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Synchronic and Diachronic Aspects of Floating Quantifiers in English

（英語における遊離数量詞の共時的通時的諸相）

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Synchronic and Diachronic Aspects of Floating Quantifiers in English

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Abstract

This thesis investigates both synchronic and diachronic aspects of floating quantifiers in English, within the recent framework of the Minimalist Program.

Chapter 1 introduces the theoretical background of this thesis and discusses the two main approaches that adopted. First, it considers Phase Theory in which the syntactic derivation of a sentence is built in phase units and the phase domains are cyclically transferred to the phonological and semantic components. Next, it reviews the MA operation, in which a probe can search more than one goal to check relevant features within the same phase domain.

Chapter 2 provides an alternative analysis of FQs in Present-day English (PE). Given the cross-linguistic empirical evidence, this thesis follows the Adverbial Analysis which proposes that FQs are anaphoric adverbial elements and applies Chomsky′s (2008) reformulation of Binding Condition A to FQs. Adopting MA presented by Hiraiwa (2001, 2005), this thesis posits that FQs must be bound and enter into an MA relation with associated DP and the head of a predicate phrase within phase domain. Given these assumptions, this chapter provides theoretical accounts for the distribution of SFQs and OFQs.

Chapter 3 examines the development of SFQs in the history of English. It focuses on the development of verbs concerning SFQs according to quantitative

data predicated on an exploration of the historical corpora. It argues that the loss of V-SFQ word order can be attributed to the loss of verb movement. Under the licensing condition proposed in chapter 2, this chapter accounts for the syntactic derivation of examples with V-SFQ word order.

Chapter 4 discusses the development of OFQs in the history of English. It investigates the distribution of OFQs concerning two types of objects by employing the historical corpora. It argues that the loss of OFQs related to full-DP objects and the loss of OE type of OFQs related to object pronouns are due to the loss of object movement. Similarly, it maintains that the advent of PE type of OFQs in terms of object pronouns is affected by the emergence of OS in Late Middle English (LME). Under the licensing condition of proposed in Chapter 2, the syntactic derivation of examples with OFQs is outlined.

Chapter 5 explores the development of FQs in passive constructions throughout the history of English. It focuses on the development of participle movement and agreement in connection with FQs, which is not possible in PE. Based on the historical evidence, this chapter contends that the loss of participle movement can be compared to the loss of V-movement which resulted in the auxiliary BE remaining with vP and leaving no room for the participle to move. Under the licensing condition of proposed in Chapter 2, the syntactic derivation of FQs in passive constructions is delineated.

The concluding remarks of this dissertation are provided in Chapter 6.

Abbreviations

ACC	accusative case
Appl(P)	applicative (phrase)
Asp(P)	aspect (phrase)
C(P)	complementizer (phrase)
DAT	dative case
D(P)	determiner (phrase)
EME	Early Middle English
EModE	Early Modern English
EOE	Early Old English
EPP	Extended Projection Principle
F	feminine
FQ	floating quantifier
Foc(P)	focus (phrase)
LME	Late Middle English
LModE	Late Modern English
LOE	Late Old English
MA	Multiple Agree
M	masculine

ME	Middle English
N(P)	noun (phrase)
NOM	nominative case
OE	Old English
OFQs	object-oriented floating quantifiers
PE	Present-day English
Perf(P)	perfect phrase
PL	plural
P(P)	preposition (phrase)
PPCEME	*The Penn-Helsinki Parsed Corpus of Early Modern English*
PPCME2	*The second edition of the Penn-Helsinki Parsed Corpus of Middle English*
PPCMBE	*The Penn-Helsinki Parsed Corpus of Modern British English*
Pred(P)	predicate (phrase)
Prog(P)	Progressive (phrase)
Q	quantifier
SFQs	subject-oriented floating quantifiers
Spec	specifier
t	trace
Top(P)	topic (phrase)
T(P)	tense (phrase)

verb second	V2
v(*)(P)	small verb (phrase)
V(P)	verb (phrase)
V-movement	verb movement
YCOE	*The York-Toronto-Helsinki Parsed Corpus of Old English Prose*

Chapter 1

Introduction

1.1. Aims of the Thesis

1.1.1. The Distribution of Floating Quantifiers

In English, a quantifier can appear in various sentence positions separate from the DP it quantifies. For example, the quantifier *all* in (1a) modifies the subject DP *the students* in prenominal position. In (1b), On the other hand, *all* isolated from the DP and appears to its right. A quantifier that is not immediately near the DP/NP it quantifies as *all* in (1b) are called floating quantifiers (FQs).[1, 2]

(1) a. **All** *the students* have finished the assignment.

b. *The students* have **all** finished the assignment. (Bobaljik (2003: 1))

A number of notable restrictions exist on the distribution of FQs. First, not all types of quantifiers can be floated. In English, quantifier float is restricted to the universal quantifiers including *all*, *both* and *each*. Other types of quantifiers are excluded from this phenomenon, as illustrated in (2).

(2) **The marines* can {**every**/**any**} hit the target. (Postal (1976: 153))

Second, considering the distribution of FQs, Sag (1976) notes that FQs may occur in VP-initial positions such as in (3), with a parenthesis between the subject and the verb.

(3) a. *The men*, I think, {**each/all/both**} left at dawn.

b. * *The men* {**each/all/both**}, I think, left at dawn. (Postal (1974: 117))

As illustrated in (3), FQs can appear to the right of the parenthesis but not to the left. Moreover, Sag (1976) observes that FQs can appear in multiple positions when more than one auxiliary is present in a sentence, as shown in (4).

(4) a. *They* (**all**) may (**all**) have (**all**) arrived.

b. *They* (**all**) have (**all**) been (***all**) happy. (Sag (1976: 35))

Lastly, Maling (1976) points out that FQs can also occur with objects under certain conditions, as illustrated in (5–6).

(5) a. I gave *the kids* **all** some candy to keep them quiet.

b. The tooth fairy promised *the kids* **each** a quarter.

c. Dad bought *the twins* **both** bicycles for Christmas.

d. Mom found *the boys* **all** so dirty when she got home, that she made *them* (**all**) take a bath.

e. We consider *the Joneses* **both** unbearably pompous.

(Maling (1976: 715))

(6) a. I called *the men* {***all**/***both**/***each**}

b. *I saw *the men* **all** yesterday.

c. *She found *the missing books* **both** quickly.

d. *They went after *the thieves* **both** on bicycles.

(Maling (1976: 714–716))

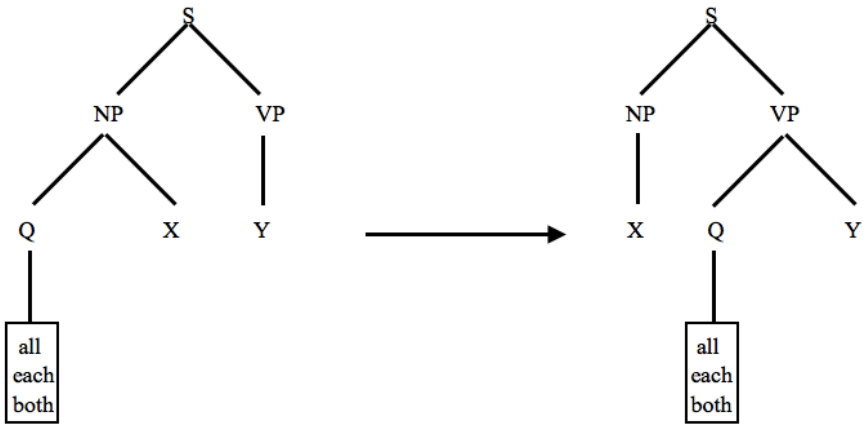
Maling posits that FQs may only follow a full-DP object when there is an element with a predication relationship to the host DP occurring to the right of the FQ. Therefore, each sentence in (5) is eligible. However, in (6a), with the FQ positioned at the end of the sentence and in (6b–e), where elements occur to the right of the FQ, there is no predication relationship to the host DP and is therefore not permissible.

1.1.2. Previous Analyses of Floating Quantifiers

In the historical development of generative grammar, the phenomenon of FQs has played an important role. In the early 1970s, Dougherty (1968) formulated a transformational rule to derive sentences as in (1b), termed Quantifier Postposition. He presented the following structure to demonstrate the

derivation of FQs which assumed that the sentences in (1b) are derived from the sentences in (1a).

(7)



(Dougherty (1968: 70)

In (7), the quantifier merged inside the NP moves to the VP following quantifier movement transformation which is a variation of conjunct movement transformation. On the basis this assumption, Dougherty′s (1968) work motivated the following empirical observations.

(8) a. **Each/All/Both** of *the men* will hit a dog.

b. *The men* will **each/all/both** hit a dog.

c. * **Each/All/Both** of *the men* **each/all/both** will hit a dog.

(Dougherty (1968: 72))

In the same period, Kayne (1969,1975) extended the observation of FQs to

French, called Q-post/R-*tous*, which describes a movement operation in which a quantifier moves to the right of its host DP. Two significant properties of FQs motivated Kayne′s proposal: the first property is the assumption that the sentences in (1a) and (1b) are logically equivalent; the second one is the fact that universal quantifiers show partial or full φ-agreement in other languages such as German, French, Spanish and Icelandic, as is the case with the Icelandic example in (9).

(9) a. *Strákarnir* komust **allir** í skóla
boys-the:NOM;M;PL got all:NOM;M;PL to school
'The boys all got to school.'

b. *Strákarna* vantaði **alla** í skólann
boys-the:ACC;M;PL lacked all:ACC;M;PL in school-the
'The boys were all absent from school.'

(Sportiche et al. (2014: 328))

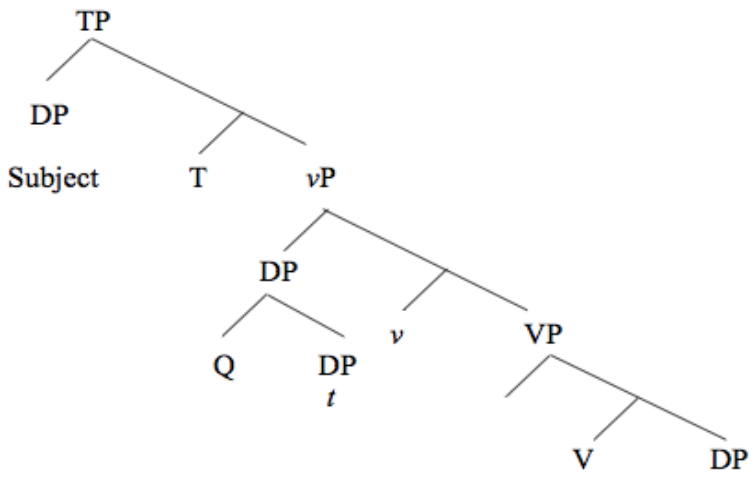
In the early 1980s, a significant discovery concerning FQs was made that there are several similar constraints with anaphors in the distribution of FQs (Belletti (1982), Kayne (1981), Jaeggli (1982) and O'Grady (1982)). Thus, FQs must be c-commanded by their host DPs as in (10a) and cannot float from the main clause to the subordinate clause of a sentence as in (10b).

(10) a. * The mother of [*my friends*]$_i$ has **all**$_i$ left.

b. * *My friends*$_i$ think that I have **all**$_i$ left. (Kayne (1984: 91))

However, this property of FQs has not received as much attention as two other analyses proposed in the late 1980s, namely, the stranding analysis (Bošković (2004), Merchant (1996), Shlonsky (1991), and Sportiche (1988), among others) and the adverbial analysis (Baltin (1995), Bobaljik (1995), Doetjes (1992), Dowty and Brody (1984), and Torrego (1996), among others). By proposing the stranding analysis, Sportiche (1988) offers significant evidence for the *v*P-internal Subject Hypothesis. This hypothesis assumed that a quantifier is included in the derivation in conjunction with the subject DP in Spec-vP and can be pipped with the subject DP to Spec-TP, or stranded in the base-generated position, deriving sentences such as (1a) and (1b), respectively. The following structure briefly sets out the derivation of the stranding analysis.

(11)



The adverbial analysis, on the other hand, claimed that FQs are neither moved rightward nor stranded by DP-movement, but constitute adverbial elements adjoined to *v*P/VP. The structure of (1b) (repeated as (12)) therefore does not represent the stranding structure in (12a) but the adjunction structure in (12b).

(12) *The students* have **all** finished the assignment.

a. *The students*$_{i}$ have [$_{vP}$ [$_{DP}$ **all** t_{i}] [$_{VP}$ finished the assignment]]

b. *The students*$_{i}$ have [$_{vP}$ [$_{QP}$ **all**] [$_{v'}$ t_{i} [$_{v'}$ *v* [$_{VP}$ finished the assignment]]]]

Even though both analyses are supported by a large quantity of empirical evidence based on a various of languages, no field-wide consensus as to the syntactic status of FQs has emerged in the literature.

Moreover, several issues remain with the distribution of FQs with respect ot objects. Fiengo and Lasnik (1976) noted that in English, FQs normally cannot be associated with the direct objects in transitive constructions, as shown in (13).

(13) a. * John saw *the men* **all**.

b. * John bought *the books* **both** for his mother.

c. * John told *the women* **each** that Harry was crazy.

d. * They read *the papers* **both** yesterday.

(Fiengo and Lasnik (1976: 188))

In contrast, they observe that there are indeed several circumstances that allow FQs to be associated with objectes, as in (14).

(14) a. I gave *the boys* **both** a quarter.

b. He called *the men* **all** crazy.

c. I persuaded *the men* **both** to leave. (Fiengo and Lasnik (1976: 188))

Fiengo and Lasnik (1976) reformulated the following rule of FQs to describe these examples.

(15)

X	Q	NP{AP / NP / VP}		Y
1	2	3	4	5
1	3	2	4	5

Futhermore, it has been observed that FQs are allowed to occur in the position following object pronouns, as shown in the contrast between (16a) ans (16b).

(16) a. I called *them* **all**.

b.* I called *the men* **all**. (Maling (1976: 714))

Although the distribution of subject-oriented FQs (SFQs) has been widely discussed, the distributional asymmetry between SFQs and object-oriented FQs (OFQs) has received little attention. Moreover, although FQs were already attested in the early stage of English, the diachronic aspect of both SFQs and OFQs remain unclear.

The purpose of this thesis is to provide a unified account for SFQs and OFQs by assuming a simple licensing condition under the minimalist framework (Chomsky (2000, 2001, 2008)). It argues that an FQ serving as a matching goal enters into a Multiple Agree (MA) relation with a functional head as a probe and its host DP as another matching goal within the same phase domain.

In contrast to the considerable number of synchronic studies that exist on FQs, few diachronic studies have been conducted on FQs.[3] This thesis provides an analysis based on historical corpora indicates that the distribution of SFQs and that of OFQs have both changed in the history of English. Moreover, the quantitative data on SFQs reveals a decline of Verb movement (V-movement) in the history of English. As for OFQs, it argues that the loss of object movement lead to the loss of OFQs with full-DP objects and Old English (OE) type of OFQs related to object pronouns and that the advent of PDE types of OFQs in terms of object pronouns is affected by the emergence of object shift in Late Middle

English (LME).

1.2. Theoretical Background

The following subsections introduce two main theoretical foundations with in the recent framework of Minimalist Program.

1.2.1. The Phase Theory

In Minimalist Program, the basic structure of a small clause is [CP TP *v*P VP]. Chomsky notes that in syntactic derivation, in order to reduce the derivation burden, derivation of expressions should be based on phase. Chomsky (2001: 12) maintains that phases are "propositional" or verbal structures with full arguments (no lacking of the external arguments). Chomsky (2001) divides phases into strong phases and weak phases. *v*P with external arguments are strong phases(denoted with *v**P), while *v*P without external arguments are weak phases. Chomsky (2004) further points out that phases should accord with requirements of interface conditions, and should be coherent and independent, semantically and phonologically. Semantically, *v**P and CP (rather than TP) should be propositional structures: *v**P should possess complete argument structure, while CP should be equipped with tense, event structure and elements denoting "force". Phonologically, CP and *v**P can be separated from other elements as cleft sentence and moving of verb phrases. Strong phase *v**P possesses an EPP position, which is the escape hatch needed to move, so it is minimalist structure

appropriate for spelling out.

In regard of phase, Chomsky (2005) points out that phase should be as small as possible so as to ease the burden of operation. Phases should at least contain an area where uninterpretable features can be valued, and these areas include CP and *v*P. The light verb *v* in *v*P leads a set of complete argument structure. Here Chomsky did not stress the division of strong and weak phases too much. And probably it is because this division does not make too much sense, since only strong phases can be transferred and be restricted by PIC.[4] Weak phase *v*P equals to TP and VP actually, and cannot be processed as phase during the operation. Chomsky (2006) states that optimal operation requires syntax to process by strict cycling. In a certain stage after merge, when the syntactic element built is sent to two interfaces, the element cannot enter the following operation, and such stage is a phase. In conclusion, phases should be propositional, and be relatively independent both semantically and phonologically. Uninterpretable features should be valued in phases, and phases should be transferred. In small clauses, only CP and *v**P conform to such conditions to form a phase.

1.2.2. Multiple Agree

Agree is one of integral derivation operations in the Minimalist Program (Chomsky (2001)). It defines the relationship between two entities if they share formal features. In the minimalist stage, the most important syntactic operation

in computational systems is the feature agreement. This operation has two elements: Probe and Goal. The probe must be active in order to enter into a relationship of agreement. It can be successful only if the probe has an uninterpretable feature to be checked by searching for an active goal that has the same matching features that can be interpreted. The importance of this operation is that it fulfills the Economy Condition which require that, during a derivation, syntactic representations formed consisting of minimum number of syntactical objects, should be as simple as possible (Collins, 2001). One interpretation of economy is that the shorter derivation is superior to the longer one (Culicover (1997)). Under the Agree system, the AGREE relation can satisfies Case and Agreement without any movement involved. The operation Agree is formulated as follows.

(17) Agree (α, β) if α c-commands β; α, β have matching features; there is no γ with matching features such that α c-commands γ and γ c-commands β.

(Chomsky (2000, 2001))

Hiraiwa (2000) expands this procedure to MA, where one probe can check more than one goal at a point in the derivation. The concept is considered a sophisticated multiple feature-checking model (Ura (1996)). MA is formalized in (18).

(18) MULTIPLE AGREE

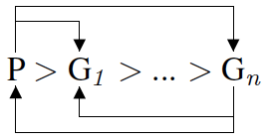
MULTIPLE AGREE (multiple feature checking) with a single probe is a single simultaneous syntactic operation; AGREE applies to all the matched goals at the same derivational point derivationally simultaneously.

(Hiraiwa (2001: 69))

Moreover, Hiraiwa (2005) constrains the operation of MA to a phase domain by adopting the phase-based model of derivation (Chomsky (2000, 2001, 2004)). The operation of MA is schematized in (33).

(19) MULTIPLE AGREE (P, $_{\forall}$G)

Agree is a derivationally simultaneous operation AGREE (P, $_{\forall}$G).



(Hiraiwa (2005: 38))

Agree (P, $G_1 \ldots G_n$) is a *Centrosymmetry* operation, where P is a probe and all instances of G are matching goals, with ">" standing for a c-command relation. As shown by the arrows in (33), [*u*Case] (uninterpretable Case feature) of all goals is valued by P, and the last goal G_n values [*u*φ] (uninterpretable φ-feature) of P and the other goals.

1.3. The Organization of the Thesis[5]

Chapter 1 introduces the theoretical background of this thesis and discusses the two main approaches that adopted. First, it considers Phase Theory in which the syntactic derivation of a sentence is built in phase units and the phase domains are cyclically transferred to the phonological and semantic components. Next, it reviews the MA operation, in which a probe can search more than one goal to check relevant features within the same phase domain.

Chapter 2 provides an alternative analysis of FQs in Present-day English (PE). Given the cross-linguistic empirical evidence, this thesis follows the Adverbial Analysis which proposes that FQs are anaphoric adverbial elements and applies Chomsky′s (2008) reformulation of Binding Condition A to FQs. Adopting MA presented by Hiraiwa (2001, 2005), this thesis posits that FQs must be bound and enter into an MA relation with associated DP and the head of a predicate phrase within phase domain. Given these assumptions, this chapter provides theoretical accounts for the distribution of SFQs and OFQs.

Chapter 3 examines the development of SFQs in the history of English. It focuses on the development of verbs concerning SFQs according to quantitative data predicated on an exploration of the historical corpora. It argues that the loss of V-SFQ word order can be attributed to the loss of verb movement. Under the licensing condition proposed in chapter 2, this chapter accounts for the syntactic derivation of examples with V-SFQ word order.

Chapter 4 discusses the development of OFQs in the history of English. It investigates the distribution of OFQs concerning two types of objects by employing the historical corpora. It argues that the loss of OFQs related to full-DP objects and the loss of OE type of OFQs related to object pronouns are due to the loss of object movement. Similarly, it maintains that the advent of PE type of OFQs in terms of object pronouns is affected by the emergence of OS in Late Middle English (LME). Under the licensing condition of proposed in Chapter 2, the syntactic derivation of examples with OFQs is outlined.

Chapter 5 explores the development of FQs in passive constructions throughout the history of English. It focuses on the development of participle movement and agreement in connection with FQs, which is not possible in PE. Based on the historical evidence, this chapter contends that the loss of participle movement can be compared to the loss of V-movement which resulted in the auxiliary BE remaining with vP and leaving no room for the participle to move. Under the licensing condition of proposed in Chapter 2, the syntactic derivation of FQs in passive constructions is delineated.

The concluding remarks of this dissertation are provided in Chapter 6.

Notes to Chapter 1

[1] Besides the quantifiers *all*, *both* and *each*, there are also quantifier phrases that can serve as FQs, such as *every one, all of them, both of them, none of them, neither of them, all three* etc., which are not dealt with in this thesis.

[2] The remainder of this thesis expresses a nominal associate in italics and a relevant quantifier in boldface.

[3] But see Carlson (1978), Lightfoot (1979) and Yanagi (2008, 2012), for a diachronic study of different types of quantifiers in English.

[4] See section 2.4.2 for the discussion on phasehood of unaccusative/passive constructions.

[5] Chapter 2 is a revised and extended version of Xia (2015, 2017b); Chapter 3 and 4 are extended from Xia (2017a, 2019).

Chapter 2

A Synchronic Aspect of Floating Quantifiers

2.1. Introduction

This chapter aims to provide a unified account for the syntactic properties of FQs in English within the minimalist framework. As introduced in Chapter 1, quantifiers as exemplified in (1b) are FQs, which are restricted to *all*, *both*, and *each* in English.

(1) a. **All** *the students* have finished the assignment.

b. *The students* have **all** finished the assignment. (Bobaljik (2003: 1))

In previous studies, the distribution of SFQs has been widely discussed (e.g. Baltin (1995), Bobaljik (2003), Kayne (1975), Bošković (2004), and Sportiche (1988)), but the distributional asymmetry between SFQs and OFQs has received little attention. In contrast to the grammatical sentence with an SFQ in (1b), Fiengo and Lasnik (1976) observed that OFQs normally cannot be associated with direct objects in transitive constructions in English, as shown in (8) in Chapter 1, repeated here as (2).[1]

(2) a. * John saw *the men* **all**.

b. * John bought *the books* **both** for his mother.

c. * John told *the women* **each** that Harry was crazy.

d. * They read *the papers* **both** yesterday. (Fiengo and Lasnik (1976: 188))

FQs are believed to be either residual elements left behind by the movement of the DP (stranding analysis) or adjuncts base-generated intermediate positions (adverbial analysis). In early studies, the correlation between FQs and anaphors was also found. This chapter highlights problems with stranding analysis and takes fundamental ideas of adverbial analysis and anaphorical analysis. In addition, this study proposes a condition of the licensing of FQs in reformulating of Binding Condition A on phase theory in Chomsky (2008) and MA in Hiraiwa (2001). It is proposed, specifically, that an FQ that serves as a matching goal enters into an MA relationship with a functional head as a probe and its host DP as another matching goal within the same phase domain. Given this assumption, the distribution in variant constructions of both SFQs and OFQs is given a unified account.

This chapter is organized as follows. Section 2.2 overviews previous analyses of FQs and points out their problems. Section 2.3 proposes a licensing condition on FQs based on Multiple Agree under the minimalist framework. Section 2.4 shows that the distribution of SFQs and OFQs is successfully accounted for under the proposed analysis. Section 2.5 is the conclusion of this

chapter.

2.2. Previous Studies

There are mainly three analyses of the distribution of FQs proposed in the literature, i.e. the stranding analysis (Giusti (1990), Merchant (1996), Shlonsky (1991), and Sportiche (1988), among others), the adverbial analysis (Baltin (1995), Bobaljik (1995), Brisson (1998), Doetjes (1992), Dowty and Brodie (1984), Torrego (1996), and Williams (1982) among others), and the anaphoric analysis (O'Grady (1982) and Kayne (1984)). This chapter overviews these analyzes and points out issues with stranding analysis, while this thesis adopts the basic ideas of adverbial analysis and anaphoric analysis.

2.2.1. The Stranding Analysis

The stranding analysis appears in the background of the debate about clausal structures. Chomsky (1981) suggests a TP model, in which objects are sisters to V, but in the Spec-TP the subjects are essentially generated. A question that arises under this model is why both subjects and objects can be assigned theta-role regardless of the asymmetry between their base-generated positions. To resolve this problem, theta-role assignment is linked links to sisterhood by Chomsky (1986). Similarly, owing to the fact that the extraction from subjects in Japanese and Chinese is possible, Koopman and Sportiche (1985) conclude that it is impossible to locate the subjects in Spec-TP, on the basis that extraction

is allowed only from a theta position. The topic emerges in the *v*P-internal Subject Hypothesis (Kitawaga (1986), Koopman and Sportiche (1991), and Speas and Fukui (1986), among others) where the topics are cross-language dependent within the vP and are subsequently moved to Spec-TP in only some languages.

2.2.1.1. Sportiche (1988)

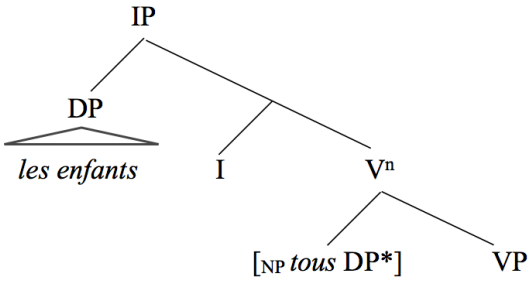
Sportiche (1988) argues that a pair of sentences like (1) are semantically identical, and this is due to the syntactic identity of the two sentences at some stage in the derivation. He therefore assumes that A quantifier enters the derivation adjacent to subject DP in Spec-vP and may be piped to Spec-TP with subject DP or stranded in the base-generated position, deriving sentences such as (1a, b), respectively. The FQs phenomenon has been thus considered experimental evidence of the *v*P-internal Subject Hypothesis. Namely, when the host DPs move out from VP, they strand FQs within VP, as in the French sentences (3a–b) bearing identical deep structure in (4). The syntactic structure of a sentence with an FQ is represented in (3) under the stranding analysis.

(3) a. **Tous** *les* *enfants* ont dormi.
all the children have slept
'All the children have slept.'

b. *Les* *enfants* ont **tous** dormi.
the children have all slept

'The children have all slept' (Sportiche (1988: 426))

(4)



(Sportiche (1988: 428))

Sportiche follows the stipulation that all the quantifiers may appear in DP-initial position, with the general structure [$_{DP}$ Q DP].[2] In this argument, in (3a) the entire DP *tous les enfants* moves to Spec-TP, in which nominative Case is assigned. Only the inner DP * is moved in (3b); *tous* remains in place. Sportiche's proposal incorporates insights that are the original inspiration for a transformative relationship between (1a) and (1b): the Q is capable of modifying the DP and agreeing with it in some languages, because [Q DP] is a single constituent in deep structure.

In addition to the vP-internal Subject Hypothesis as an empirical evidence, the stranding analysis also reveals the fact that FQs mayovertly agree with their host DPs in gender, number and (perhaps) cases in a number of languages. For example, as the following French examples show, the DP-initial quantifier agrees with the nominal associate in gender, as in (5a, c). The same facts apply to FQs as well, as in (5b, d).

(5) a. **Toutes**/***tous** *les* *femmes* sont arrivées.
all:FEM/*all:MASC the women are arrived
'All the women have arrived.'

b. *Les* *femmes* sont **toutes**/***touts** arrivées.
the women are all:FEM/*all:MASC arrived
'The women have all arrived.'

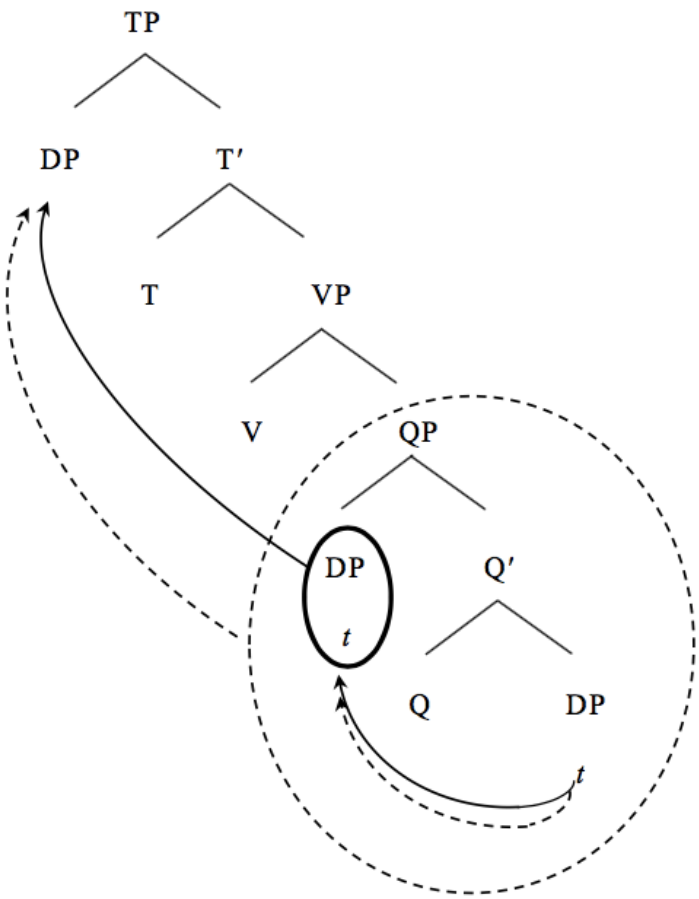
c. **Tous**/***toutes** *les* *hommes* sont arrivés.
all:MASC/*all:FEM the men are arrived
'All the men have arrived'

d. *Les* *hommes* sont **tous**/***toutes** arrivés.
the *men* are all:MASC/*all:FEM arrived
'The men have all arrived' (Fitzpatrick (2006: 20))

2.2.1.2. Shlonsky (1991)

To provide a straightforward account for Hebrew data, Shlonsky (1991) proposes some modifications of the stranding analysis. In particular, he suggests that the subject's left movement over the quantifier passes through QP's specifier position, of which the head is a quantifier. As a result, the structure is a QP rather than a DP, as in (6).

(6)



This structure is empirically illustrated by the following Hebrew instances.

(7) a. **kol**/*kul-am *ha-yeladim* yašnu

all/all:3;M;PL the-children slept

'All the children slept.'

b. *Ha-yeladim* yašnu **kul-am**/*kol.

the-children slept all:3;M;PL /all

'The children all slept.' (Shlonsky (1991: 167))

Quantifiers like Hebrew *kol* 'all' are shown with an agreement marker when they follow the DP *ha-yeladim* 'the children', as illustrated in (7b), but no such an agreement marker if the quantifier goes before the DP, as in (7a). Crucially, Shlonsky suggests that the specifier of VP in Hebrew is at in the right edge of *v*P, and QPs with the subjects in their complement positions are base-generated in Spec-*v*P. In accordance with the stranding analysis, QPs headed by FQs from which the subject of the clause is moved can appear in the clause-final position in Hebrew, as exemplified in (8).

(8) a. *Ha-yeladim* medabrim sinit **kul-am**.
the-children speak Chinese all:3;M;PL
'The children all speak Chinese.'

b. *Ha-saparim* hiku ʔet ha-yeled **kul-am**.
the barbers hit acc the-boy all:3;M;PL
'The barbers all hit the boy.' (Shlonsky (1991: 171))

(9) a. * *Ha-saparim* hiku ʔet ha-yeled be-ʔaxzariyut **kul-am**.
the barbers hit acc the-boy with-cruelty all:3;M;PL
'The barbers all hit the boy cruelly.'

b. *Ha-saparim* hiku ʔet ha-yeled **kul-am** be-ʔaxzariyut.
the barbers hit acc the-boy all:3;M;PL with-cruelty
'The barbers all hit the boy cruelly.' (Shlonsky (1991: 171))

FQs cannot occur to the right of *v*P when a *v*P adjunct follows *v*, as in (9). The contrast between (8b) and (9a) shows that postverbal subjects are able to follow only the specifier or the complement of *v*P but not the adjunct of *v*P. Furthermore, If the subject were a sister of *v*P and an adjunct as in the structure in (4), then (9a) would be predicted to be grammatical, contra to the fact. Alternatively, if the connection is attached on the right to *v*P, it must be preceded by the FQ as in (9b).

2.2.1.3. Problems with the Stranding Analysis

Shlonsky (1991) refines the stranding analysis by changing a DP-structure to a QP-structure. However, there are still several problems with the stranding analysis, and hence it cannot be maintained.

Firstly, given the standard assumption that the surface subjects of unaccusative/passive verbs, but not unergative verbs, are actually the arguments which receive the theta-role assigned to objects, the stranding analysis fails to capture the fact that FQs cannot appear in the position in which the surface subject of unaccusative/passive verbs is base-generated. The following examples provide empirical evidence for this assumption.

(10) a. There were arrested *over five-hundred protesters*. (Passive)

b. There arrived *a letter* for you today. (Unaccusative)

c. * There danced *many students* on the floor. (Unergative)

(Fitzpatrick (2006: 43))

As in (10), both English passives like *be arrested* and unaccusative verbs like *arrive*, rather than unergative verbs like *dance*, allow the post-verbal position for the logical subject.

Similar facts apply for other languages as well. As noted by Fitzpatrick (2006: 43), for instance, the Italian clitic *ne* 'of them' can appear only in the position of surface subjects of passive/unaccusative verbs, as shown in (11) and (12), respectively. In contrast, it is not allowed with transitive subjects of unergative/verbs, as in (13) (Burzio (1986)). [3]

(11) a. Furono arrestati molti studenti. (Passive)

were arrested many students

'Many students were arrested'

b. *Ne* furono arrestati molti

of-them were arrested many

'Many of them were arrested' (Fitzpatrick (2006: 43))

(12) a. Arrivarono molti studenti. (Unaccusative)

arrive many students

'Many students are arriving.'

b. *Ne* arrivano molti.

of-them arrive many

'Many of them are arriving.' (Fitzpatrick (2006: 43))

(13) a. Telefonano molti studenti. (Unergative)

call many students

'Many students are calling.'

b. * *Ne* telefonano molti.

of-them telephone many

Intended: 'Many of them are calling.' (Fitzpatrick (2006: 44))

Therefore, the stranding analysis would thus predict that such post-verb position of passive/unaccusative verbs, from which the surface subject is derived, should allow FQs to be stranded. However, the prediction is wrong, as shown in (14).

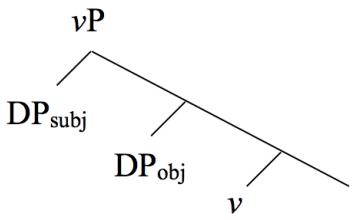
(14) a. * *The students* have arrived **all**.

b. * *The students* were seen **all**. (Bobaljik (2003: 13))

Sportiche (1988) offers an alternative analysis to solve this problem of English passive/unaccusative constructions. He claims that the surface subjects of these constructions do not require DP movement from V complement position to

Spec-V, and the theta-role of object is specifically assigned to inner specifier position of *v*P. He argues that the surface subjects of these constructions do not involve DP movement from the object position of the head V to its specifier position, and the object theta-role is directly assigned to an inner specifier position of *v*P, which is neither in the base position of transitive subjects nor in the base position of direct objects. As a result, there is no post-verbal trace involved in clause-internal DP movement, and the problem in (14) is solved. The structure is shown as follows.

(15)



However, this clause structure is rather unwieldy and cannot account for the French passive/unaccusative constructions, in which FQs do appear in the clause-final position, as in (16).

(16) a. *Les enfants* ont été vus **?tous**/presque **tous**.
the children have been seen all/(almost) all
'The children have (almost) all been seen.'

b. *Les enfants* sont venus **?tous**/presque **tous**.
the children came all/(almost) all

'The children (almost) all came.'

c. *Les enfants* ont dormi **?tous**/presque **tous**.

the children have slept all/(almost) all

'The children have (almost) all slept.'

d. *Les enfants* ont vu ce film **?tous**/presque **tous**.

the children have seen this movie all/(almost) all

'The children have (almost) all seen this movie.'

(Sportiche (1988: 427, 437))

Sportiche claims that FQs can mark the subject traces of passive/unaccusative constructions in French, as in (16a) and (16b), respectively.[4] However, FQs may also appear in the clause-final position in French transitive/unergative constructions. Acceptability of the French examples, as in (16c) and (16d), does not vary between different types of clause. In those cases, the stranding analysis therefore appears to make the wrong predictions for the most grammatical base-generated position of subjects. Bošković (2004) indicates that the stranding analysis could be retained if FQs that remain in the positions of the intermediate DP-trace but cannot be held in theta-positions both in English and French. Such a step would however tend to contradict the *v*P-internal Subject Hypothesis, for it needs that a DP trace be present even lower than the one originally proposed by Sportiche.

Secondly, the stranding analysis crucially relies on the assumption that a pair

of sentences like (1) are semantically identical. Junker (1990) provides arguments against this assumption. She defines the quantifiers *all* and *each* as operators of distributivity, the effect of which varies depending on their positions at S-structure. Namely, the positions of quantifiers constrain their interpretations. The asymmetry of interpretation between non-floating quantifiers and FQs is illustrated in the following examples.

(17) a. **All** *the students* have **not** finished the assignment. [not >∀, ∀> not]

b. *The students*$_i$ have **not all** t_i finished the assignment. [not >∀, *∀> not]

In (17a), *all* takes either wide or narrow scope over the negation, while *all* can take only wide scope over the negation in (17b). These data demonstrate that different structures must be assigned to non-floating and floating constructions, contrary to the stranding analysis. A similar argument is presented by Bobaljik (2003), who also pays attention to the asymmetry of interpretation between non-floating quantifiers and FQs.

(18) a. **All** *lions, tigers and bears* are scary.

b. *Lions, tigers and bears* are **all** scary. (Bobaljik (2003: 29))

For example, (18a) has the most prominent reading in which every member of lions, tigers, and bears is terrifying. In contrast, the FQ sentence in (18b)

includes a further assertion that lions, tigers and bears appear to be terrifying in the world; in other words, (18b) is ambiguous with the individual plural nouns construed as generics, which is a reading unavailable in (18a).

Thirdly, another problem concerning with stranding analysis is the fact that sentences containing FQs do not always correspond to those with partitive quantifiers, such as the contrast between (19a) and (19b).

(19) a. *John, Bill, and Mary* **all** left.

b. * **All of** *John, Bill, and Mary* left. (Sportiche (1988: 440))

Relying on some French data, Sportiche (1988: 426) suggests that FQ structures are derived from partitive structures.[5] In particular, quantifiers like *each* in *Each man left* correspond to French *chaque*, which does not appear as an FQ. On the other hand, only the one in *Each of the men left,* which translates as *chacun*, has an FQ counterpart. Based on this fact, Sportiche then concludes that examples like (3a) are partitive structures, without *de* 'of' insertion. However, examples of FQs do not always have a proper partitive counterpart, as shown in the contrast in (19a–b). To solve the problem, Sportiche postulates an alternative analysis, i.e., generating FQs and partitive quantifiers independently. However, neither the stranding analysis nor the alternative one can account for all the facts.

Finally, it is less economical of stranding analysis to treat SFQs and OFQs

differently within the framework of the Minimalist Program. This suggests that the stranding of the SFQ "is not a process affecting quantifiers" (Sportiche (1988: 435)). As for OFQs, however, Sportiche (1988) points out that only OFQs are subject to Quantifier Raising (QR), which is an overt counterpart of a covert movement like *wh*-movement in English and *wh*-in-situ in Chinese (see Huang (1982)). It is theoretically undesirable to treat OFQs as an instance of QR because it is argued that the interpretation of SFQs is delayed until LF, although the interpretation of OFQs occurs in the syntax. Moreover, if the movement of OFQs is an instance of QR, Sportiche (1988) does not explain why OFQs do not raise to an initial position, as in the case with overt instances of *wh*-movement.

2.2.2. Similarities of FQs to Adverbs and Anaphors

This section outlines the other two analyses of FQs, adverbial and anaphoric, highlighting the properties of FQs similar to adverbs and anaphors.

2.2.2.1. The Adverbial Analysis

It has been claimed in the literature that FQs are neither moved rightward nor stranded by DP-movement, but they are adverbial elements that are base-generated in a *v*P/VP-adjoined position. Under the adverbial analysis, the structure of (1b) (repeated as (20)) therefore does not represent the stranding structure in (20a) but the adjunction structure in (20b).

(20) *The students* have **all** finished the assignment.

a. *The students*$_{i}$ have [$_{vP}$ [$_{DP}$ **all** t_{i}] [$_{VP}$ finished the assignment]]

b. *The students*$_{i}$ have [$_{vP}$[$_{QP}$ **all**][$_{v'}$ t_{i} [$_{v'}$ *v* [$_{VP}$ finished the assignment]]]]

There are mainly three facts providing empirical support for the structure in (20b). Firstly, one piece of empirical evidence is the parallel distribution between FQs and certain adverbs (Bobaljik (1995: 194)). As shown by the following examples, as in (16a), FQs may occur in positions where 'high' adverbs can appear; see (21b) for the case of speaker-oriented adverbs, (21c) for subject-oriented adverbs, and (21d) for modal adverbs. Fitzpatrick (2006) concisely summarizes these distributional patterns of adverbs/FQ *all* with respect to a sequence of auxiliaries in Table 1.

(21) a. *The students* **all** will **all** have **all** been ?***all** being ***all** reprimanded.

b. *The students* **allegedly** will **allegedly** have ?***allegedly** been ***allegedly** being ***allegedly** reprimanded.

c. *The students* ?***willingly** will **willingly** have **willingly** been ?***willingly** being ***willingly** reprimanded.

d. *The students* **easily** will **easily** have **easily** been ?***easily** being ***easily** reprimanded. (Bobaljik (1995: 230–235))

Table 1. Distributions of adverbs/FQs *all* relative to auxiliaries

	The students				reprimanded...
	The veggies __ will __ have __ been __ being __				roasted...
allegedly (SpkrOr)	OK	OK	?*	*	*
willingly (SubjOr)	?*	OK	OK	?*	*
easily (Modal)	OK	OK	OK	?*	*
***all* (FQ)**	OK	OK	OK	?*	*
quietly (Manner)	*	*	?	OK	OK
completely (Compl.)	*	*	*	?*	OK

(Fitzpatrick (2006: 43))

It is observed that FQs seem to behave similarly to modal adverbs in their distribution. However, it is not sufficient to determine that FQs are modal adverbs, although FQs have similar properties to modal adverbs in their distribution. Other properties of FQs are discussed in Section 2.2.2.

Secondly, following Sag (1978), Bobaljik (2003) observes that both FQs and adverbs show the same pattern under *v*P/VP-ellipsis, as shown in (22).

(22) a. Otto has read this book, and my brothers have (**all**/**certainly**) read it, too.

b. Otto has read this book, and my brothers have (***all**/***certainly**) ___, too.

(Bobaljik (2003: 5))

In (22a), both the FQ *all* and the adverb *certainly* can be put between the auxiliary and the main verb. The example in (22b) on the other hand indicates that neither of them can escape from *v*P/VP-ellipsis.

Further empirical evidence comes from the fact that FQs can limit adverb distribution, as shown in (23), cited from Fitzpatrick′s (2006) reference to Brisson (2000: 19).

(23) a. *The gladiators* **all bravely** fought the lions

b. *The gladiators* **bravely all** fought the lions (Fitzpatrick (2006: 51))

Following Brisson (2000), Fitzpatrick (2006: 51) suggests that the reading of a adverb may be ambiguous in a sentence as shown in (24).

(24) Two readings for *bravely* (*The gladiators* ***bravely*** *fought the lions*):

a. Subject-oriented: It was brave of X to do Y. (The manner in which X did Y might have been cowardly, but it was brave to choose to do it.)

b. Manner: X did Y bravely. (The choice to do Y might have been cowardly (e.g., the easy way out), but the actions were brave (e.g., no flinching or cowering)) (Fitzpatrick (2006: 51))

When *bravely* is preceded by the quantifier *all*, the sentence is ambiguous with either interpretation. Namely, the adverb *bravely* in (23a) can act either as a

subject-oriented adverb or as a manner adverb. On the other hand, when the adverb is followed by *all*, only the subject-oriented reading obtains, as in (23b). he accounts for these findings by arguing that FQs adjoin to a position adjoined by manner adverbs which is higher than the VP. This assumption correctly rules out the lower position of *all* in the passive/unaccusative construction in (14), repeated here as (25).

(25) a. *The students*$_i$ have [$_{VP}$ **all** [$_{VP}$ arrived ***all** t_i]]]

b. *The students*$_i$ were [$_{VP}$ **all** [$_{VP}$ seen ***all** t_i]]] (=(14b))

Although the adverbial analysis works better than the stranding analysis to account for the distribution of FQs, there still remains one problem. If we assume that FQs are adverbials, then a question will arise as to which class of adverbs they exactly belong to. The statement that FQs are limited as modal adverbs only implies that such a distribution applies not only to adverbs, but also to other adjuncts like FQs. Brisson (2000) explores the distinctions between adverbs and FQs, and concludes that FQs do not belong to one of the traditional adverb categories. I agree with his suggestion that FQs should be considered as a special class of adverb, differing from any other types of adverb generally assumed.[6] Moreover, there are further properties of FQs that are not found in other types of adverbs, i.e., anaphoric distribution and agreement, which will be discussed in the next section.

2.2.2.2. The Anaphoric Analysis

As pointed out by a number of linguists, FQs show behaviours similar to anaphors (O'Grady (1982), Jaeggli (1982), and Kayne (1984)). As shown in (26), a pronominal quantifier can serve as an anaphoric expression: *all* and *each* refer to and are coindexed with *the students* and *the women*, respectively. Moreover, the examples in (27) show that the antecedent of a pronominal quantifier must be plural.

(26) a. *The students*$_i$ came to the party and **all**$_i$ danced together.

b. After *the men*$_i$ had read the book, **each**$_i$ agreed that it should be banned.

(O'Grady (1982: 527))

(27) a. * *The student*$_i$ came to the party and **all**$_i$ danced together.

b. * After *the man*$_i$ had read the book, **each**$_i$ agreed that it should be banned.

(O'Grady (1982: 527))

The same property holds for FQs, which must also be associated with the plural host DP, as shown in (28).

(28) a. *The men* have {**all**/**both**/**each**} left.

b. * *The man* has {**all**/**both**/**each**} left. (O'Grady (1982: 535))

Furthermore, the following examples indicate that the relation between FQs and their host DPs is parallel to that between anaphors and their antecedents.

(29) a. * The mother of [*my friends*]$_i$ likes **each other**$_i$.

b. * *My friends*$_i$ think that I like **each other**$_i$. (Kayne (1984: 91))

(30) a. * The mother of *my friends* has **all** left.

b. * *My friends* think that I have **all** left. (Kayne (1984: 91))

It is well known that anaphors must be c-commanded by their antecedents in the same local domain, which is formulated as the Binding Condition A (Chomsky (1981)). The sentences with an anaphor in (29) are ruled out due to the violation of the Binding Condition A. It seems that the sentences involving an FQ in (30) show a similar pattern and hence are amenable to the same analysis as (29). In (30a), the host DP *my friends* is not in a position c-commanding the FQ *all*, while the two elements are separated by the embedded clause boundary in (30b). Thus, it can be concluded that FQs are subject to the Binding Condition A, which suggests that they are a kind of anaphor.

Given these facts, it would be plausible to assume that FQs are adverbial elements with an anaphoric property and must be associated with their host DPs in the same local domain.

2.3. An Alternative Analysis

In this section, I will propose a new analysis of FQs within the minimalist framework to accommodate their properties discussed so far, especially the anaphoric behaviour and agreement.

2.3.1. The Binding Condition A and Multiple Agree

Given that FQs have the same distributional restrictions as anaphors, FQs should be subject to some condition with the same effect as the Binding Condition A. Chomsky (2008: 141) indicated in his recent study that it is an open question that whether c-command plays a role in the computation of the C–I interface. In fact, he claims that Binding Theory does not require c-command. He adopts Reuland′s (2001) proposal that the relationship between the antecedent XP and the reflexive R to be bound in the structure of the form {H ... XP ... R}, where XP does not c-command R, but both are c-commanded by the head H, which agrees with XP. Empirical evidence for this proposal comes from Norwegian and Icelandic, as shown in (31).

(31) a. Norwegian:

Det ble introdusert en mann$_i$ for *seg$_i$ selv* / **ham$_i$ selv*

it became introduced a man to SE SELF / *him SELF

b. Icelandic:

Thad kom maður$_i$ með börnin *sín$_i$* / **hans$_i$*

There came a.man with children SE / *him (Reuland (2005: 512))

In (31), the reflexive does not c-commanded by the antecedent DP, but both of them are goals of the probe heading the construction. Chomsky then claims that binding relations can be reformulated as probe–goal relations. This is a case of probe–goal relation with H as a probe, which is not c-commanded by XP, and R is in the minimal search domain of H. In other words, the head H mediates between R and XP. Chomsky (2008: 142) mentions that "the reflexive must have the bare form R, meaning that it is in an agreement (probe–goal) relation with H, though not c-commanded by its antecedent XP." Then he suggests that there is no c-command in the core case of Condition A, but Agree. Chomsky adopts Hiraiwa′s (2001) theory of MA rather than a c-command relation for the Binding Condition A. The definition of MA is as follows.

(32) MULTIPLE AGREE

MULTIPLE AGREE (multiple feature checking) with a single probe is a single simultaneous syntactic operation; AGREE applies to all the matched goals at the same derivational point derivationally simultaneously.

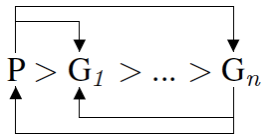
(Hiraiwa (2001: 69))

Moreover, Hiraiwa (2005) constrains the operation of MA to a phase domain by adopting the phase-based model of derivation (Chomsky (2000, 2001, 2004)).

The operation of MA is schematized in (33).

(33) MULTIPLE AGREE (P, ∀G)

Agree is a derivationally simultaneous operation AGREE (P, ∀G).



(Hiraiwa (2005: 38))

Agree (P, $G_1 \ldots G_n$) is a *Centrosymmetry* operation, where P is a probe and all instances of G are matching goals, with ">" standing for a c-command relation. As shown by the arrows in (33), [*u*Case] (uninterpretable Case feature) of all goals is valued by P, and the last goal G_n values [*u*φ] (uninterpretable φ-feature) of P and the other goals. Moreover, MA must take place within a phase domain, along the lines of the phase-based model of derivation. Thus, a probe–goal relation under MA is subject to the Phase Impenetrability Condition (PIC).

(34) Phase-Impenetrability Condition (PIC):

In phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.

(Chomsky (2000: 108))

Under these assumptions, the Binding Condition A is reformulated based on the phase-based model of derivation, by replacing a binding domain with a phase

domain, as shown in (35).

(35) Binding Condition A (reformulated):

An anaphor serving as a matching goal enters into an MA relation with a functional head as a probe and its antecedent DP as another matching goal within the same phase domain.

As for probing by functional heads, this thesis assumes, with Chomsky (2008), that T and V inherit [*u*φ] and [EPP] from the phase heads C and *v**, respectively, and they serve as probes which attract matching goals to their specifiers to satisfy [EPP].

Given this theoretical background, an alternative analysis of FQs will be proposed in the following section.

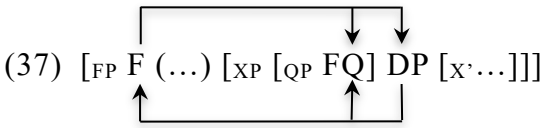
2.3.2. A Phase-Based Analysis of Floating Quantifiers

Given that FQs have the same distributional restrictions as anaphors, as we saw in Section 2.2.2, I propose that FQs are licensed by the condition in (36), as roughly schematized in (37).

(36) Licensing Condition on FQs

An FQ serving as a matching goal enters into an MA relation with a functional head as a probe and its host DP as another matching goal within

the same phase domain.

(37) 

Although quantifiers do not bear any overt inflections in P PE, there are reasons to believe that an FQ indeed enters into an agreement relation with the host DP and the functional head as a probe. Lightfoot (1979) notes that FQs were adverbs in OE and ME, in which case, gender, and person inflections were (partly) realized. Moreover, universal quantifiers show partial or full φ-agreement in other languages such as German, French, Spanish, and Icelandic, so it is possible to assume that there are φ-agreement relations between an FQ, the host DP, and the functional head as a probe, even though an FQ has lost its inflectional morphemes by PE. Examples from Icelandic and OE are given in (38), where the FQ shows overt gender, number, and case features.

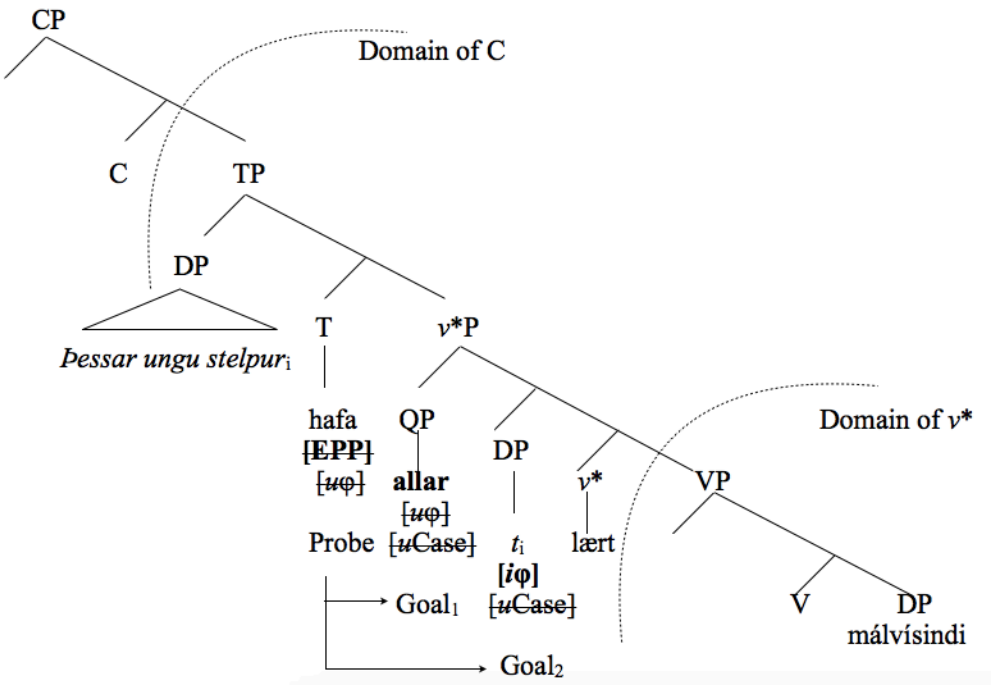
(38) a. *Þessar ungu stelpur* hafa ***allar***
these young girls:NOM;FEM;PL have all:NOM;FEM;PL
lært málvísindi.
studied linguistics
'These young girls have all studied linguistics.'

(Thráinsson (2007: 124)/ Icelandic)

b. Þi *we* sceolon **ealle** beon
therefore we:NOM;MASC;PL should all:NOM;MASC;PL be
on gode gebroþru.
on God brothers
'Therefore should we all be brothers on God.' (ÆCHom I 327.47/ OE)

If this is correct, the derivation of the Icelandic sentence in (38a) will be as in (39), where the auxiliary *hafa* 'have' occupies the head position of TP (cf. Thránsson (2007)), the FQ *allar* 'all' is adjoined to *v**P, and the past participle *lært* 'studied' has moved to *v**.

(39)



In (39), T, which has [*u*φ] and [EPP] inherited from C, acts as a probe and enters

into an MA relation with the FQ *allar* 'all' bearing [*u*φ] and [*u*Case], as well as the subject DP *Þessar ungu stelpur* 'these young girls' bearing [*i*φ] (interpretable φ-feature) and [*u*Case]. This MA relation is established at the CP phase, thereby satisfying the condition in (36). Under MA, T assigns nominative Case to the FQ and the subject DP; at the same time, [*i*φ] of the subject DP values [*u*φ] of T and the FQ. Then, the subject DP moves to Spec-TP to satisfy [EPP] on T. This leads to the convergent derivation, with all the uninterpretable features deleted in (39).

The next section exhibits how the proposed analysis accounts for the distribution of SFQs and OFQs.

2.4. The Distribution of SFQs

In this section, the syntactic structures of SFQs in different types of constructions will be discussed, i.e., transitive constructions, unaccusative/passive constructions, subject control constructions, and small clauses.

2.4.1. Transitive Constructions

Firstly, let us look at the following sentences with SFQs occurring in various positions of transitive constructions, as shown in (40).

(40) a. *The children* **all** may have been watching the movie.

b. *The children* may **all** have been watching the movie.

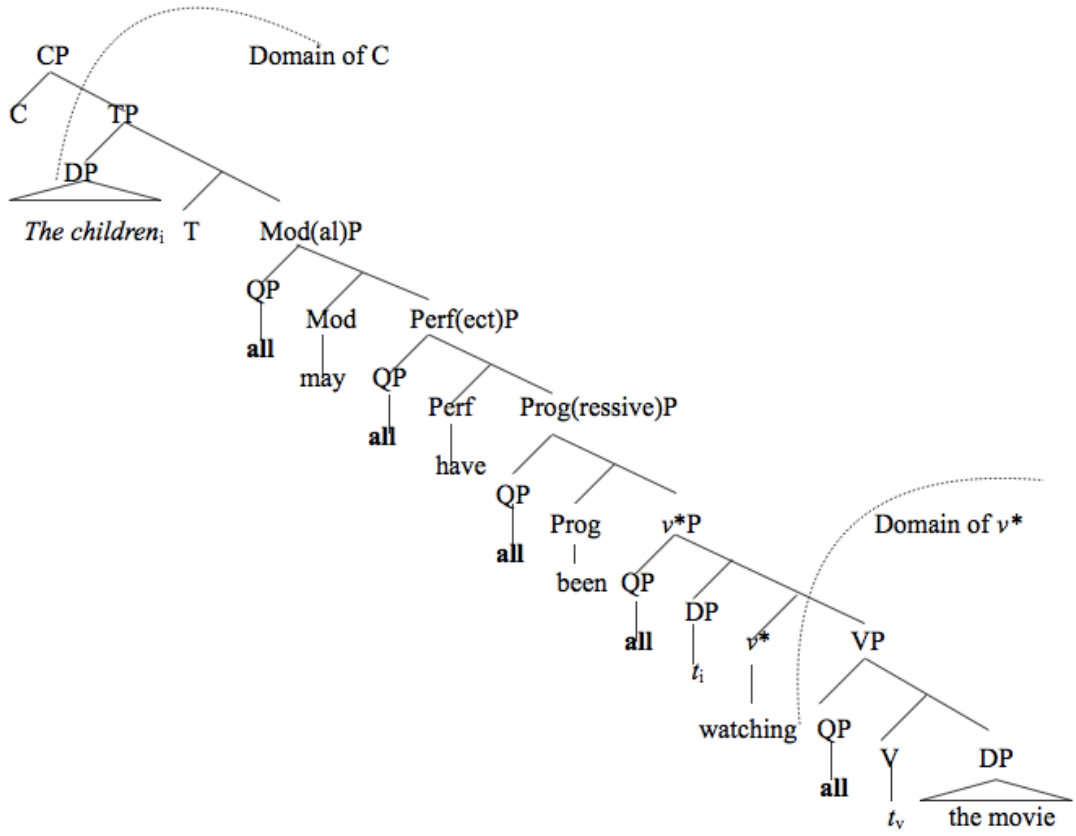
c. *The children* may have **all** been watching the movie.

d. *The children* may have been **all** watching the movie.

e. * *The children* may have been watching **all** the movie. (Cirillo (2009: 24))

The structure of the examples in (40) is represented as a single tree diagram in (41), where the order of maximal projections follows the adverbial hierarchy in Cinque (1999). Each of the examples in (40a–d) is grammatical, because the SFQ enters into an MA relation with the probe T and the host DP in Spec-*v**P at the CP phase, satisfying the condition in (36). On the other hand, (40e) is ungrammatical due to the violation of (36), because the SFQ is in the domain of *v**, and hence it cannot establish an MA relation with T and the host DP, without violating the PIC. As a result, [*u*φ] and [*u*Case] of the SFQ remain unvalued, causing the derivation to crash.

(41)



2.4.2. Unaccusative/passive Constructions

Next, consider unaccusative/passive constructions with SFQs. As mentioned above, SFQs cannot appear in a position immediately after unaccusative/passive verbs, as shown in (9), repeated here as (42). This poses a serious problem for the stranding analysis.

(42) a. * *The students* have arrived **all**.

b. * *The students* were seen **all**. (= (9))

As for the status of unaccusative/passive *v*P, Legate (2003) claims, contra

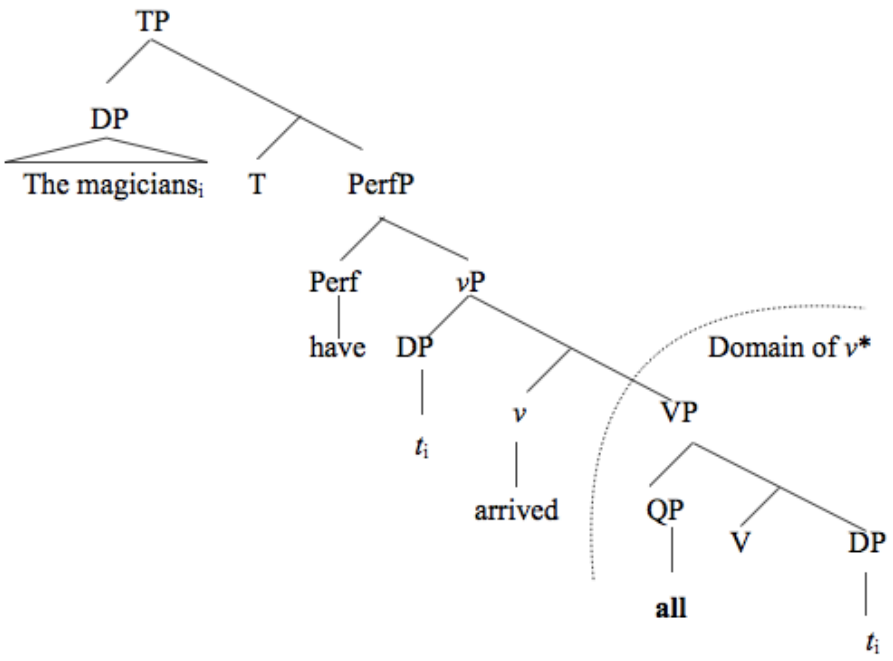
Chomsky (2000), that it constitutes a phase and provides an escape hatch for movement out of it, based on facts concerning reconstruction (see also Legate (2014)). In addition, the presence of the inflection on the passive participle in the French example (43) implies that passive *v* has [*u*φ], because only a phase head bears [*u*φ] in Chomsky′s (2008) framework.

(43) Les chaises ont été repaintés.
The chairs:F;PL have:PL been repainted:F;PL
'The chairs were repainted.' (Boeckx (2008: 33))

Thus, unaccusative/passive constructions are not different from transitive constructions on the phasehood of *v*P: *v* is a phase head, and all elements within the complement of *v* cannot be the target of agreement with T. Keeping this in mind, let us consider the following structures of the unacceptable sentences in (42), where the surface subject moves to Spec-TP via Spec-*v*P to satisfy [EPP] of *v*, and the SFQ is adjoined to VP following the verb, which has raised to *v*.

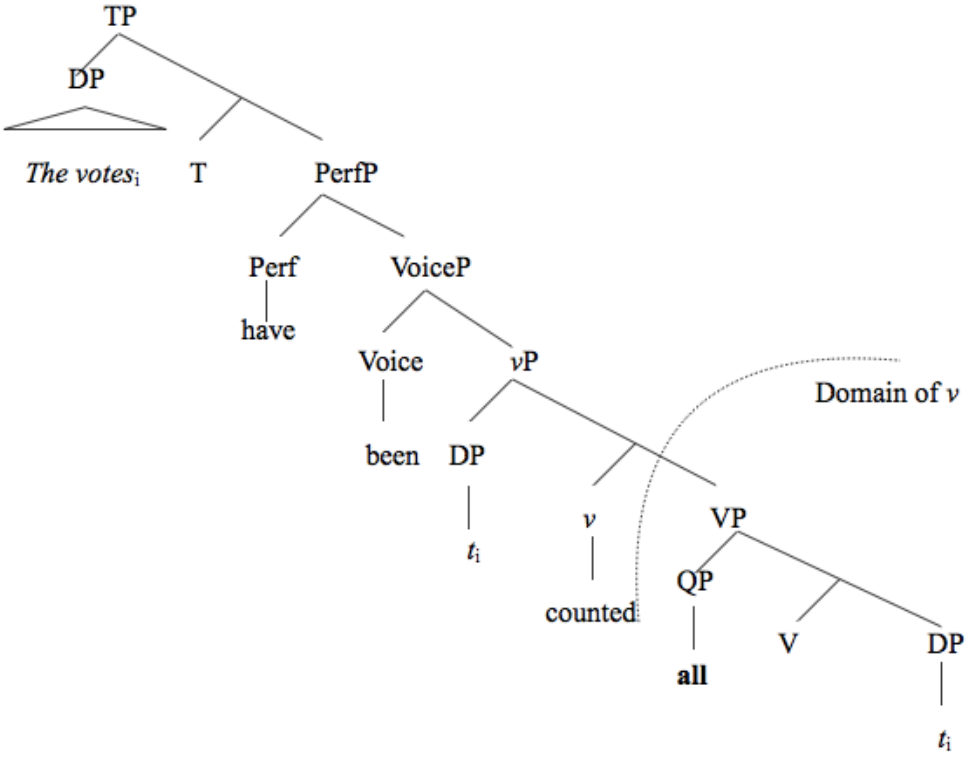
(44) a. * *The magicians* have arrived **all**.

b.



(45) a. * *The votes* have been counted **all**.

b.



In (44) and (45), the FQ cannot enter into an MA relation with T and the host DP, because it is in the domain of *v* and is not accessible to operations at the CP phase due to the PIC, violating the condition in (36). This results in a nonconvergent derivation because [*u*φ] and [*u*Case] of the SFQ are not valued.[7]

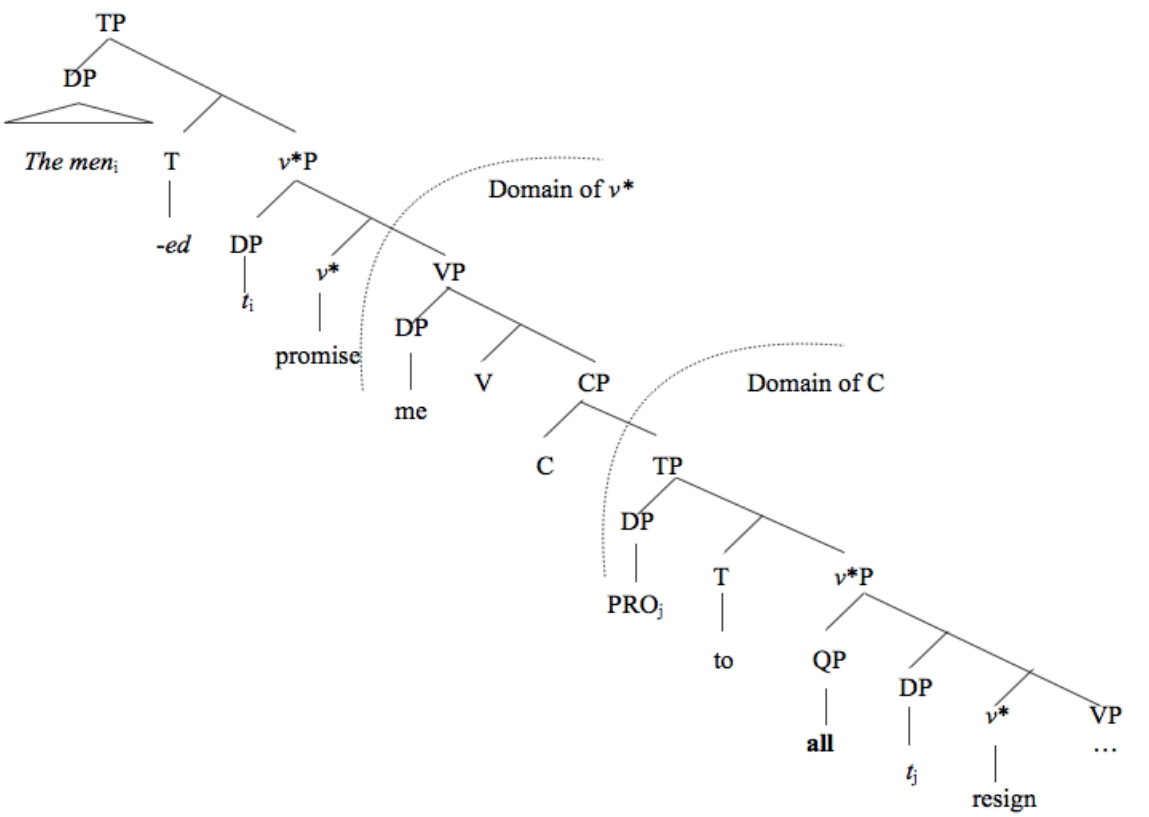
2.4.3. Subject Control Constructions

Now, let us consider subject control constructions with SFQs. Baltin (1995) observes that SFQs cannot precede the infinitival *to* but must follow it in subject control constructions, as shown in (46). Assuming with Chomsky and Lasnik (1993) that a control infinitive has a PRO subject bearing null Case which is checked by the infinitival T, I propose that the relevant probe is the infinitival T, and the host of an FQ is PRO bearing [iφ] and [*u*Case]. Then, the structures of (46a, b) will be as in (47) and (48), respectively.

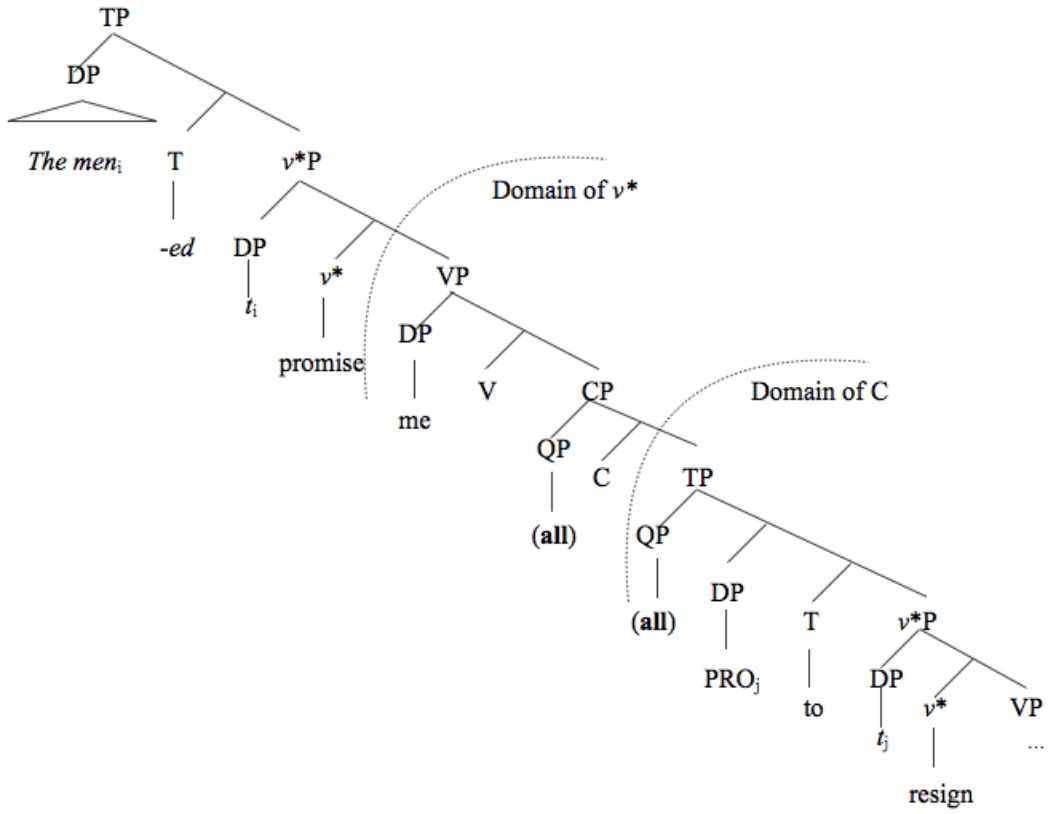
(46) a. *The men* promised me to **all** resign.

b. * *The men* promised me **all** to resign.

(47)


TP
DP
The men$_i$
T
v*P
Domain of v*
-ed
DP
v*
VP
t$_i$
DP
promise
V
CP
Domain of C
me
C
TP
DP
T
v*P
PRO$_j$
to
QP
DP
v*
VP
all
t$_j$
resign
…

(48)


TP
DP
The men$_i$
T
v*P
Domain of v*
-ed
DP
v*
VP
t$_i$
DP
promise
V
CP
Domain of C
me
QP
C
TP
(all)
QP
DP
T
v*P
(all)
PRO$_j$
to
DP
v*
VP
t$_j$
resign
…

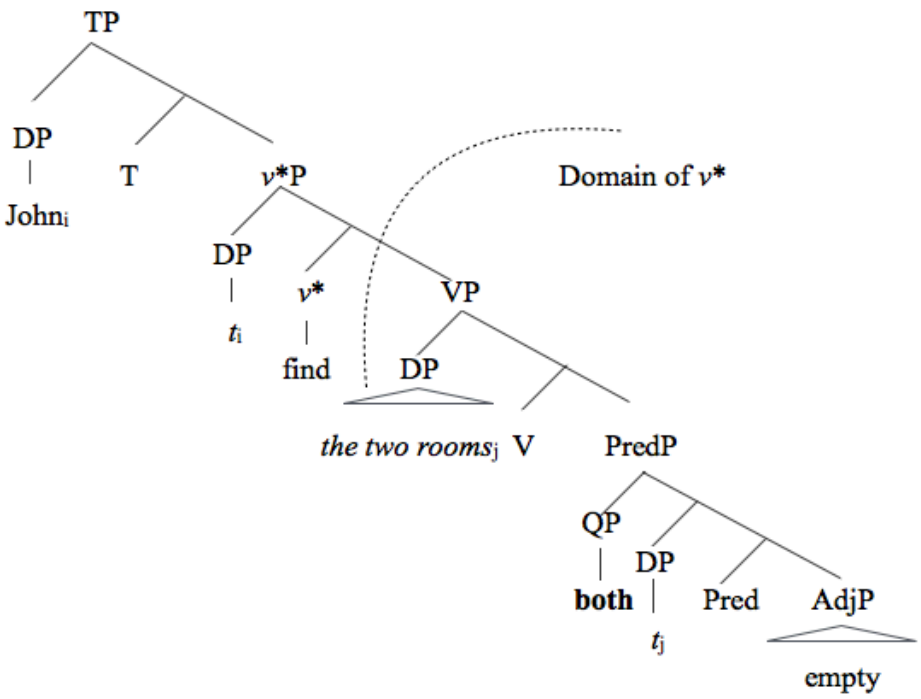
In (47), the SFQ enters into an MA relation with the infinitival T and PRO in Spec-*v**P at the infinitival CP phase, satisfying the condition in (36). On the other hand, in (48), the FQ, whether it is adjoined to the infinitival TP or CP, cannot enter into an MA relation with the infinitival T and PRO, because the SFQ is not c-commanded by the infinitival T and hence is outside its search domain, violating the condition in (36). The derivation crashes with [*u*φ] and [*u*Case] of the SFQ unvalued.

2.4.4. Small Clauses

Lastly, the distribution of SFQs in small clauses is considered, as illustrated in (49). For the purpose of exposition, this thesis follows Bowers (1993) in assuming that small clauses are headed by a functional head Pred(ication), whose function is to convert a predicate into a proposition function requiring a subject in its specifier. In this analysis, the structure of the sentence in (49) will be as in (50), where the SFQ is adjoined to PredP and its host, the small clause subject is base-generated in Spec-PredP. In this structure, the SFQ enters into an MA relation with V bearing [*u*φ] and [EPP] inherited from *v** and the host DP in Spec-PredP, satisfying the condition in (36). Then, the small clause subject moves to Spec-VP to satisfy [EPP] on V. The derivation converges, so that the distribution of SFQs associated with small clause subjects is correctly accounted for.

(49) John found *the two rooms* **both** *empty*. (Takami (1998: 155))

(50)



2.5. The Distribution of OFQs

In this section, the syntactic structures of OFQs in transitive constructions, object control constructions, and ditransitive constructions will be discussed. In particular, the consideration of the derivation of OFQs in transitive constructions will be concerned with different types of objects, i.e. full-DP objects and object pronouns. The case of a quantifier following an object pronoun has been excluded from the consideration of OFQs in the literature. However, given phonological and discourse-related factors, this chapter attempts to provide an alternative analysis of this case. Moreover, the diachronic aspect

of OFQs with respect to object pronouns discussed in the Chapter 4 may also supported by the present analysis.

2.5.1. Transitive Constructions

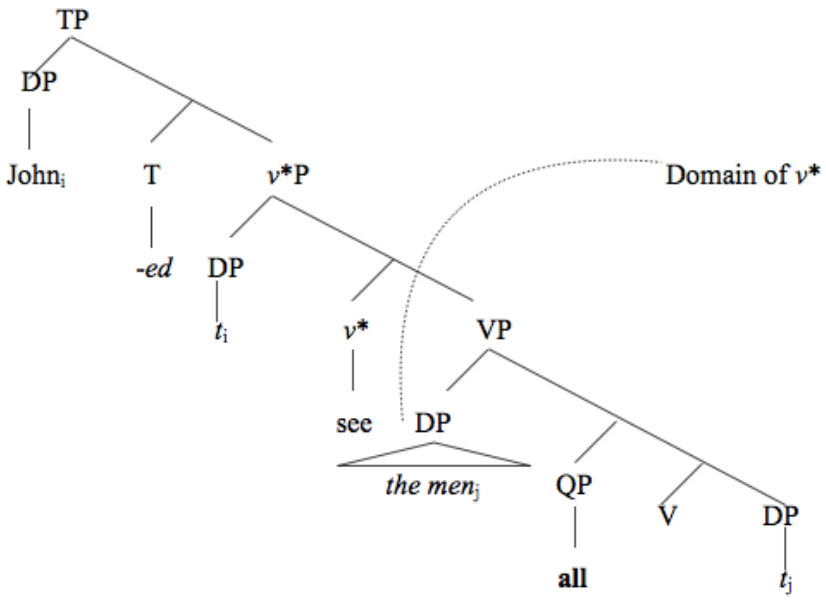
2.5.1.1. Full-DP Objects

It has been observed in the literature that the distribution of OFQs is severely restricted and they may appear only in certain constructions such as ditransitive constructions (Maling (1976), Baltin (1995), Bobaljik (2003), and Bošković (2004) among others). As we saw in Section 1, OFQs are generally not allowed in ordinary transitive constructions with full-DP objects, as shown in (2), repeated here as (51). The structure of (51a) is represented in (52).

(51) a. * John saw *the men* **all**.

b. * They read *the papers* **both** yesterday. (=(2))

(52)



In (52), the OFQ cannot enter into an MA relation with V bearing [*u*φ] and [EPP] inherited from *v**, because the OFQ, which is adjoined to VP, is not in the search domain of V, violating the condition in (36). As a result, [*u*φ] and [*u*Case] on the OFQ are not valued, causing the derivation to crash.

2.5.1.2. Object Pronouns

As briefly discussed in footnote 1, object pronouns can be followed by quantifiers, in contrast to full-DP objects. The examples in question are repeated here in (53).

(53) a. I called *them* **all**.

b. * I called *the men* **all**. (Maling (1976: 714))

Maling (1976: 714) excludes the possibility of the sentence in (53a) as an

instance of OFQs and proposes a *Q-Pro-Flip* hypothesis, claiming that the object pronoun and the quantifier form a constituent within a DP, in which the two elements can be "flipped". However, Brisson (1998) suggests that the pair [*them all*] is not really a constituent because it cannot be topicalized or sever as an answer to a question, in contrast to the presumably synonymous *all of them*, as in (54) and (55), respectively.[8]

(54) a. **them* **all**, I like.

b. all of them, I like. (Brisson (1998: 240))

(55) Which cookies did Rhonda eat?

a. **them* **all**

b. all of them (Brisson (1998: 240))

It follows that the asymmetry between object pronouns and object DPs in (53) is due to other reasons, rather than being "flipped" or not. Under the present analysis, if we assume that object pronouns stay within VP as in the standard assumption, the sentence in (53a) would be incorrectly excluded in the same way as the case of OFQs with full-DP objects in (52). Therefore, it seems that the surface positions of the two types of objects with respect to OFQs are different. There are two pieces of evidence to support this assumption. The first one comes from ECM sentences with respect to OFQs, as shown in (56).

(56) a. Malcolm proved *them* **all**, don't forget/he claimed, to be vicious criminals.

b. *Malcolm proved *the soldiers* **all**, don't forget/he claimed, to be vicious criminals. (Postal (1974: 115)

This pair of sentences is just like (53), in which an object pronoun can be followed by an OFQ while a full-DP object cannot. The difference in acceptability between (56a) and (56b) can be attributed to the different position of the two ECM subjects. Namely, the pronoun *them* could be shifted to a position higher enough to allow both an OFQ and a parenthetical to follow it, but this is not true for the DP *the soldiers*.[9] The second piece of evidence comes from verb–particle constructions, as shown by the contrast between (57a) and (57b).

(57) a. The housewife dusted *them* **all** off.

b. ? He bawled *the boys* **all** out. (Fraser (1976: 26))

Although (57b) is not as unacceptable as (53b), the difference in acceptability indicates different positions of the two types of objects. It is suggested that the particle may bring in additional structure for the OFQ to adjoin to a lower phrase. It has been observed in the literature that object pronouns and full-DP objects have different distribution in verb–particle constructions in English, as

illustrated in (58), where the object pronoun cannot follow the particle but the full-DP subject can (Fraser (1976) and Kayne (1985), among many others).

(58) a. John looked (*the information*) up (*the information*).

b. She stirred (*it*) up (**it*). (Fraser (1976: 16–17))

Kayne (1985) attributes the asymmetry between object pronouns and full-DP objects in verb–particle constructions to the "heaviness" of the moved DP.[10] This rightward DP movement is constrained by the following condition.

(59) In … $[e]_i$ X NP_i …, where NP_i binds $[e]_i$ NP_i must be as heavily weighted as X (Kayne (1985: 127))

Moreover, it has been argued in the literature that PE object pronouns exhibit behaviour similar to Scandinavian languages (Holmberg (1986, 1999), Chomsky (2001), and Wallenberg (2008, 2009) among others), as the comparable instances to PE in some Scandinavian languages shown in (60).

(60) a. Jeg skrev (nummeret/det) op (*nummeret/*det). (Danish)

b. Jeg skrev (nummeret/det) opp (nummeret/*det). (Norwegian)

I wrote (the-number/it) up (the-number/it)

'I wrote the number/it down.' (Holmberg (1999: 2))

Since these languages are object shift language, it is plausible to assume that PE object pronouns may also undergo object shift in certain circumstances. This phenomenon apparently violates Holmberg′s Generalization (Holmberg (1986)), where object shift cannot apply if an object moves across any phonologically visible non-adjunct material. Holmberg (1999) reformulates Holmberg′s Generalization along the following lines.

(61) Object Shift cannot apply across a phonologically visible category asymmetrically c-commanding the object position except adjuncts.

Holmberg suggests that object shift is a phonological possess, satisfactory (61), and is based on semantic interpretations of the shifted object (old/new information, specificity-definiteness, focus or topic, etc.) under information structure (cf. Diesing (1992)).[11] Particularly, an element with [-Foc] feature must move out of the focus domain (i.e. VP) to a position that can be dominated by phonologically visible [+Foc] elements such as *wh*-phrases. While pronouns are inherently specified as [-Foc], the Icelandic full-DPs are specified optionally as [-Foc] or [+Foc]. It is debatable whether the significant asymmetry between the pronoun object shift and the full-DP object shift in question really accounts for or merely ‘technicalizes’ and restates it. On the other hand, Chomsky (2001: 15) points out that the post-syntactic rules are not expected to be

semantically restricted. Therefore, the fact that object shift apply only to presuppositional material (old information) leads to the conclusion that the object shift is a syntactic operation after all. It is also proposed that Holmberg′s assumption that Holmberg′s Generalization is a condition on derivation must be discarded and that it is rather a filter on output representations. As a consequence, Chomsky (2001) claims that object shift should be reduced to the optionality of an [EPP] feature on *v** and falls under the following principles of phase-based derivation.

(61) a. *v** is assigned an EPP-feature only if that has an effect an outcome.

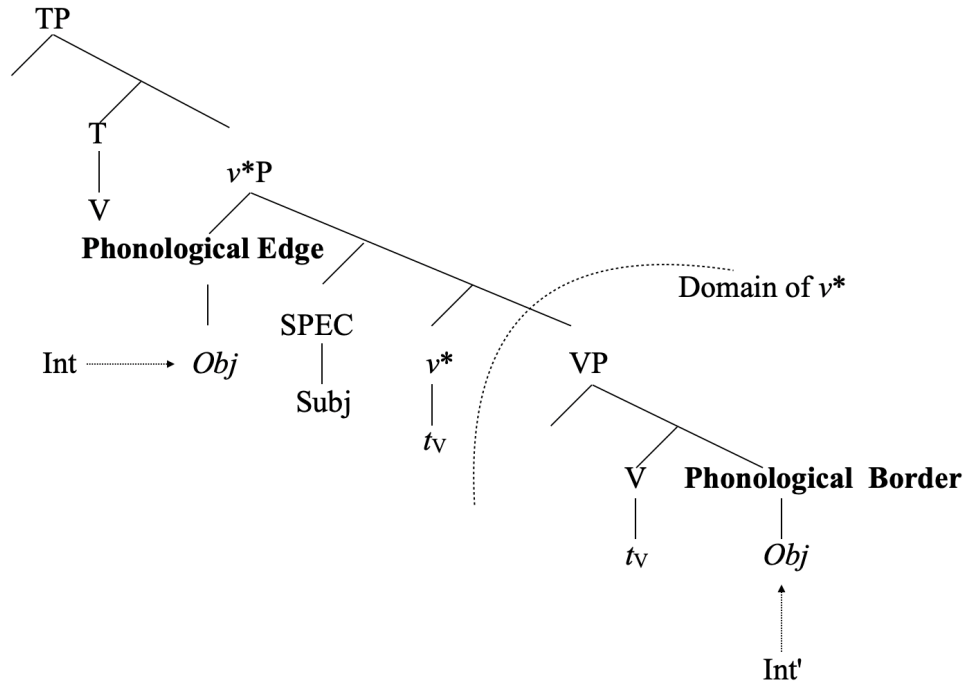
b. The EPP position of *v** is assigned Int.

c. At the phonological border of *v**P, XP is assigned Int′.

(Chomsky (2001: 35))

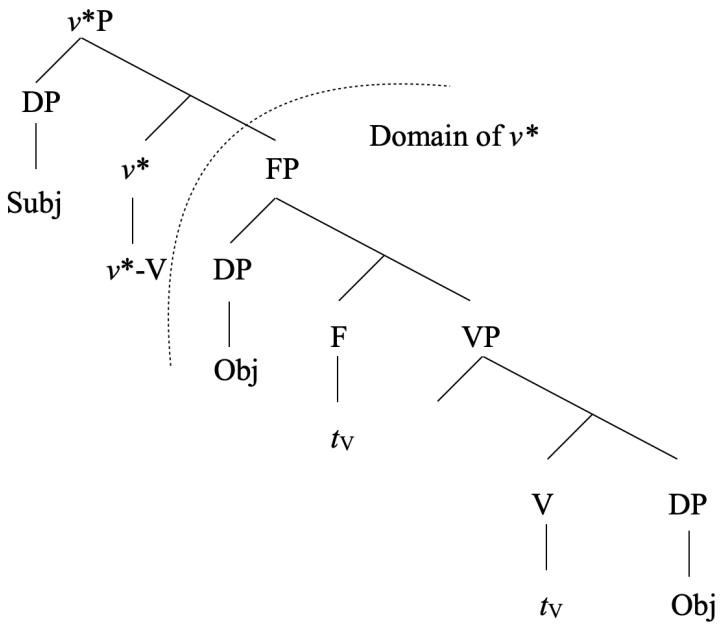
In (61), Int/Int' is an interpretive complex which is relevant to information structure (Chomsky (2001: 31)). Based on phase theory, Chomsky states that principle (61a) is evaluated at the next strong phase CP, and at that point it is understood whether V-movement occurs (to T or C). Since the [EPP] feature *v** is optional, the object may either remain in the phonological border position and be assigned Int', or undergo OS forced by [EPP] to the edge position of *v**P and be assigned Int. Under these assumptions, the derivation of object shift in Scandinavian languages is represented in (62).

(62)



The movement from the position of the object to Spec-*v**P will therefore have a semantical effect in object shift languages. Therefore, an [EPP] feature is assigned to *v** to avoid a deviant outcome. If this is correct, it is plausible to assume that the object shift of PE object pronouns is driven by [EPP] as in the Scandinavian languages. However, since PE does not have V-movement (to T or C), the PE type object shift must occur within *v**P.[12] For the purpose of discussion, let us assume that the target of object shift in PE is an intermediate functional head F, at a position between V and *v**, as represented in (63).

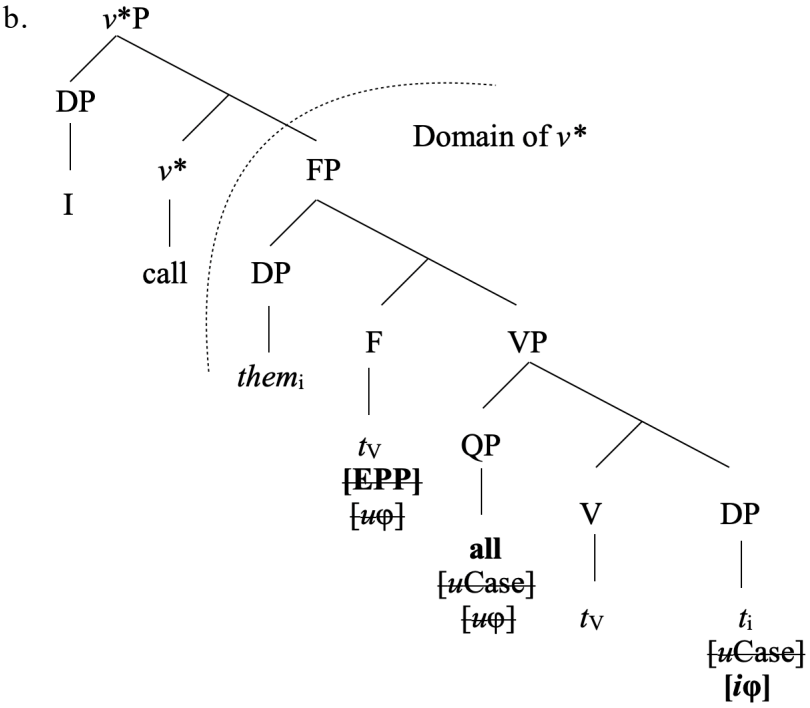
(63)



With this verbal structure, the derivation of OFQ with respect to object pronouns (53a), repeated here as (64a), is represented in (64b).

(64) a. I called *them* **all**. (53a)

b.



In (64b), the verbal functional head F bearing [EPP] and [*u*φ] acts as a probe and enters into an MA relation with the OFQ as well as the object pronoun bearing [*i*φ] and [*u*Case]. As a result, F assigns accusative Case to the object; at the same time, [*i*φ] of the object values [*u*φ] of F. Then, the object moves to Spec-FP trigged by [EPP] on F. As for the derivation of the verb and the particle, it is assumed that they are base-generated in V as a compound [$_V$ V-Prt], and the V moves out of [$_V$ V-Prt], adjoining to *v** successfully. Thus, the derivation above does not violate the licensing condition (36).[13]

2.5.2. Object Control Constructions

As briefly mentioned in Chapter 1, there are several circumstances that allow FQs to be associated with objectives, as shown in (9) in Chapter 1, which is repeated here as (66).

(66) a. I gave *the boys* **both** a quarter.

b. He called *the men* **all** crazy.

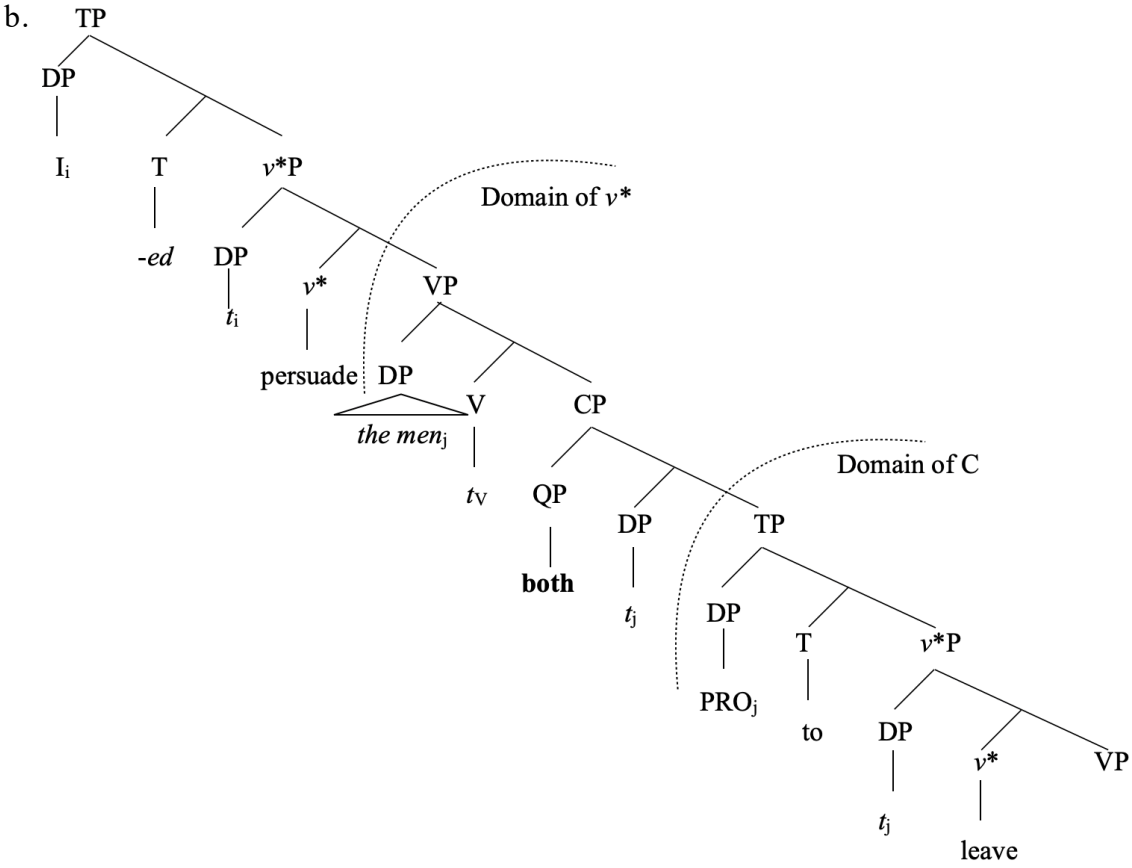
c. I persuaded *the men* **both** to leave. (Fiengo and Lasnik (1976: 188))

The syntactic derivation of (66b) is a case of SFQs in small clauses, which has been discussed in Section 2.4.4. The structure of ditransitve sentences in (66a)

will be discussed in the next subsection. Now, let us consider the object control construction in (66c), whose derivation is represented in (67).

(67) a. I persuaded *the men* **both** to leave.

b.



In (67b), the OFQ enters into an MA relation with V in the main clause bearing [*u*φ] and [EPP] inherited from *v** and the object DP *the men* in Spec-CP controlling PRO in the specifier of the infinitival T, satisfying the condition in (36). Then the object DP moves to Spec-VP to satisfy [EPP] on V, yielding a convergent derivation.

2.5.3. Ditransitive Constructions

Next, let us consider ditransitive constructions with OFQs. As first observed by Maling (1976), FQs associated with an indirect object can occur between it and a direct object, as illustrated in (68).

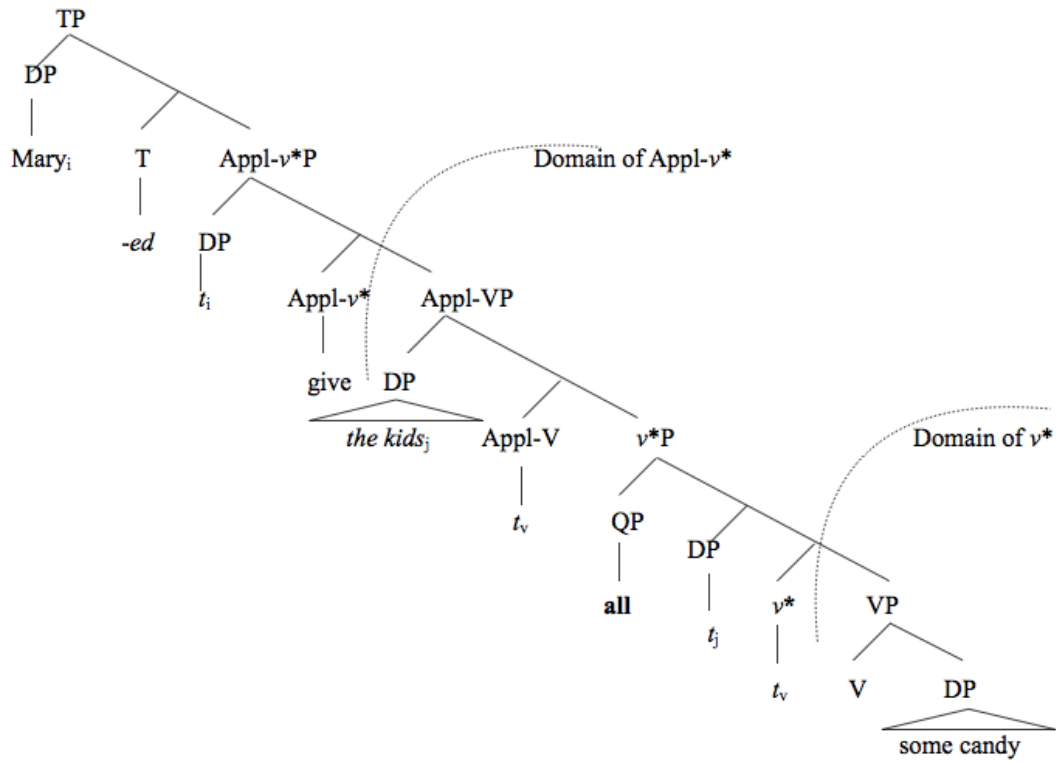
(68) a. Mary gave *the kids* **all** some candy.

b. The tooth fairy promised *the kids* **each** a quarter.

c. Dad bought *the twins* **both** bicycles for Christmas. (Maling (1976: 715))

Otsuka (2012) argues that the structure of ditransitive constructions contains two projections of *v**: Appl(icative)-*v**P and the lower *v**P. Appl-*v**P is a phase and hosts an external argument in its specifier, while an indirect object is base-generated in the specifier of the lower *v**. Based on this structure, it is assumed that [*u*φ] and [EPP] are inherited from Appl-*v** to Appl-V in the same way as the feature inheritance from *v** to V. At the Appl-*v**P phase, the FQ adjoined to the lower *v**P enters into an MA relation with Appl-V and the indirect object *the kids*, satisfying the condition in (36). Then, the indirect object moves to Spec-Appl-V to satisfy [EPP] on Appl-V, yielding a convergent derivation. The derivation of (68a) is represented in (69).

(69)



2.6. Conclusion

This chapter has discussed the syntactic structure of FQs within the minimalist framework. Given the empirical facts, it has adopted basic ideas of the adverbial analysis and the anaphoric analysis and highlighted the properties of FQs behaving similar to adverbs and anaphors. In these respects, this chapter has related Chomsky′s (2008) reformulation of Binding Condition A to FQs and suggested a licensing condition on FQs under MA. It has indicated that an FQ serving as a matching goal enters into an MA relation with a functional head as a probe and its host DP as another matching goal within the same phase domain. Under this assumption, the distributional properties of both SFQs and OFQs in variant constructions have received a unified account.

Notes to Chapter 2

[1] Postal (1974) and Maling (1976) discuss the asymmetry between a full-DP object and an object pronoun with respect to FQs, as shown in (i). Unlike in the case of the DP object in (2a), a quantifier is allowed to follow an object pronoun. This phenomenon is called *Q-Pro-Flip* in Maling (1976), according to which the Q *all* and the pronoun *them* are simply inverted, rather than an instance of OFQ. Namely, the two elements make up a single constituent [Pro Q] in surface structure, and they are a part of the same DP constituent throughout the derivation.

(i) a. I called *them* **all**.

b. * I called *the men* **all**. (Maling (1976: 714))

This is supported by the ungrammaticality of the following sentences.

(ii) a. * Mary hates *THEM* **all**.

b. * Mary hates *you, him, and her* **all**. (Bošković (2004: 708))

As shown in (ii), when an object is a contrastively focused pronoun or consists of coordinated pronouns, it patterns with a DP object, and an FQ associated with it is not allowed. See Section 2.5.1 for more detailed discussion of the syntactic structure of OFQs with respect to object pronouns.

[2] Sportiche (1988) uses NP to express a nominal projection, rather than DP. Without considering various analyses of the internal structure of a nominal, this thesis uses DP to present both full-DP and pronominal arguments uniformly.

[3] For further evidence of this asymmetry between passive/unaccusative verbs and transitive/unergative verbs, including auxiliary selection in French, Italian, and German, and the genitive of negation in Russian, see Pesetsky (1982).

[4] Sportiche (1988) notes that the grammaticality of examples improves with emphasis on the Q or the addition of the modifier *presque* 'almost'.

[5] There are two facts that contradict the view of FQs as derived from their partitive counterpart, i.e., *all of the students* vs. *the students all*. First, in the history of English, this form is attested much earlier than the partitive form (Amano (2003)). Second, FQs are far more frequent overall than the other variant.

[6] Tescari Neto (2013) proposes to account for the distribution of FQs within Cinque′s (1999) hierarchy of adverbial projections by assuming that FQs occur in a fixed position between mood adverbs, as shown in (i).

(i) $\text{Mood}_{\text{SpeechAct}}\text{P} > \text{Mood}_{\text{Mirative}}\text{P} > \text{FQ}_{all} > \text{Mood}_{\text{Evaluative}}\text{P} > \text{Mod}_{\text{Epistemic}}\text{P} > \ldots > \text{V}$ (Tescari Neto (2013: 317))

Since the distribution of FQs is rather free, there are still counterexamples that do not follow this hierarchy, as in (ii).

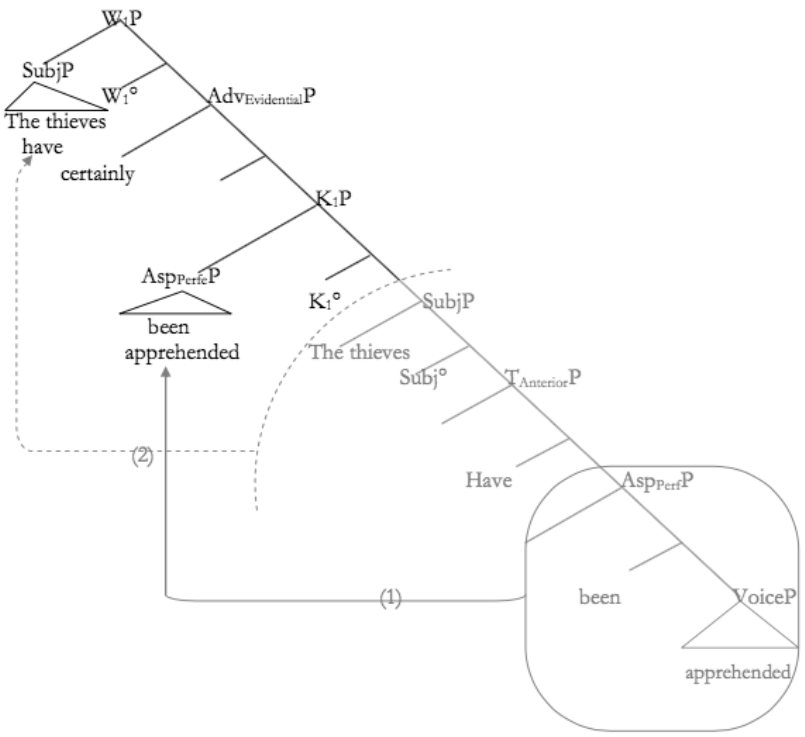
(ii) a. *The thieves* have **all certainly** been apprehended.

b. *The thieves* have **certainly all** been apprehended.

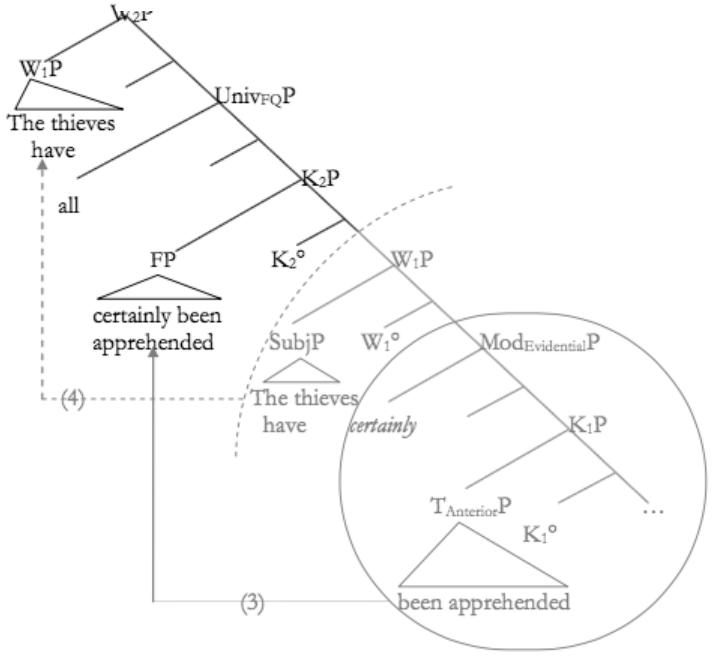
(Bobaljik (1995: 31))

Tescari Neto (2013) attributes the apparent free orders of FQs with respect to other adverbs to scope-inducing effects of FQs (Kayne (1998)). He argues that the derivation of the two examples involves movement of different types of constituents, which are attracted by the probing head, including the adverb. Firstly, let us see the two-step derivation of the example in (iia), as shown in (iiia) and (iiib), respectively. As in (iiia), the adverb *certainly* is adjoined to $Mood_{Evidential}P$ after the whole $Asp_{Perfect}P$ moving to Spec of the criterial head K_1 and the remnant movement of SubjP *The thieves have* to Spec-W_1P. As in (iiib), the FQ *all* dose not merge until all the other steps have finished, i.e. the attraction of $Mood_{Evidential}P$ to Spec-K_2P and the remnant movement of W_1P to Spec-W_2P.

(iii) a.



b.

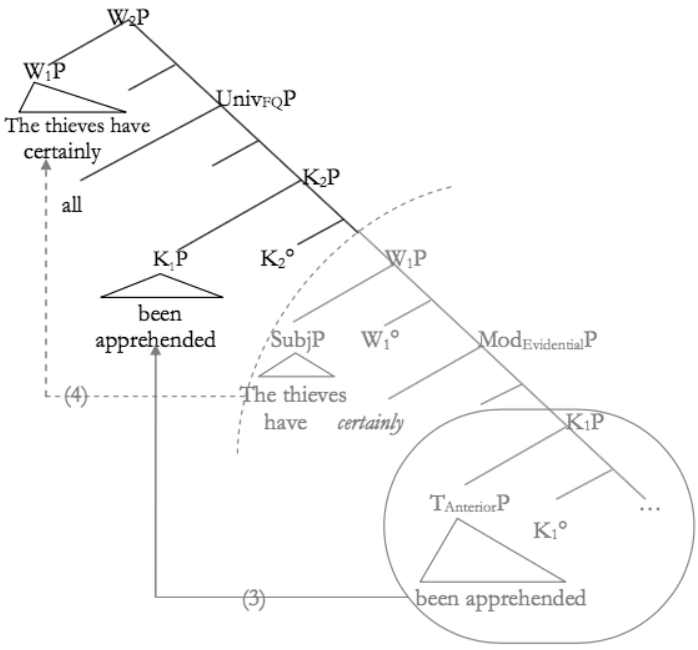


(Tescari Neto (2013:318–319))

On the other hand, the derivation of the example in (iib) is compatible with the one in (iia) at the second step. Namely, it is K_1P *been apprehended* that is attracted to Spec-K_2P, without the adverb *certainly*, as in (iv). The remnant

elements including the adverb then move to Spec-W_2P before the merger of FQ *all*.

(iv)



Under this assumption, Tescari Neto (2013) has correctly accounted for the inaction between FQs and other adverbs. However, it is not clear why the merger of FQs should be delayed until a late stage of the derivation and why only FQs, rather than other adverbs, can escape from a series of movements. This thesis, therefore, does not adopt the hierarchy in (i) and proposes an alternative licensing condition to constrain the distribution of FQs (see Section 2.2.).

[7] A case of FQs involving progressive constructions discussed in Harwood (2012) provides further support to our assumptions, which is exemplified in (i). In these sentences, FQ *all* occurs in the position following a progressive copular auxiliary *being*. According to the detailed observation of existential

constructions and FQs, Harwood (2012) claims that the projection with its head position occupied by a verb with progressive suffix *–ing* is phasal, whose complement is the spell-out domain that bans further operation under PIC. Adopting his assumption, the unacceptable sentences in (ia,b) would be accounted for. Since FQ *all* is within the spell-out domain of the phase head being, it cannot be accessible anymore to the functional head T in the next phase. Therefore, the agreement relation between T, FQ, and the subject will not be established and the uninterpretable features on FQ cannot be deleted. As a result, the derivation will end up with a crash in PF.

(i) a. * *They* were being **all** punished.

b. * *They* were being **all** rather loud. (Harwood (2012: 220))

In addition, Harwood (2012) presents passive sentences with all sorts of auxiliaries presented, as in (ii).

(ii) a. *We* **all** could have been being punished for our crimes.

b. *We* could **all** have been being punished for our crimes.

c. *We* could have **all** been being punished for our crimes.

d. *We* could have been **all** being punished for our crimes.

e. * *We* could have been being **all** punished for our crimes.

f. * *We* could have been being punished **all** for our crimes.

(Harwood (2012: 221))

[8] Koopman (2000: 103) argues that object pronouns move to Spec-AgrP, a position above OFQs (*all*P in Koopman′s (2000) terminology) and VP. She argues that asymmetries between full-DP objects and object pronouns are due to overt morphological Case distinctions carried by English pronouns. Consequently, pronominal movement could therefore be motivated as DP movement to the position where these features are checked. However, this argument fails to explain why the same problem does not arise between different types of subjects, as shown in (i).

(i) a. *They/you/we/* **all** left.

b. *The girls* **all** left together. (Brisson (1998: 238–239))

[9] Bošković (2004: 707) observes that (57b) would be more acceptable without the OFQ, as shown in (i).

(i) ? Malcolm proved *the soldiers*, don't forget/he claimed, to be vicious criminals.

The different acceptability judgments of these sentences exclude the possibility of incompetence of full-DP objects in such a construction. Namely, the ungrammaticality of (56b) is due to the presence of the OFQ *all*. Bošković argues that the full-DP object *the soldiers* in (i) raises from the ECM subject position to the matrix object position, whereas the OFQ in (56b) is stranded in infinitival Spec-TP, which makes it impossible for the parenthetical to be

attached between the infinitival Spec-TP and *to*. In contrast, he assumes that the object pronoun *them* in (56a) undergoes further movement (to a position higher than *the soldiers* in (i)) and strands the OFQ in the matrix object position.

[10] Dik (1997) formulates categorical complexity at the clause and sentence levels by postulating the *Language Independent Preferred Order of Constituents* schema for SVO language.

(i) Other things being equal, constituents prefer to be placed in an order of increasing complexity, which is defined as follows:

a. clitic < pronoun < noun phrase < adpositional phrase < subordinate clause

b. for any category X: X < X co X

c. for any categories X and Y: X < X [sub Y]

(co = coordinating element, sub = subordinating element)

(Dik (1997: 411))

It is argued that for any pair of constituents above, the preferred position of an item to the left of < is higher than that of an item to the right of <.

[11] Let us consider the core empirical data of Icelandic OS, as illustrated in (i).

(i) a. Nemandinn las ekki *bókina*.

student-the read not book-the

b. Nemandinn las *bókina*$_{i}$ ekki t_{i}

‘The student didn’t read the book.’

c. Nemandinn las (*hana*) ekki (**hana*)

student-the read it not it

‘The student didn’t read it.’ (Thráinsson (2001: 148, 150))

The first two examples show that the OS of full-DP object is “optional” in Icelandic, and the choice between them depends on the information structure of the clause: while the full-DP object in (ia) is part of the focus of the clause (new information), it is part of the presupposition of the clause in (ib) (old information). The example (ic) shows that the OS of object pronouns is obligatory due to their presuppositional nature.

[12] It has been observed in the literature that English pronouns underwent “longer” OS out of *v**P in the earlier stages (Wallenberg (2008, 2009), Miyashita (2013)). See Chapter 5 for a discussion of the historical development of OFQs with respect to object pronouns.

[13] Although full-DP objects can either precede or follow the particle in verb–particle constructions like (58a), assigned Int or Int' to be interpreted as old or new information, they may not be assigned Int in the derivation of (i). If we adopt the verb structure (63) to the case of OFQs with respect to full-DP objects,

the ungrammaticality of (i) might be contributed by the absence of [EPP] on F, which cannot force OS in such an environment.

(i) * I called *the men* **all**. (53b)

This is because of the failure of the Transfer of the *v** phase domain to the syntax–phonology interface. It has been argued in the literature that FQs serve as focus markers and cannot follow any stressed material in sentence-final positions (Sjoblom (1975), Jayaseelan (1997, 2001), Valmala (2008), and Rochman (2010) among others). This phonological restriction is noted by Sjoblom (1975) as a phonological filter, represented in (ii).

(ii) * Q / [+ stress] __]$_{S'}$ (Sjoblom (1975: 40))

This filter can be captured by the following empirical facts.

(iii) a. *Mary hates *THEM* **all**.

b: *Mary hates *you, him, and her* **all**. (Bošković (2004: 708))

In (iii), contrastively focused and coordinated object pronouns, which are heavier material or more "complex" (see footnote 10) than unstressed pronouns, are not permitted to precede an OFQ.

Chapter 3

A Diachronic Aspect of Subject-Oriented Floating Quantifiers

3.1. Introduction

In PE, SFQs must occur in the position preceding the main verb regardless of the presence of a transitive/unergative verb or an unaccusative verb, as illustrated in (1).

(1) a. *My friends* (**all**) rely (***all**) on Mary.

b. *The students* (**all**) arrived (***all**).

However, the distribution of SFQs in other languages is different from that in PE. For example, Pollock (1989) observes that, in French, the word order of SFQ with respect to the finite main verb is diametrically opposed to English, as shown in (2).[1]

(2) a. **My friends* love **all** Mary.

b. *Mes amis* aiment **tous** Marie.

c. *My friends* **all** love Mary.

d. **Mes amis* **tous** aiment Marie. (Pollock (1989: 367))

In (2b), the French SFQ *tous* is allowed to follow the underlined verb *aiment*, and in (2d) it is not allowed to precede the verb. As main verbs can overtly move to T in French but not in English, Pollock assumes that the facts in (2) are adequately captured by the presence of verb movement (V-movement), which involves movement to the inflectional domain.[2] However, as illustrated in (3), SFQs did follow the main verb in OE.

(3) a. Þa hie þa hine gesawon,
then they then him saw
þa cleopodon *hie* sona **ealle** ane worde
then call they at once all one word
'Then when they saw him, then they all called on word at once'
(coverhom,HomS_24_[ScraggVerc_1]:163.167)

b. *Hi* eodan þa **ealle** ut ætforan þam cyninge,
they went then all out before the king
'They then all went before the king' (coaelhom, ÆHom_22:400.3515)

In (3a), the SFQ *ealle* 'all' occurs in the position following the transitive verb *cleopodon* 'call'. Similarly, in (3b), the SFQ *ealle* 'all' occurs in the position following the unaccusative verb *eodan* 'go'. As lexical verbs could overtly

move to T in the history of English (cf. Roberts (1985,1993), Kroch (1989), and Pollock (1989)), the facts of (3) could have been related to the historical development of V-movement in English; the loss of the V-SFQ order probably was probably due to the loss of V-movement in the history of English.

The discussion on the syntactic properties of SFQs in early English have been discussed (Carlson (1978) and Lightfoot (1979)), have included neither systematic investigations of the distribution of SFQs, nor principled explanations as to why SFQ does not follow the main verbs in PE.[3] Therefore, to address these gaps, this chapter first investigates the distribution of SFQs in the history of English based on historical corpora before attempting to account for the historical changes in the distributions of SFQs in the framework of the minimalist program by approaching the topic in terms of the loss of V-movement.

This chapter is organized as follows. Section 3.2 outlines the historical change of V-movement in English. Section 3.3 provides quantitative data of the distribution of SFQs in the history of English by employing *The York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE), *The Penn-Helsinki Parsed Corpus of Middle English, Second Edition* (PPCME2), *The Penn-Helsinki Parsed Corpus of Early Modern English* (PPCEME), *The Parsed Corpus of Early English* Correspondence (PCEEC), and *the Penn-Helsinki Parsed Corpus of Modern British English* (PPCMBE).[4] [5] Section 3.4 examines the historical development of syntactic structures of SFQs, based on the licensing

condition proposed in Chapter 2. Section 3.5 concludes the chapter.

3.2. The Development of Verb Movement in the History of English

Before examining the quantitative data of SFQs, this section reviews the observations from previous studies of V-movement in main and subordinate clauses of OE. Particularly relevant is the analysis of the syntactic clause structures with a focus on the two types of subject in the history of English, namely, the full-DP subject and the subject pronoun.

3.2.1. The Word Order of Main Clauses in Old English

The syntax of OE overlaps with that of the modern West Germanic languages such as German and Dutch (cf. Kemenade (1987)). In particular, the finite verb was moved to an initial constitute in main clauses (verb-second (V2)), whereas it occurred in the final position in subordinate clauses (verb-final) in OE. However, in both V2 and verb-final structures, the distribution of finite verbs in OE differs slightly from that of West Germanic languages (cf. Fischer et al. (2000), Haeberli (2000, 2002b, 2005), Kemenade (2011, 2012), and Kemenade and Westergaard (2012)). In this section, the word order in the OE main clauses is briefly compared with that in German.

As shown in (4), in main clauses in German, the V2 constraint holds (with finite verbs underlined).

(4) a. *Ich* las schon letztes Jahr diesen Roman.
I read already last year this novel
b. Diesen Roman las *ich* schon letztes Jahr
this novel read I already last year
c. Schon letztes Jahr las *ich* diesen Roman
already last year read I this novel
'I read this novel last year already.'
d. *Schon letztes Jahr *ich* las diesen Roman
already last year I read his novel

(Roberts (2007: 49))

As shown in the three grammatical sentences in (4a–c), the first constituent as a topic (the subject pronoun *Ich* 'I' in (4a), the direct object *diesen Roman* 'this novel' in (4b), and the adverbial adjunct schon letztes Jahr 'last year already' in (4c), respectively) precedes the finite verb *las* 'read'. However, (4d) shows that more than one constituent preceding the finite verb is not grammatical. Similarly, sentences with an auxiliary in (5) also follow the V2 order.

(5) a. *Ich* habe schon letztes Jahr diesen Roman gelesen
I have already last year this novel read
b. Diesen Roman habe *ich* schon letztes Jahr gelesen
this novel have I already last year read

c. Schon letztes Jahr habe *ich* diesen Roman gelesen
already last year have I this novel read
(Roberts (2007: 49))

In contrast to (4a–c), what immediately follows the first constituent is the finite periphrastic auxiliary *habe* 'have', and the non-finite main verb *gelesen* 'read' occurs in the final position, following their direct objects, as in (5a–c), respectively. Given these facts, it is generally assumed that main clauses in modern West Germanic languages exhibit a strict V2 order. Similar facts have been observed in OE as illustrated in (6).

(6) a. *Se swicola Herodes* cwæð to ðam tungel-witegum
this treacherous Herod spoke to the star-wise men
'the treacherous Herod spoke to the astrologers'
(AHTh, I, 82, 15 / Kemenade (1987: 17))

b. Maran cyðde habbað *englas* to Gode þonne men
more affinity have angels to God than men
'angels have more affinity to God than men'
(AHTh, I, 10, 3 / Kemenade (1987: 17))

c. þy ilcan geare drehton *þa hergas* on East englum
the same year harried the armies in East Anglia
'in the same year the armies harried East Anglia'

(Parker 895 / Kemenade (1987: 18))

Consider that in (6), just like in the German sentences in (5a–c), the finite verb in OE occurs as the second constituent immediately following the first constituent: i.e. the full-DP subject *se swicola Herodes* 'this treacherous Herod' in (6a), the direct object *maran cyðde* 'more affinity' in (6b), and the adjunct *þy ilcan geare* 'the same year' in (6c). (7) shows the OE counterpart of the German sentences in (5). Note that the finite auxiliary occupies the second constituent position and the participial verb (7a, c) or the non-finite verb (7b) appears in final position.

(7) a. *þæs dæg* wæs on ðære ealdan æ gesett and gehalgod
this day was in the old law set and hallowed
'this day was appointed and hallowed in the old law'

(AHTh, I, 310 / Kemenade (1987: 18))

b. ðone onwald mæg wel reccan *se* þe ægðer ge hiene
the power may well wield he that both it
habban con ge wiðwinnan
have can and resist
'he is well able to wield power who can both hold and resist it.'

(CP, 112, 21 / Kemenade (1987: 18))

c. On twæm þingum hæfde *God* þæs mannes sawle gegodod
in two things had God the man′s soul endowed
'God had endowed man′s soul with two things'

(AHTh, I, 20 / Kemenade (1987: 18))

However, word order of OE does not always exhibit patterns identical to those of modern West Germanic languages. To elaborate on this point further, let us firstly consider the following examples.

(8) a. Æfter his gebede *he* ahof þæt cild up
after his prayer he lifted that child up
'after his prayer he lifted the child up'

(AHTh, II, 28 / Kemenade (1987: 110))

b. ðas þing *we* habbað be him gewritene
these things we have about him written
'these things we have written about him'

(PC 1087, 143 / Kemenade (1987: 110))

c. God *him* worhte þa reaf of fellum.
God them wrought then garments of skin.
'God then made them garments of skin.'

(AHth, I, 18/ Kemenade (1987: 114))

As in (8), the finite verb occurs in the position of the third constituent (V3) when the subject is pronominal, which follows the first constituent. Recall the ungrammatical sentence in (4d) repeated here as (9). The fact that the V3 order is not allowed in German indicates that the order of the words in West Germanic and OE is clearly distinguished in the main clause.

(9) * Schon letztes Jahr *ich* <u>las</u> diesen Roman
already last year I read this novel (Roberts (2007: 49))

On the other hand, when the first constituent is a *wh*-phrase, a negative element or *þa*, *þonne* 'then', a subject–verb inversion is generated regardless of subject-type (Kemenade (1987)). Let us consider the following two examples with full-DP (10) and pronominal subjects (11).

(10) a. Hwi <u>wolde</u> *God* swa lytles inges him forwyrnan?
why would God so small thing him deny
'Why should God deny him such a small thing?'
(ÆCHom I, 1.14.2/Kemenade (1987: 43))

b. Ne <u>sende</u> *se deofol* ða fyr of heofennum
not sent the devil then fire from heaven
'the devil did not send fire from heaven'
(ÆCHom I (Pref) 6.13 / Fischer, et al. (2000: 106))

c. Þa wæs *þæt folc* þæs micclan welan ungemetlice brucende
then was the people the great prosperity excessively partaking
'then the people were partaking excessively of the great prosperity'
(Or 1.23.3 / Fischer, et al. (2000: 106))

(11) a. for hwæm noldest *þu* ðe sylfe me gecyðan þæt …
for what not-wanted you you self me make known that
'wherefore would you not want to make known to me yourself that …'
(LS 7 (Euphr) 305 / Fischer, et al. (2000: 118))

b. Ne sceal *he* naht unaliefedes don
not shall he nothing unlawful do
'he shall not do anything unlawful'
(CP 10.61.14 / Fischer, et al. (2000: 118))

c. Þa foron *hie* mid þrim scipum ut
then sailed they with three ships out
'then they sailed out with three ships'
(Chon A (Plummer) 897.30 / Fischer, et al. (2000: 118))

Compared with (8), the subject pronoun occurs on the right of the finite verb in V2 clause with the first constituent that is either a *wh*-phrase like *for hwæm* 'for what' in (11a), a negative element *ne* 'no' in (11b), or *þa* 'then' in (11c). Finally, even if the subject is a full-DP type, exceptions to V2 orders in OE main clause,

as in (12), may occur all the same (Koopman (1998) and Haeberli (2001, 2002a)).

(12) a. ðone *Denisca leoda* lufiað swyðost
that Danish people love most
'The Danish people love that one most'
(Wulfstan, 223.54 / Haeberli (2002a: 249))

b. Eallum frioum monnum *ðas dagas* sien forgifene
all free persons these days be given
'These days should be given to every free person'
(Laws 2, 78.43 / Haeberli (2002a: 249))

c. ge eac hwilum *þa yflan* bioð ungerade betwuh him selfum
and also sometimes the evil are discordant between them selves
'And sometimes the evil people are also discordant among themselves'
(Boethius, 134.26 / Haeberli (2002a: 249))

d. æfter þan *þæt lond* wearð nemned Natan leaga
after that that land was named Natan leaga
'After him, that land was called Netley.'
(Chronicle A, 14.508.1 / Haeberli (2002a: 249))

Given the fact that the V3 order pattern in (12) involving a full-DP subject

without subject-verb inversion is ungrammatical in modern West Germanic languages, it does not seem appropriate to claim that standard analysis of the modern West Germanic languages applies to the word order of main clauses with V-movement in OE.

The next subsection outlines the word order in subordinate clauses with special attention to the placement of verbs.

3.2.2. The Word Order of Subordinate Clauses in Old English

As mentioned above, subordinate clauses in both OE and modern West Germanic languages have frequent verb-final orders (cf. Kemenade (1987)). This is shown in the examples of German subordinate clauses in (13).

(13) Du weiß well
youknow well
a. daß *ich* schon letztes Jahr diesen Roman las
that I already last year this novel read
b. daß *ich* schon letztes Jahr diesen Roman gelesen habe
that I already last year this novel read have

(Roberts (2007: 50))

Equivalent examples of OE subordinate clauses with verb-final orders are shown in (14).

(14) a. þæt *ic* þas boc of Ledenum gereorde to Engliscre spræce awende
that I this book from Latin language to English tongue translate
'that I translate this book from the Latin language to the English tongue'
(AHTh, I, pref, 6 / Kemenade (1987: 16))

b. þæt *Darius* hie mid geheofte secan wolde
that Darius them for battle seek wanted
'that Darius wanted to seek them out in order to battle with them'
(Oros, 45, 31 / Kemenade (1987: 16))

Kemenade (1987) was thus able to claim that the basic word orders of OE can be analyzed along the lines of proposals made for the West Germanic languages. In particular, she claims that main clauses have V-movement to CP-domain, while subordinate clauses do not involve V-movement, with the finite verb thus always occurring in its base-generated position. The following examples, however, pose a challenge to Kemenade′s (1987) analysis of OE subordinate clauses (Pintzuk (1991)).

(15) a. þæt *he* wearp þæt sweord onweg
that he threw the sword away
'… that he threw away the sword' (Bede 38.20 / Pintzuk (1991:91))

b. gif *Crist* scute ða adun

if Christ casts then down

'… if Christ then casts himself down'

(ÆCHom i.170.21-22 / Pintzuk (1991:91))

Assuming that the finite verb always occupies the head position of the head-final inflectional projection in the subordinate clause, the word order in (15) must be derived through the movement to the right, not through the V-movement to the left, of the postverbal element containing the clause-final particle. Pintzuk (1991) suggests, however, that it is not be appropriate to assume that particles, i.e. *onweg* 'away' in (15a) and *adun* 'down', can undergo rightward movement based on cross-linguistic observations. Thus, the only way to obtain the verb-particle order as in (15) is to assume that the finite verb occurs in the head position of a head-initial projection. Subject-verb inversion has been described in the embedded clauses that are either complements of bridge verbs or contain an unaccusative/passive construction (Fischer et al. (2000)).

(16) a. Gregorius se trahtnere cwæð þæt forði wolde *drihten*

Gregory the interpreter said that therefore wanted God

getrahtnian þurh hine sylfne ðæt bigspel ðe

interpret through himself the parable that

'Gregory the interpreter said that therefore God wanted to interpret himself the parable that . . .'

(ÆCHom II, 6.53.33 / Fischer et al. (2000: 116))

b. forðam þe him burston ut *butu his Eagan*

because that him burst out both his eyes

'because both his eyes burst out'

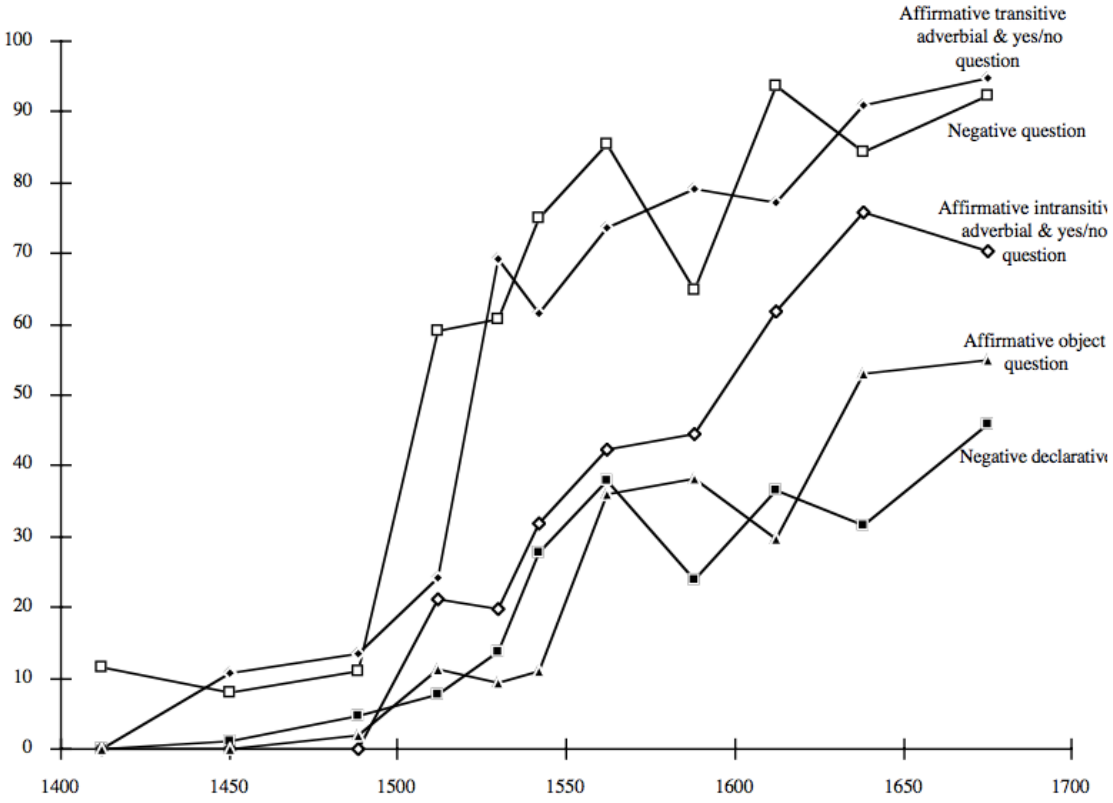
(ÆLS(Alban) 116 / Fischer et al. (2000: 117))

Consequently, the basic word orders of OE are far more complicated than those of the modern West Germanic languages. The landing site of V-movement is neither limited to V2 order patterns in main clauses, nor head-final positions in subordinate clauses. The following subsections overview a recent observation of the historical development of English V-movement and its syntactic analysis as proposed by Haeberli and Ihsane (2016).

3.2.3. The Loss of Verb Movement in the History of English

According to the comparation of the placement between finite main verb and sentential negation, it is traditionally observed that V-movement began to decline at the beginning of the 16th century and eventually disappeared by the late 16th century. It has been argued that the rise of *do*-support is a consequence of the loss of V-movement. Figure 1, adopted by Kroch (1989), plots the quantitative data on the rise of periphrastic *do*.

Figure 1. The rise of periphrastic *do*. (adapted from Ellegård (1953))



(Kroch (1989: 221))

The frequency of *do* increases in all contexts until the period from 1550 to 1575. Negative sentences temporarily decline afterwards and the affirmative object questions remain constant for half a century.

Biberauer and Roberts (2010) adopt the Rich Agreement Hypothesis in their analysis of the development of V-movement in the history of English. They argue that the loss of V-movement results from the loss of rich tense agreement inflection on finite main verbs, which is a consequence of the rise of periphrastic auxiliaries. On the other hand, Haeberli and Ihsane (2016) claim that the loss of V-movement in the history of English is consisted of several events but the result

of a combination of factors. They revisit this phenomenon by exploring the distribution of finite main verbs with respect to adverb placement. This is important evidence for the presence of V-movement in a language, as the contrast between French and PE in (17).

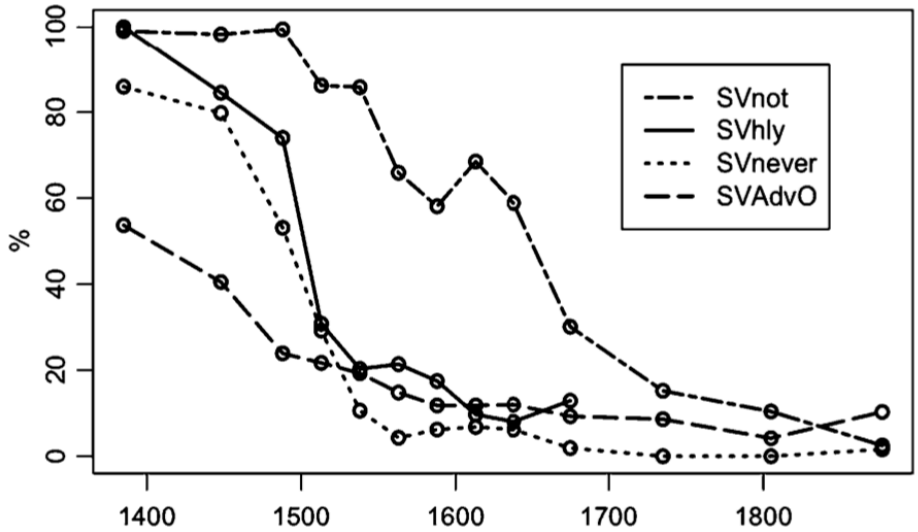
(17) a. John **often** reads this newspaper. (English AdvV)

b. Jean lit **souvent** ce journal. (French VAdv)

(Haeberli and Ihsane (2016: 498))

The quantitative data of V-movement with respect to adverbs and negation is summarized in Figure 2.

Figure 2. The placement of adverbs and negation in the Penn Corpora and PCEEC



(Haeberli and Ihsane (2016: 520))

The decline of V-movement past adverbs started earlier than that of V-not word order. Haeberli and Ihsane (2016) thus argue that the decline of V-movement started in 1450s and was largely lost by the 1550s. A detailed analysis of the empirical observation gave rise to the authors' claim that the simplicity requirement on language acquisition plays an important role in driving the language change. Multiple developments, such as (i) the emergence of the periphrastic *do*, (ii) the gradual decline of aspectual distinctions, and (iii) the categorical reanalysis of modals, together with a weakening V and its [EPP] on aspects from the beginning of the 1500s. Taken together, they give rise to the occurrence of fewer formal features required by a structure (Roberts (2007)). To provide further evidence for this proposal, detailed observations of V-movement with respect to SFQs are made in the section below.

3.2.4. The Analysis of Verb Movement in the Earliest Stages of English

This section adopts the V-movement system proposed by Haeberli and Ihsane (2016). Example (18) demonstrates thus proposed all possible positions of the target of V-movement, and both types of subjects, regardless of clause-type.

(18) 1st constituent Vf1 SU1 Vf2 [$_{TP}$ SU2 (. . .) Vf3]

C Fin T

(Haeberli and Ihsane (2016: 505))

The authors claim that a finite verb can appear in the Vf1 or Vf2 position within main clauses (otherwise would appear in the Vf3 position in subordinate clauses). The distinction between Vf1 and Vf2 is supposed to be based on the difference of V2 in the main clauses discussed in section 3.2.1.1. When the first constituent is a *wh*-phrase, a negative element or *þa/þonne* ('then'), subject-verb inversion and V2 order is generated regardless of subject-type. In these cases, it is suggested, the finite verb occupies Vf1. When other types of constituents appear in the initial position, the finite verb occupies Vf1, immediately preceding the full-DP subject and yielding subject-inversion; otherwise, the verb would occupy Vf2 with respect to subject pronoun and generate V3 orders. However, as mentioned above, full DP subjects can also be involved in V3 orders.

To account for these observations, Haeberli and Ihsane (2016) assume that the verb is directed at Vf2, and depends upon the presence of subject-verb reversal on SU1 or SU2 subjects with the topic of discourse, such as pronouns generally occurring in SU1 and subjects generally not provided in SU2 under the knowledge structure. (see Kemenade (2012) and Kemenade and Westergaard (2012) for detailed discussions about information status of subjects). Based on the observation in section 3.2.1.2 that V-movement cannot target Vf1 and Vf2 generally in subordinate clauses, it is suggested that both of them are part of the C-system. According to Biberauer and Roberts (2010), Vf2 is assumed to be the lowest functional head in the split CP system, i.e. Fin (Rizzi (1997, 2001,

2004 etc.)). As for the clause structure of Vf3, the statistical evidence from OE supports the assumption that V-movement can target the inflectional domain in a head-final structure and that Vf3 thus corresponds to T.

Even though subject-auxiliary inversion is still required in PE in all questions and certain declaratives, such as negative proposing, it is assumed that V-movement was lost in the history of English. In the following sections, let us consider the historical date of SFQs and discuss the distribution of SFQs in relation to V-movement in the history of English.

3.3. The Quantitative Data of SFQs in the History of English

This section investigates the historical development of the distribution of SFQs based on the historical corpora: YCOE, PPCME2, PPCEME, PCEEC, and PPCMBE. The next subsections discuss the quantitative data of SFQs regarding transitive/unergative verbs (3.3.1) and unaccusative verbs in main clauses (3.3.2). Then, detailed observations of the subject position (3.3.3) and the word order patterns of SFQs in subordinate clauses (3.3.4) are introduced.

3.3.1. Transitive/Unergative Verbs

Firstly, the summary of the results regarding the word order patterns of SFQs with transitive/unergative verbs in the history of English is provided in Table 1 and Figure 3.[6, 7]

Table 1. Tokens of SFQs with Transitive/Unergative Verbs in Main Clauses

	EOE	LOE	EME	LME	E1	E2	E3	L1	L2	L3
SFQ-V	2	11	1	1	6	24	15	24	28	28
V-SFQ	3	27	12	20	25	13	4	2	0	0
V-SFQ (%)	60	71.1	92.3	95.2	80.6	35.1	21.1	7.7	0	0

Figure 3. Percentages of V-SFQ with Transitive/Unergative Verbs in Main Clauses

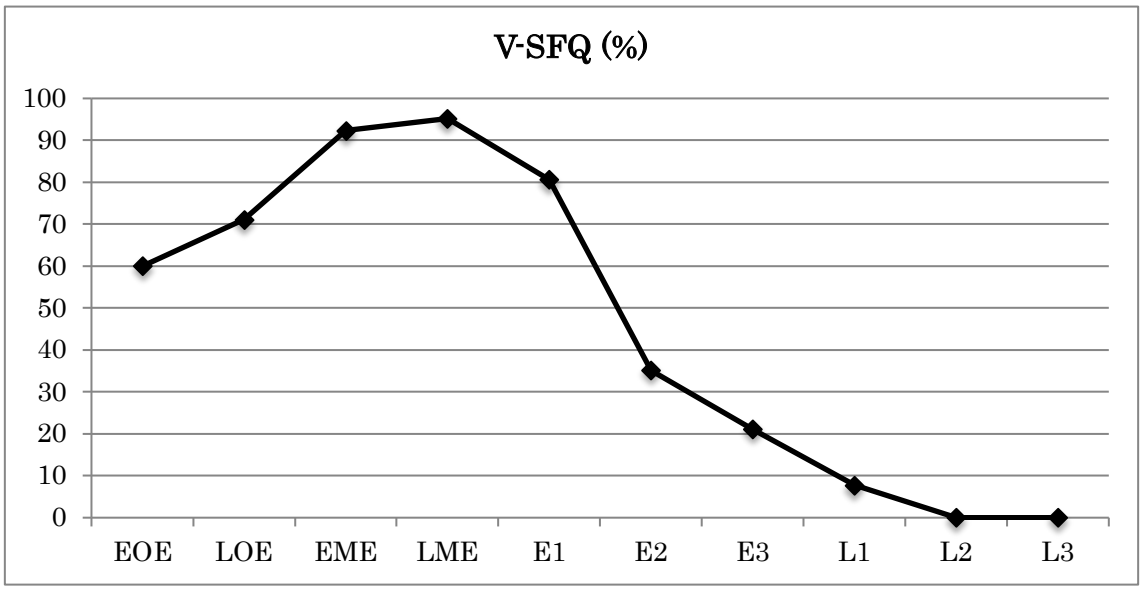


Table 1 and Figure 3 both indicate that, in OE and ME, the number of V-SFQ order examples exceeds those with SFQ-V order. While the former structure began to decline during the LME and E1 periods, it remained the preferred option until E2. In the transition from E3 to L1, only 7.7% of occurrences were instances of V-SFQ order, until they were finally lost in the 18th century. The overall statistical trend of these changes corresponds to that of the V-movement in all but the OE period in which the frequency of V-SFQ examples was much

lower than expected.

In the OE period, however, as many as four of the 13 SFQ-V order examples were probably head-final structures (19a–b). As observed by Pintzuk (1993), head-final word order structures, in which The final verb was placed in the final position of the clause and preceded by at least two heavy constituents, were attested in main clauses during the OE period. Under her proposal, the landing site for the finite verb movement in these cases would be T. However, the other nine SFQ-V order examples were head-medial structures, as shown in (19c), which is identical to (11b) in Haeberli and Ihsane (2016). Following their proposal, In such cases, the finite verb shifted to T and the SFQ occurred in a position between C and T.

(19) a. *Hi* ða **ealle** mid angsumum mode ænlipige cwædon.
they then all with long-time mode alone said
am I him the Lord
Eom ic hit Drihten;
'then they all said alone with a lang time: I am him, the Lord'
(cocathom2, ÆCHom_II,_14.1:138.40.3056)

b. *Hie* ða **ealle** eaðmodlice swa heora æþela bisceop lærde,
they then all weekly, so their noble bishop advised,
feower daga fæsten gedydon.
four days fast do

'Then they all weekly performed their four days' fast, as the bishop advised them'

(coblick,LS_25_[MichaelMor[BlHom_17]]:205.169.2631)

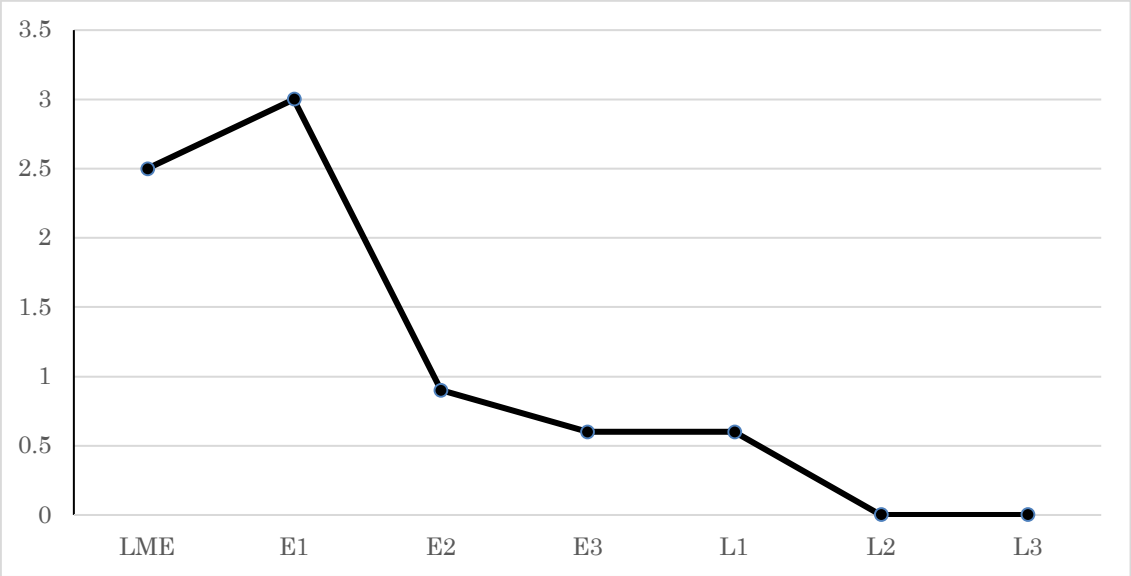
c. *Hi* þa sona **begen** begyrndon hi caflice.
They then soon both begirt themselves vigorously
'They then soon both begirt themselves vigorously.'
(coaelive,ÆLS_[Sebastian]:247.1357 / Haeberli and Ihsane (2016: 506))

Next, let us consider the change of V-SFQ word order from the 14th to the 20th century, which can be related to the presence of V-movement.

Table 2. The Frequency of V-SFQ with Transitive/Unergative Verbs in Main Clauses (per 100,000 words)

	LME	E1	E2	E3	L1	L2	L3
V-SFQ	2.5	3.0	0.9	0.6	0.6	0	0

Figure 4. The Frequency of V-SFQ with Transitive/Unergative Verbs in Main Clauses (per 100,000 words)



As shown in Figure 4, the frequency of V-SFQ word order decreased rapidly from E1 to E2 and completely fell out of usage from L2 onward. This tendency is not inconsistent with that of V-Adv word order shown in Figure 2.[8] In the OE period, 24 out of 30 examples of V-SFQ order have SFQs associated with subject pronouns and six of them have SFQs with full-DP subjects. A similar tendency can be found in the following periods. Some of the earliest examples in OE are shown in (20–21) (see section 3.3.3 below for detailed discussion of the position of subjects).

(20) OE-V-SFQ

a. *Hi* <u>sungon</u> ða **ealle** ealmas and licsang þa

They sang then all psalms and hymns then

hwile þe man ða byrgene bufan geopenode.

while that man the grave above opening

'then they all sang psalms and hymns while the grave was being opened at the top' (coaelive, ÆLS_[Æthelthryth]:88.4192)

b. *Hi* weopon ða **ealle** ðe þærinne wæron,

they wept then all that within were

'then they all wept, that were within,'

(coaelive, ÆLS_[Apollinaris]:102.4604)

c. Binnan fyrste *hi* gesawon **begen** swefn on anre nihte

Within first they saw both sweven on one night

'within the first they both saw a sweven on one night'

(cootest,Gen:40.5.1602)

d. *þas & feola oþre þa wæron þær kyninges*

these and many others who were there king's

þeonestmen hit geotton **ealle**.

thane it confirmed all

'these and many others who were the thane of king there all confirmed it' (cochronE-INTERPOLATION,ChronE_[Plummer]:656.103.465)

(21) OE-SFQ-V

a. *Hi* ða **begen** bædon binnon þam fyrste God,
They then both prayed during that space God,
þæt he his geleafan geswutelode þam seocan to hæle.
that he his truth manifest the sick man to healing
'then they both prayed to God during that space, that He would make manifest His truth in the sick man's healing'

(coaelive, ÆLS_[Sebastian]:208.1335)

b. *Hi* þa **ealle** glædmode begunnon to ceorfenne
they then all chearfully began to cut-down
þone heagan pinbeam,
that high pine tree
'then they all cheerfully began to cut-down that high pine tree'

(coaelive, ÆLS_[Martin]:406.6221)

c. *Hi* ða **ealle** anre stæfne cwædon: We sædon æfre þæt
they then all one voice said: we told ever that
þu ure cyng and fæder wære and for ðe we woldon
you our king and father were and for you we would
lustlice swiltan, for ðam þe þu us alysdest of hungre.
willingly to die, for those that you us release of hunger
'then they all said by one voice: we were ever told that you are our king and father and we would willingly to die for you, for that you release us

from hunger' (coapollo,ApT:50.8.532)

The three examples in (21) show the same word order pattern as (19c), for which Haeberli and Ihsane (2016) suggest that the verb is moved to T, namely Vf3 in (18). Examples in (22) show the single word order pattern V-SFQ in ME. Examples from EModE with two order patterns are shown in (23) and (24), respectively. Examples from EModE with SFQ-V are shown in (25) and the last two examples of V-SFQ word order from LModE are shown in (26).

(22) ME-V-SFQ

a. When Kyng Arthure hade þus saide, *þai* criden **al** wiþ an hye voice,
"God, fader almigty, Worsheppede be þine name Wiþouten ende, …"
'When King Arthur had thus said, they cried all with a high voice: God, father almighty, Worshipped be their name without end, … '
(CMBRUT3,86.2609)

b. The moste parte of all the barownes of the Rounde Table that were there at that tyme assayde all be rew, …
'The most part of all the baronesses of the Round Table that were there at that time all assayed in order, …' (CMMALORY,46.1517)

(23) EModE-SFQ-V

a. and then *our company* **all** broke up, (PEPYS-E3-H,7,412.75)

b. And *they* **all**, with one accord, assur'd him, they cou'd not suffer enough, when it was for his repose and safety. (BEHN-E3-P2,182.173)

(24) EModE-V-SFQ

a. And at the sayd Corfona *they* speke **all** Greke,

(CHAPLAIN-E1-P2,11.167)

b. for *they* knew **all**, that his father was a Greeke.

(AUTHNEW-E2-P2,16,1A.1060)

(25) LModE-SFQ-V

a. a little timbered, ancient house, *the front walls* **all** scored with pale half-circles, where the roses swung to and fro; (BENSON-190X,125.623)

b. We all know our Lucan′s admonition that it was the winning cause that found favour with the gods, the beaten cause with Cato.

(BOETHJA-1897,160.418)

(26) LModE-V-SFQ

a. *They* accordingly took **each** his Censer (PURVER-OLD-1764,16,1N.537)

b. but, as every tree must be planted in a soil proper to its kind, and requires particular culture, so our various tempers and dispositions demand **each** a different manner of instruction and improvement.

(BARCLAY-1743,11.16)

All of the SFQs data with respect to transitive/unergative verbs fall into the same pattern of V-movement observed by Haeberli and Ihsane (2016).

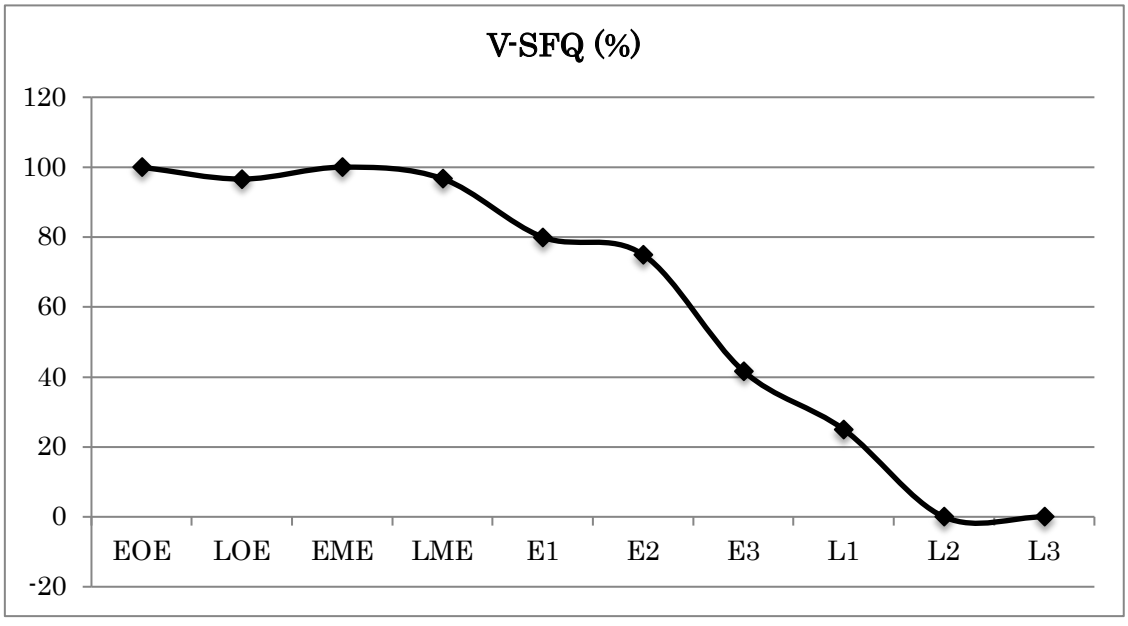
3.3.2. Unaccusitive Verbs

The results of SFQ word order patterns with unaccusative verbs are summarized in Table 3 and Figure 5.

Table 3. Tokens of SFQs with Unaccusaitve Verbs in Main Clauses

	EOE	LOE	EME	LME	E1	E2	E3	L1	L2	L3
SFQ-V	0	1	0	1	6	6	7	3	3	6
V-SFQ	3	28	9	29	24	18	5	2	0	0
V-SFQ (%)	100	96.6	100	96.7	80	75	41.7	25	0	0

Figure 5. Percentages of V-SFQ with Unaccusaitve Verbs in Main Clauses

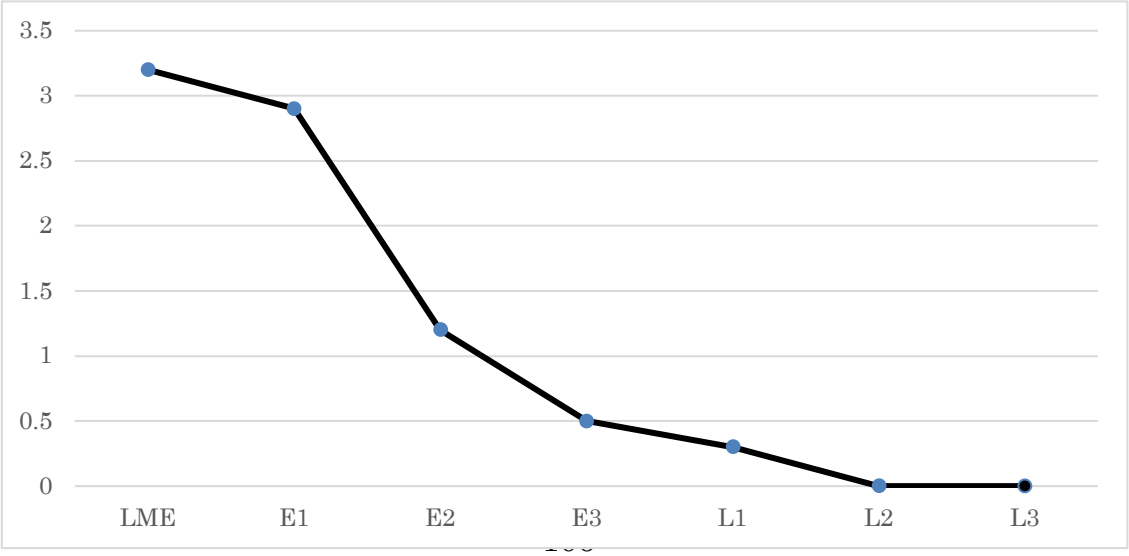


Compared to Table 1 and Figure 3, Table 3 and Figure 5 present a more straightforward scenario, in line with the development of V-movement. The V-SFQ order with unaccusative verbs was strongly preferred in OE. However, the differences between the transitive/unergative and unaccusative verb distributions may be explained by the fact that, in early English, the subject of the unaccusative verb frequently remained postverbal as an internal argument (Kemenade (1997), Kemenade and Westergaard (2012)).

Table 4. The Frequency of V-SFQ with Transitive/Unergative Verbs in Main Clauses (per 100,000 words)

	LME	E1	E2	E3	L1	L2	L3
V-SFQ	3.2	2.9	1.2	0.5	0.3	0	0

Figure 6. The Frequency of V-SFQ Order with Unaccusative Verbs in Main Clauses (per 100,000 words)



Compared to Table 2 and Figure 4, Table 4 and Figure 6 present yet a more straightforward scenario, in line consistent with the development of V-movement. The V-SFQ order with unaccusative verbs was strongly preferred in OE, but its frequency gradually declined from LME onward, and it finally disappeared in L2. In the OE period, 48 of 54 examples of V-SFQ order have FQs associated with subject pronouns and six of them have FQs with full-DP subjects. A similar pattern is observed for SFQ-V order. As many as nine out of 11 examples of SFQ-V order have SFQs associated with subject pronouns, and only two have SFQs with full-DP subjects. Parallel to the transitive/unergative verbs results, the frequency of V-SFQ with unaccusative verbs declined gradually from LME onward, until its loss in L2. Some of the earliest examples of V-SFQ order in OE are shown in (27).

(27) OE-V-SFQ

a. Þa common *þa sacerdas* to þam cynincge **ealle**,
then came the priests to the king all
'Then all the priests came to the king'
(coaelive, ÆLS_[Book_of_Kings]:374.3935)

b. *Hi* eodan þa **ealle** ut ætforan þam cyninge,
they went then all out before the king
'They then all went before the king' (coaelhom, ÆHom_22:400.3515)

c. *Hi* wunodon þa **begen** mid þæm bioscope ofer gear,

they dwelt then both with the bishop over year

'Then they both dwelt with the bishop over a year'

(coaelive, ÆLS_[Basil]:81.503)

All examples in (27) exhibit V2 order patterns. The first example with a full-DP subject in (27) shows subject-verb inversion, whereas the other two with a subject pronoun do not. Therefore, it is plausible to assume that the finite verb *common* 'came' in (27a) undergoes V-movement to a high position Vf1 and the finite verbs in (27b) and (27c) move to Vf2. Also, the SFQs in these cases that marked the base-generated position of their host DPs provide further evidence for verbs and host DPs movement. The differences between the transitive/unergative and unaccusative verb distributions may be attributed to the fact that, in early English, the subject of the unaccusative verb frequently remained postverbal as an internal argument, as shown in (27a) (Kemenade (1997), Kemenade and Westergaard (2012)). As did transitive/unergative verbs, so the frequency of V-SFQ with unaccusative verbs also declined gradually from LME onward, until its loss in L2.

The single word order pattern V-SFQ in ME is shown in (28). Examples from EModE to LModE are shown in (29–32), with the SFQ-V order and V-SFQ order, respectively.

(28) ME-V-SFQ

a. Than they hurteled togedyrs as two wylde bullys, russhynge and laysshyng with hir shyldis and swerdys, that somtyme *they* felle **bothe** on their nosys. their shields and swords that sometimes they fell both on their noses

'Then they hurtled together as two wild bullies, rushing and lashing with their shields and swords, that sometimes they both fell on their noses'

(CMMALORY,192.2834)

b. *the foxe, hys wyf and hys children* wente **alle** to slepe.

'the foxes, their wives and their children all went to sleep'

(CMREYNAR,57.526)

(29) EModE-SFQ-V

a. and fought, tell *they* **both** fell dwone, which was heared in room under them and fought, till they both fell down, which was heard in room under them (ANHATTON-E3-P2,2,162.13)

b. *we* **all** perish. (AUTHOLD-E2-H,17,1N.1231)

(30) EModE-V-SFQ

a. and *they* went downe **both** into the water, both Philip, and the Eunuch, and they went down both into the water, both Philip, and the Eunuch

(AUTHNEW-E2-P2,8,20A.314)

b. Friday, the xix Day of June, a lityll a for nyght, *we* com **all** to the Shippe ageyn. (TORKINGT-E1-P1,16.229)

(31) LModE-SFQ-V

a. As soon as they had taken care of their canoes *they* **all** came. (COOK-1776,29.527)

b. The resistance of the air having been avoided, *the glass bottle and gold leaf* **all** fall exactly in the same time. (FARADAY-1859,28.277)

(32) LModE-V-SFQ

About half an Hour afterwards *they* came **all** up in a Body a-stern of us, and pretty near us, so near that we could easily discern what they were, tho' we could not tell their Design (DEFOE-1719,193.2)

As mentioned in section 3.2.1, it has been observed that English gradually lost V-movement (Roberts (1985, 1993), Kroch (1989), and Pollock (1989) among others). The loss of V-SFQ word order may be due to the loss of V-movement because of their close temporal correspondence. According to Heaberli and Ihsane (2016), the decline of V-movement in English began in the middle of 15th century, whereas the loss of V-movement is a long process, which, after appearing in the 16th century was completed more than 200 years later. Figure 6 shows that V-SFQ word order began declining in E1 until its loss in L2.

3.3.3. The Distribution of Two Types of Subjects

This section explores in more detail the positions of two types of host DP subjects, i.e. full-DP subject and subject pronoun. Before examining the relevant data, the distributional properties of subjects in the history of English are discussed.

(33) *wh-* initial

a. *full-DP subject*

Hwi wolde *God* swa lytles þinges him forwyrnan?
why would God so small thing him deny
'Why should God deny him such a small thing?'

(ÆCHom I, 1.14.2/ Kemenade (1987: 43))

b. *subject pronoun*

for hwam noldest *þu* ðe sylfe me gecyðan þæt . . .
for what not-wanted you yourself me make-known that
'wherefore would you not want to make known to me yourself that . . .'

((*LS* 7(Euphr) 305)/ Fischer, et al. (2000: 106))

(34) *neg* initial

a. *full-DP subject*

Ne sende *se deofol* ða fyr of heofennum
not sent the devil then fire from heaven

‘the devil did not send fire from heaven’

(ÆCHom I (Pref) 6.13 / Fischer, et al. (2000: 106))

b. *subject pronoun*

Ne sceal *he* naht unaliefedes don

not shall he nothing unlawful do

‘He shall not do anything unlawfull’

(CP 10.61.14 / Fischer, et al. (2000: 106))

(35) *Þa/Þonne* initial

a. *full-DP subject*

Þa wæs *þæt folc* þæs micclan welan ungemetlice

then was the people the great prosperity excessively

brucende . . .

partaking

‘Then the people were partaking excessively of the great prosperity.’

(Or 1.23.3/ Fischer, et al. (2000: 106))

b. *subject pronoun*

þa foron *hie* mid þrim scipum ut

then sailed they with three ships out

‘... then they sailed out with three ships.’

(Parker, 897 / Kemenade (1987: 112))

(36) *topic* initial

a. On twæm þingum hæfde *God* þæs mannes sawle gegodod
in two things had God the man′s soul endowed
'God had endowed man′s soul with two things'
(AHTh, I, 20 / Kemenade (1987: 18))

b. ðas þing *we* habbað be him gewritene
these things we have about him written
'these things we have written about him'
(PC 1087, 143 / Kemenade (1987: 110)

Both the full-DP subject and the subject pronoun follow the finite verb when the first constituent is a *wh*-phrase as in (33), the negative adverbial *ne* as in (34), or the short adverbial *þa* as in (35). The subject pronoun may precede the finite verb and after a topic phrase as in (36). With this in mind, let us consider the distribution of SFQs with respect to the two types of subjects. The frequencies of the constructions historical corpora are summarised in Table 5.

Table 5. Tokens of SFQs with Two Types of Subjects in Main Clauses

The type	OE			ME		EModE		LModE	
of subject	SVQ	SQV	VSQ	SVQ	VSQ	SVQ	SQV	SVQ	SQV

full-DP	8(6)	3(2)	2(2)	6(15)	0(0)	6(8)	9(13)	1(2)	12(20)
pronoun	74(60)	28(23)	9(7)	31(77)	2(5)	35(51)	19(28)	3(5)	43(72)
Total	124			39		69		59	

* The relative frequency of a construction for each period is indicated in brackets.

Three main word order patterns emerged in OE: SVQ, SQV, and VSQ. They declined to two patterns from ME onward, namely, SVQ and SQV. Table 5 indicates that SFQs occur with subject pronouns more frequently than full-DP subjects in each period. The low frequency of subject–verb inversion in SFQs data might be due to the discourse-related properties of FQs. As discussed in Chapter 2 (fn. 13), FQs serving as focus markers require discourse-old/given type of host DPs, i.e. pronouns and definite DPs. This property might lead to a placement of a host DP to a higher position and the high frequency of subject pronouns. Rochman′s (2010) observation on the distribution of FQs in PE in the Santa Barbara Corpus shows that FQs occur far more frequently with pronouns than full DPs. Rochman (2010) attributes this result to the difference in heaviness between the two types of host DPs. Examples for each pattern are provided below.

(37) OE-SVQ-*full-DP subject*

a. Eft ða on dægerede *Drihtnes ehteras* comon **ealle**

again then at daybreak of the lord persecutors came all

tosomne to heora sunderspræce.

together to their private conference

'Again then at daybreak, the persecutors of the lord all came together to their private conference' (cocathom2, ÆCHom_II,_14.1:142.148.3154)

b. Hwæt *ða hremmas* ða ricene flugon **ealle**

what the ravens then instantly flied all

tosomne ofer ðone sealtan brym.

together over that salt sea

'What! The ravens instantly all flied together over the salt sea'

(cocathom2, ÆCHom_II,_10:86.188.1744)

(38) OE-SVQ-*subject pronoun*

a. Binnan fyrste *hi* gesawon **begen** swefn on anre nihte

Within first they saw both sweven on one night

'within the first they both saw a sweven on one night'

(coaelive, ÆLS_[Apollinaris]:102.4604)

b. *Hi* eodan þa **ealle** ut ætforan þam cyninge,

they went then all out before the king

'They then all went before the king' (coaelhom, ÆHom_22:400.3515)

(39) OE-SQV-*full-DP subject*

a. *Ðas gesceafta* eac **ealle** doð swa swa him gedihte heora agen scyppend

these creations also all do as him compose their own creator

'These creations also all perform as compose him as their own creator'

(cowulf,WHom_12:27.1170)

b. *Þa swyn* ða **ealle** endemes scuton into ðære sæ. sume twa ðusend

the swine then all equally shoot into the sea some two thousand

'the two thousand swine then all equally shoot into the sea'

(cocathom2, ÆCHom_II,_27:219.166.4838)

(40) OE-SQV-*subject pronoun*

a. *Hi* ða **begen** bædon binnon þam fyrste God,

they then both prayed during that space God

þæt he his geleafan geswutelode þam seocan to hæle.

that he his truth make manifest the sick to heal

'then they both prayed to God during that space, that He would make manifest his truth in the sick man′s healing'

(coaelive, ÆLS_[Sebastian]:208.1335)

b. *Hi* þa sona **begen** begyrndon hi caflice,

they then soon both begirt themselves vigorously

'then forthwith they both begirt themselves vigorously'

(coaelive, Æ LS_[Sebastian]:247.1357)

(41) a. OE-VSQ-*full-DP subject*

Ða burston *ða seofon weallas.* **ealle** tosomne.

then burst out the seven walls all together

'Then the seven walls all broke out together'

(cocathom2, ÆCHom_II,_12.2:121.395.2657)

b. Þa comon *þa sacerdas* to þam cynincge **ealle**

then came the priests to the king all

'Then all the priests came to the king'

(coaelive, ÆLS_[Book_of_Kings]:374.3935)

(42) OE-VSQ-*subject pronoun*

a. Þa hie þa hine gesawon, þa cleopodon *hie* sona **ealle**

then they then him saw then call they at once all

ane worde

one word

'Then when they saw him, then they all called on word at once'

(coverhom,HomS_24_[ScraggVerc_1]:163.167)

b. Æ endunge ælces tidsanges gan *hy* ut **ealle** mid

at ending each hymns go they out all with

þære mæstan swigan

the most silence

'In the ending of each hymn they all go out with the most silence'

(cobenrul,BenR:52.81.6.931)

Before considering to the ME data, recall the schema of clause structures in OE

introduced in 3.2.4., repeated here as (43).

(43) 1st constituent Vf1 SU1 Vf2 [$_{TP}$ SU2 (. . .) Vf3]

C Fin T

Although a few OE main clauses have no V2 (Koopman 1995), the number of main clauses with SFQs lacking V2 is far greater (49.2% of all OE examples): all the examples of SQV order and 30 of 82 examples of SVQ order show non-V2 order. The sentences of SVQ order never show V2 order when the subject is full-DP (37). Since particles and object pronouns cannot be extraposed in OE, Haeberli and Ihsane (2016) use their occurrence to the right side of verbs as a diagnostic for head-initial structure. Therefore, it is suggested by (37) that the finite verbs may occur in Vf2 following the full-DP subjects in SU1. (38a) shows V3 order, in which the finite verb *gesawon* 'saw' appears in the third position, following an adverbial constituent *binnan fyrste* 'within first' and the subject pronoun *hi* 'they'. If subject pronouns mostly occupy a higher position in which elements are interpreted as discourse-given, it is assumed that the subject pronoun in (38a) occurs in SU1 and the finite verb in Vf2 (Haeberli and Ihsane (2016: 503)). As discussed in the above case in (19c), SQV order (39–40) indicates that the position of the finite verbs is Vf3 (T) rather than C.[9] The subjects then occupy SU1 and the SFQs occur between SU1 and SU2. On the other hand, 52 of 74 examples of SVQ order with subject pronouns (38b) and all

the examples of VSQ order exhibit the V2 order (41–42). Interestingly, even when the first constituent is a topic phrase, the subject pronoun *hy* 'they' in (42b) occurs in the position following the finite verb *gan* 'go' in the second position, namely SU1, which is not a common position for subject pronouns as in (36). This may because the subject pronouns have to remain in a lower position for agreement to satisfy the licensing condition of SFQs.

(44) ME-SVQ-*full-DP subject*

a. *the foxe hys wyf and hys chyldren* wente **alle** to slepe

'the foxes, his wife and his children all went to sleep'

(CMREYNAR,57.526)

b. *The moste parte of all the barownes of the Rounde Table that were there at that tyme* assayde **all** be rew

'The most part of all the barons of the round table who were there at that time all assayed successfully' (CMMALORY,46.1517)

(45) ME-SVQ-*subject pronoun*

a. *þei* ly **both** byried in þe cherch cleped Banburgense, doyng many miracles.

'They both lie in the church cleped Bamberg, doing many miracles'

(CMCAPCHR,96.1949)

b. And *tai* felle **baþe** dede downe.

'And they both fell down dead' (CMBENRUL,37.1203)

(46) ME-VSQ- *subject pronoun*

a. Ne cwemenn *þeȝȝ* nohht **alle** Godd Wiþþ heore rihhtwisnesse.

no please they not all God with their rightness

'They all do not please God with their rightness' (CMORM,I,10.208)

b. leofemen þah ȝe sunegien and gan to bote ne lipnie

dear men though you sin and go to repair not trust

ȝe no **al** to eower festene ȝif ȝe maȝen

you not all to your fasts if you may

eni oðer god don.

any other gooddeed

'Dear men, though you sin and repent, do not trust wholly your fasts, if you are able to do other deeds' (CMLAMBX1,37.479)

All the ME examples of SVQ order (44–45) attested in late ME show that the distinction between full-DP subjects and subject pronoun is weakened and the target of the movement of the finite verb would be T (Haeberli and Ihsane (2016: 509)). The only two examples of VSQ order are both attested in early ME. Given the observation that English lost V2 order in ME (e.g. Kemenade and Westergaard (2012)), the loss of VSQ order in ME is probably due to the loss of V2.

(47) EModE-SVQ- *full-DP subject*

a. and *the young People* went **all** to the Wake (OATES-E3-H,4,83.C1.415)

b. *Hops and Turkies, Carps and Beer* came into England **all** in a year.

(WALTON-E3-H,292.228)

(48) EModE-SVQ- *subject pronoun*

a. And at the sayd Corfona *they* speke **all** Greke

(CHAPLAIN-E1-P2,11.167)

b. *They* goe **all** barefoot except the king, who hath a paire of soles on his feet (COVERTE-E2-P1,9.121)

(49) EModE-SQV- *full-DP subject*

a. *the knight and the rest* **all** laught a good at the jest: not knowing how to amend it (ARMIN-E2-H,14.217)

b. *Aboan and Onahal* **both** pleaded (BEHN-E3-P2,171.24)

(50) EModE-SQV- *subject pronoun*

a. and by my truly, sometimes *they* **both** go out (PENNY-E3-P2,210.346)

b. Beinge demaunded guyltie or not guilty they both answered not guyltie

(ESSEX-E2-P1,3.29)

The contrast between (47–48) and (49–50) shows that V-to-T movement is still preferred in the EModE period, but the finite verb in the alternative SQV order probably remains within *v**P as in PE.

(51) LModE-SVQ- *full-DP subject*

and *their Day Cloaths* lay **all** about their Rooms. (OFFICER-1744,248.760)

(52) LModE-SVQ- *subject pronoun*

a. and *they* took **each** his own. (PURVER-OLD-1764,17,1N.598)

b. About half an Hour afterwards *they* came **all** up in a Body a-stern of us, and pretty near us, so near that we could easily discern what they were, tho' we could not tell their Design (DEFOE-1719,193.2)

(53) LModE-SQV- *full-DP subject*

a. *She and her mother* **both** cried very much when she went, although it was only for a few days. (READE-1863,206.65)

b. The resistance of the air having been avoided, *the glass bottle and gold leaf* **all** fall exactly in the same time. (FARADAY-1859,28.277)

(54) LModE-SQV- *subject pronoun*

a. But *we* **all** opposed this entirely (RYDER-1716,162.36)

b. and you perceive *they* **both** fall to the earth in the same time.

(FARADAY-1859,26.258)

(51) and (52a) are the latest examples of SVQ order with the full-DP subject and the subject pronoun in 1700s, respectively. SQV order become preferred in the LModE period and has been maintained until today.

3.3.4. The Word Order of SFQs in Subordinate Clauses in Old English

Recall that the word order of subordinate clauses is different from the main clauses in OE (see Section 3.2.2), i.e. the former generally exhibits verb-final order unless the subordinate clause is a complement of a bridge verb or contains an unaccusative/passive verb (Fischer et al. (2000)). Let us now consider the word order of subordinate clauses involving SFQs in OE. The results of the comparison of SFQs with unaccusative verbs and those with transitive/unergative verbs are summarized in Table 6, followed by examples of SVQ order (55) and SQV order (56).

Table 6. Tokens of SFQs in Subordinate Clauses in OE

	SVQ	SQV	Total
unaccusative	21 (67.7%)	10 (32.3%)	31
transitive/unergative	12 (48%)	13 (52%)	25

(55) SVQ

a. þa gelamp his mannum þæt *hi* lagon **ealle** on unasecgendlicum broce,
then occur his men that they lay all on undesirable disease
'then it occurs to his men that they all lay on undesirable'
(coaelive, ÆLS_[Martin]:1277.6812)

b. Moyses gehyrde ðæt *ðæt folc* weop **ælc** æt his geteldes dura,
Moses despises that the people wept all at his tent door
'Moses despises that the people all wept at the door of his tent'
(cootest, Num:11.10.4029)

(56) SQV

a. Þas halgan weras æfre wunodon mid þam bisceope,
these holy men ever dwelt with the bishop
oð þæt *hi* togædere **ealle** to Gode ferdon.
on that they together all to God went
'These holy men ever dwelt with the bishop, on that they all went
together to God' (coaelive, ÆLS_[Denis]:215.5897)

b. and eac hi noldon þæt utlendiscum mannum wære þes eard þurh
and also they would not that foreign man were this country through
þæt ðe swiðor gerymed þe *hi* him sylfe **ælc** oþerne forfore.
that the more extended that they them self all others perish
'and they did not want this country to be laid more open to foreign

nations should they themselves destroy each other'

(cochronD,ChronD_[Classen-Harm]:1052.2.44.2009)

The difference in the frequency of the two types of word order patterns is not significant. Table 6 indicates that the SVQ order is preferred in embedded unaccusative construction. In transitive/unergative clauses, however, the frequency of the SVQ order is lower than that of the SQV order. All the examples of SQV order as in (56) are probably with head-finial structure. Namely, the unaccusative verb ferdon 'went' in (56a) and the transitive verb forfore 'perish' in (56b) both move to T in the clause-final position (Pintzuk (1991)). On the other hand, the high frequency of the SVQ order in unaccusative constructions confirms the assumption that subordinate clauses might obey the verb-final order involving "unaccusative" contexts (Fischer et al. (2000: 116)). In the 12 examples of SVQ with respect to transitive verbs, three of them are complements of "bridge verbs" (57a) and four of them are relative clauses (57b). Interestingly, the other five are all adverbial clauses in the main passive clauses, as illustrated in (57c).

(57) a *Ða steortas* he sæde þæt hulpan **ealle** þæs heafdes,
the tails he said that help all the head
& þæt heafod heora ealra.
and that heads their all

'The tails, he said, all helped the head, and the head [assists] all of them'

(codicts,Prov_1_[Cox]:2.8.170)

b. Þis is ðonne þæt ærendgewrit þe *ða apostolas* sendon **ealle**
this is then the letter that the aqostles sent all
to Antiohhia & to Syria & to Cilicia, ða sint nu
to Antioch and to Syira and to Cilicia, that are now
of hæðenum ðeodum to Criste gecirde.
from heathen people to Christ converted
'This is then the letter which the apostles all sent to Antioch and to Syria and to Cilicia, which are now converted from heathen people to Christ'

(colawafint,LawAfEl:49.2.121)

c. ac wurdon þa asyndrode fram þam soðum Gode, forþam ðe
but were then separated from the true God, for that
hi forleton his hlafordscipe **ealle** swyðe unwislice, fram him ascyrede
they permit his lordship all swiftly unwisely from him separated
'but (they) were then separated from the true God, because they all permit his lordship swiftly foolishly, separated from him'

(colwgeat, ÆLet_6_[Wulfgeat]:39.20)

All word patterns of SFQs in the history of English have hitherto been presented. As mentioned in section 3.2.2, the distribution of the V-SFQ word order pattern declined from 1500s and completely disappeared in the 1700s,

which closely corresponds to the historical pattern of V-movement. Thus, it is reasonable to argue that the loss of V-SFQ order is demonstrably attributed to the loss of V-movement. We now turn to the syntactic structure of the derivation of SFQs in the history of English.

3.4. The Syntactic Structures of SFQs in the History of English

Based on Chapter 2, this chapter adopts the adverbial analysis and proposes a licensing condition for the distribution of the FQs in PE. Here the FQ serves as a matching goal in a MA relationship, with the functional head as a probe and the host DP as another matching goal within the same phase domain, which is in line with the PIC.

(58) Licensing Condition on FQs

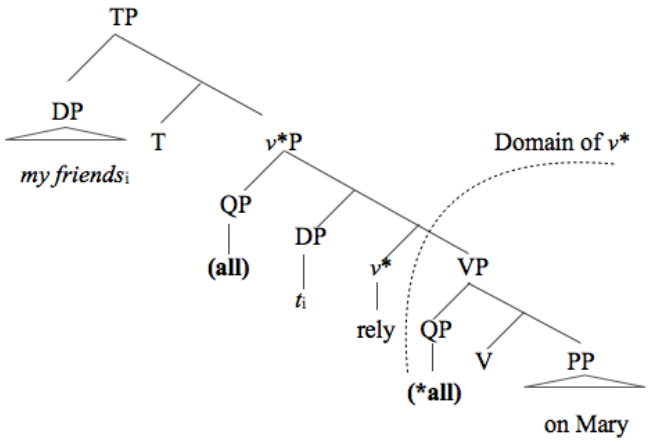
An FQ serving as a matching goal enters into an MA relation with a functional head as a probe and its host DP as another matching goal within the same phase domain.

Based on this condition, the grammaticality of the sentences with SFQs in (1), repeated here as (59), can be accounted for, as follows.

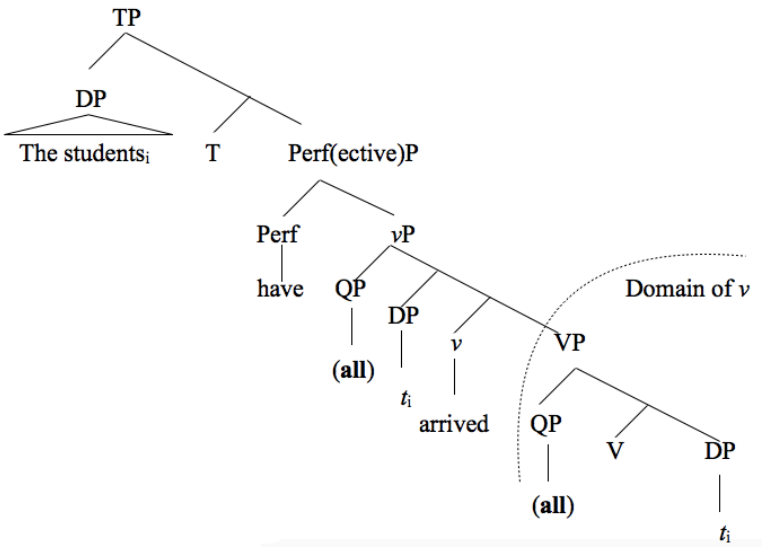
(59) a. *My friends* (**all**) rely (***all**) on Mary.

b. *The students* have (**all**) arrived (***all**).

(60)



b.



As the SFQ in (60a) is adjoined to *v**P, it enters into an MA relation with the probe T and the host DP in Spec-v*P at the CP phase, thereby satisfying the condition in (58), as it is allowed to appear in the position between the subject and the main verb. However, the position following the main verb is ungrammatical for the SFQ due to the violation of (58), because the SFQ is in the

domain of *v**. It, therefore, cannot establish an MA relation with T and the host DP without violating the PIC. As a result, [*u*φ] and [*u*Case] of the SFQ remain unvalued, causing the derivation to crash.

For unaccusative verbs, as in (60b), the surface subject moves to Spec-TP to satisfy [EPP] of T, and the FQ is adjoined to the VP following the verb, which has been raised to *v*. As the FQ adjoined to *v*P enters into an MA relation with the probe T and the host DP in Spec-*v*P at the CP phase, the condition in (58) is satisfied. It is thus allowed to appear in the position between the subject and the unaccusative verb. In contrast, the FQ that follows the unaccusative verb cannot enter into an MA relation with T and the host DP, because it is in the domain of *v* and is not accessible to operations at the CP phase due to the PIC, thereby violating the condition in (58).

3.4.1. The Syntactic Analysis of SFQs in OE Main Clauses

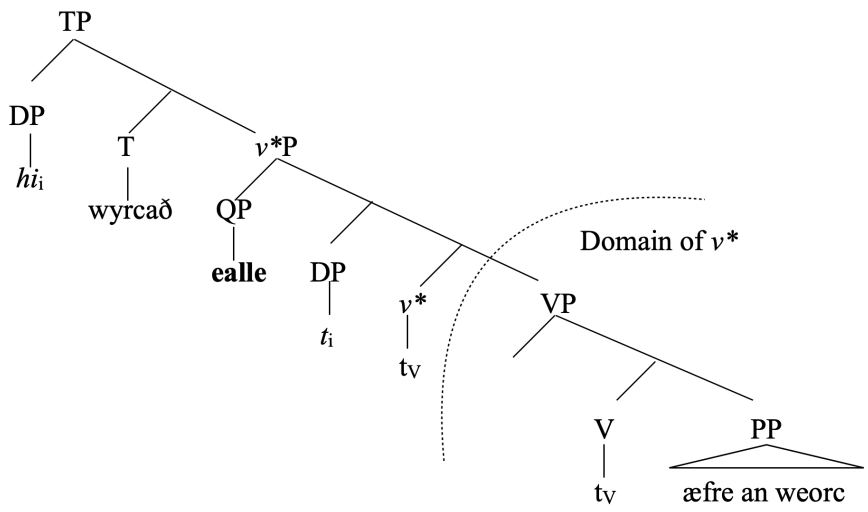
This section attempts to account for the distribution of the SFQs in OE on the basis of the licensing condition in (58) and provides a theoretical explanation for why V-SFQ order was lost in the history of English.

Firstly, let us consider the distribution of SFQ in OE. The structure of transitive sentence in (61a) is shown in (61b).

(61) a.	*hi*	<u>wyrcað</u>	**ealle**	æfre	an	weorc;
	they	work	all	after	a	work

'they all work after a work' (cocathom2,ÆCHom_II,_3:23.128.541)

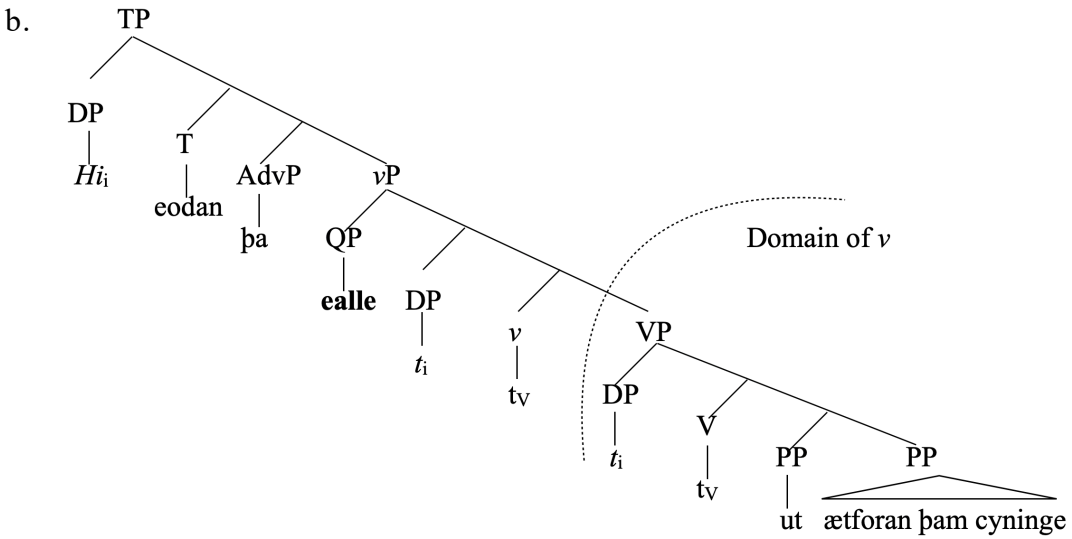
b.



Like in PE, the SFQ successfully enters into an MA relation with the probe T and the host DP in [Spec-*v**P] (61b). As early English exhibits V-movement to T, unlike PE, the main verb moved to T past the FQ, thereby deriving the V-SFQ order. Similarly, the structure of the unaccusative sentence in (62a) is presented in (62b).

(62) a. *Hi* eodan þa **ealle** ut ætforan þam cyninge
they went then all out in front of the king
'they then all went out before the king' (coaelhom, ÆHom_22:400.3515)

b.



In CP phase domain, the verb *eodan* moves from *v* to T and the SFQ enters into an MA relation with the probe T and the host DP, satisfying the condition in (58). Finally, the verb moves to C to produce V2 word order and the derivation converges.

According to Haeberli and Ihsane (2016), the loss of V-movement, which started at the end of the 15th century, was completed in the 18th century. In sum, the demise of the V-SFQ order in the 18th century was a direct consequence of the loss of V-movement.

3.5. Conclusion

This chapter has accounted for the development of SFQs in the history of English, under the licensing condition of FQs proposed in Chapter 2. By employing the historical corpora, this chapter has investigated the distribution of SFQs. The results of these investigations have revealed that the distribution of V-SFQ word order of SFQs declined from the 1500s and fell out of usage in the 1700s. Based on this observation, it has been argued that the loss of V-SFQ word order SFQs is due to the loss of V-movement.

Notes to Chapter 3

[1] For comparison, these examples are also cited by Bobaljik (2003).

(i) a. * John kisses often Mary.
b. Jean embrasse souvent Marie.
c. John often kisses Mary.
d. * Jean souvent embrasse Marie. (Pollock (1989: 367))

As in (i), just as the FQ pattern in (3), the position of adverbs like often/souvent varies between English and French. Bobaljik (2003: 5) notes that such comparison provides cross-linguistic evidence for the proposition that FQs are adverbial elements.

[2] But see section 3.2.4 for the possibility of the landing site of V-movement to CP-domain.

[3] See also Yanagi (2008, 2012) for a diachronic analysis of some other types of quantifiers in English.

[4] The conventionally assumed historical periods of English are Early Old English (500–950), Late Old English (950–1150), Early Middle English (1150–1350), Late Middle English (1350–1500), Early Modern English (1500–1710), E1

(1500–1560), E2 (1570–1639), E3 (1640–1710), Late Modern English (1710–1920), L1 (1710–1780), L2 (1780–1850), L3 (1850–1920).

[5] For the analysis of PCEEC, all texts that are duplicated with PPCEME are excluded (cf. Taylor et al. (2006) for a list of the overlapping files). The research here is restricted to the movement of the main verbs in main clauses because of the frequent occurrence of verb-final word order in OE subordinate clauses.

[6] The following are paradigms of FQs *all* and *both*.

(i) Paradigm of Quantifier *All* and *Both* in OE

	all			both		
	Masculine	Neuter	Feminine	Masculine	Neuter	Feminine
Nominative	ealle/alle	ealle/all	ealle/ealla	bēġen	bū/bā	bā
Accusative	ealle/alle	ealle/eal/eall	ealle/ealla	bēġen	bū/bā	bā
Dative	eallum			bām/bǣm		

Although several examples with FQ *each* are indeed attested in the earliest stage of English, their frequency is too low to be significant. Because of its complexity and ambiguous usage with *every*, the historical development of FQ *each* will not be discussed in this thesis, pending further empirical research.

Some of the examples with FQ *each* are shown in (i).

(i) a. and we magon us sylfe betwux us on life ælc
and we may ourselves between us on life each
oðrum fultumian to ðam upplican life. gif we
others help to their heaven life if we
that notice
ðæs cepað.
'and we may ourselves each help others between us in life, if we notice that' (cocathom2, ÆCHom_II,_23:203.131.4511)

b. Nu com tid & cymð þæt ge tofaron æghwylc
Now came time and come that you to-go each
to his agenon & forlæton me anne
to his own and let me alone
'Now the time that you each go to his own and leave me alone.'
(cowsgosp,Jn_[WSCp]:16.32.7121)

This investigation also excludes OE and ME sentences whose quantifier immediately follows the subject like those in (ii), since the quantifier in such sentences may be base-generated within DP, contra to the fact in PE as in (40b) in Chapter 2.

(ii) a. Þa cwædon *hi* **ealle** anmodlice to þam cinge,
Then said they all unanimously to the king
we gað nu **ealle** ut ætforan þe, cyning,
we go now all out before you king
'Then they all said with one accord to the king, "we will now all go out before you, king…"' (coaelhom, ÆHom_22:391.3509)

b. Þa fordemdon *hy* **ealle** þone deofles mann.
Then condemned they all the devil′s man
'Then they all condemned the man of devil'
(colwsigeXa, ÆLet_1_[Wulfsige_Xa]:10.11)

As in (iia), for example, only the nominative quantifier *ealle* 'all' inside the quotation, but not the one immediately following the subject *hi* 'they' in the first clause, is counted as an instance of SFQs in this investigation. There are two pieces of evidence to support this position. Firstly, given the fact that universal quantifiers, such as *all* and *both*, are in form of strong adjectives agreeing with a noun or pronoun in OE and early ME, which were free to occur postnominally (cf. Carlson (1978: 306)), it is not implausible to assume that the postnominal quantifiers were nominal modification within DP rather than an instance of SFQs. Secondly, it is observed that only an unstressed *alle* 'all' is allowed to follow its host DP in German, as illustrated in (iii) (Vater (1980), Merchant (1996)).

(iii)* *Die Mitglieder des Hockey teams* **alle** haben gestern nach
The members the hockey team all have yesterday after
der Niederlage vom Vorsitzenden einen Trostpreis erhalten.
the defeat from the chairman a consolation prize received
'The members of the hockey team all received a consolation prize
from the chairman after the defeat yesterday.' (Vater (1980: 235))

According to Vater (1980), (i) is grammatical only when *alle* is unstressed, in which "*alle* is not floated, but still part of the NP, only in a different position within the NP" (Vater (1980: 236)). This fact follows naturally from the V2 restriction in German, under which the finite verb must follow one constituent. Since OE and early ME main clauses also have V2 property, by analogy, adopting the same assumption to the instances in OE and ME is not implausible.

[7] Coordinate clauses are excluded in this investigation because they have verb-final word order associated with the subordinate clause in many cases as illustrated in (i) (Fischer et al. (2000: 52)).

(i) & *heo* þa **begen** in <u>eoden</u>
and they then both in went
'and then they both went in' (corood,LS_5_[InventCrossNap]:119.114)

[8] Two interesting patterns are attested during E2 and E3: periphrastic *do*-SFQ and main verb *have*-SFQ. Firstly, it has been argued that the emergence of *do*-support played an important role in the loss of V-movement (cf. Ellegård (1953), Roberts (1985, 1993), and Kroch (1989) among others). Although the results in Tables 1 and 2 exclude examples with auxiliaries and the periphrastic *do*, this may have affected the decline of the V-SFQs. The following are relevant examples from PPCEME and PCEEC in which an SFQ occurs between the periphrastic *do* and the main verb.

(i) a. besides that *they* doe **all** stand upon plaine and sure grounds, as I trust I am able to make evident demonstration in each particular so as any man of understanding may perceive cleerely, that they may be done. (BRINSLEY-E2-P1,6.70)

b. for *Surr James an my lady* doth **both** say, an so dooth my sonn, that shee should be worth fifty pounes unto you with that hee made her an that she had before. (OXINDE,I,117.070.961)

Secondly, the results in Tables 1 and 2 also exclude the following examples with an SFQ following *have*, which are probably analogies of auxiliary *have*.

(ii) a. and *they* haue **all** one language (AUTHOLD-E2-P1,11,1G.291)

b. and saith *your father and sister* have **both** good health and that they

are very peacable at home and like to continue so

(PEPYS,159.070.1091)

Given the standard assumption that a transitive main verb and its light object should be adjacent in PE, the pattern in (ii) is a proposed analysis of V-movement. Haeberli and Ihsane (2016: 515), however, observe that as the verb *have* is not restricted by the V-O adjacency rule in British English, which is a remnant of V-movement.

[9] Kemenade (1987) and many subsequent analyses have proposed that a subject pronoun was a clitic in OE and ME, occurring immediately to the left of the finite verb in topic-initial clauses, or to the right of the finite verb in neg-initial clauses, *wh*-initial clauses, and *Þa/Þonne* initial clauses. However, the fact in (40) that an SFQ occupies a position between the subject pronoun and the finite verb would be an exception to cliticization as they are not in adjacency relation (Koopman (1995: 135)). Various proposals have been made in the literature concerning the different structural positions of the subjects. As for the position of the subject pronoun, the proposals made by previous studies are classified into two types: (i) one considers it as a head element and places it in the cliticized position or in the head position (e.g. Kemenade (1987), Pinzuk (1996, 1999)); (ii) the other considers it to be a phrasal element and places it in the specifier position (e.g. Hulk and Kemenade (1997), Tanaka (2000)). Considering the

licensing condition of FQs, this thesis adopts the second proposal and assume that subject pronouns are phrasal elements. See Section 3.4 for a unified account of the distribution of SFQs in OE.

Chapter 4

A Diachronic Aspect of Object-Oriented Floating Quantifiers

4.1. Introduction

In PE, OFQs are allowed to follow object pronouns in transitive constructions, but not full-DP objects, as demonstrated by the contrast between (1a) and (1b).

(1) a. * John saw *the men* **all**.

b. I called *them* **all**.

In contrast to PE, an OFQ is allowed to follow a full-DP object in transitive constructions in other Germanic languages. Let us compare the German sentence in (2a) and the PE sentence in (2b).

(2) a. Der Lehrer hat *den Schülern* (gestern) **allen**
the teacher has the students (yesterday) all
eine Fünf ge geben.
an F given
'The teacher has given the students **all** an F (yesterday)'

b. * The teacher gave an F to *the students* all. (cf. Giusti (1990))

According to Giusti (1990), the German object *den Schülern* 'the students' undergoes object movement, leaving a quantifier *allen* 'all' in its base position, whereas this fact is not true in PE as in (2b). It is well-known that the syntax of objects in OE shares similarities with the modern West Germanic languages, and OFQs are indeed arrested in transitive sentences in early stages of English, such as the following OE examples.

(3) a. & we þrær *ure geteld* bræddon **ealle** on æfen.
and we there our tents broaden all on evening
'and we broaden all our tents there in the evening'
(coalex,Alex:30.1.363)

b. God gesceop *his gesceafta* on syx dagum **ealle**,
God created his creations in six days all
'God created all his creations in six days'
(coaelhom, ÆHom_2:220.354)

c. & *helle geatu* & *hire þa ærenan scyttelas* he **ealle**
and hell gate and their the brass bolts he all
tobræc
broke
'and completely broke the gate of hell and their brass bolts'

(coblick,HomS_26_[BlHom_7]:85.30.1059)

In (3), the OFQ *ealle* 'all' occurs in the position below its host DPs, namely, the objects *ure geteld* 'our tents' in (3a); *his gesceafta* 'his creations' in (3b); and *helle geatu & hireþa ærenan scyttelas* 'the gate of hell and their brass bolts' in (3c), respectively.

Moreover, although examples such as (1b), in which OFQs are associated with object pronouns, have been attested since the earliest stage of English, the word orders in OE and ME are quite different from those in PE. This is possibly due to the fact that object pronouns acted as clitics in OE and ME (cf. Kemenade (1987)).

Since the historical change of OFQs has received little attention in the literature, this chapter is devoted to investigating the distribution of OFQs in the history of English and providing an account for it within the framework of the minimalist program. Section 4.2 reviews the development of two types of objects. Section 4.3 investigates the distribution of OFQs with respect to two types of objects by using the historical corpora. It is argued that the loss of OFQs with respect to full-DP objects and the loss of OE and ME types of OFQs with respect to object pronouns due to the loss of object movement and that the emergence of PE type OFQs with respect to object pronouns is affected by the emergence of object shift in LME. Section 4.4 accounts for the historical development of the syntactic structures of OFQs under the current licensing

condition proposed in Chapter 2. Section 4.5 concludes chapter.

4.2. The Distribution of Two Types of Objects

4.2.1. Full-DP Objects

It is widely known that the word order of English has changed from OV order to VO order in its history, and the position of the object has varied in OE and ME texts, as shown in (1) (Pinzuk (1996), Pinzuk and Taylor (2006), Tanaka (2015, 2017)).

(4) Verb–object order in OE

a. Ac he sceal *þa sacfullan* gesibbian
But he must the quarrelsome reconcile
'But he must reconcile the quarrelsome'
(colwstan1,ÆLet_2_[Wulfstan_1]:188.256/ Pinzuk and Taylor (2006:249))

b. Se wolde gelytlian *þone lyfigendan hælend*
He would diminish the living lord
'He would diminish the living lord'
(colwstan1,ÆLet_2_[Wulfstan_1]:55.98/ Pinzuk and Taylor (2006:249))

(5) Verb–object order in ME

a. ear he hefde *his ranceun* fulleliche ipaiȝet
before he had his ransom fully paid

‘Before he had fully paid his ransom’

(CMANCRIW,II.101.1228 Pinzuk and Taylor (2006:249))

b. ȝef pu wult habben bricht sichðe wid þine heorte echnen
if you will have bright sight with your heart′s eyes
‘If you will have bright sight with your heart′s eyes’

(CMANCRIW,II.73.839/ Pinzuk and Taylor (2006:249))

Although it has been generally accepted that the change from OV to VO was completed by around 1200 （Kemenade (1987: 175)), Wurff (1999) argues that surface OV order was retained in LME, as shown in (6).

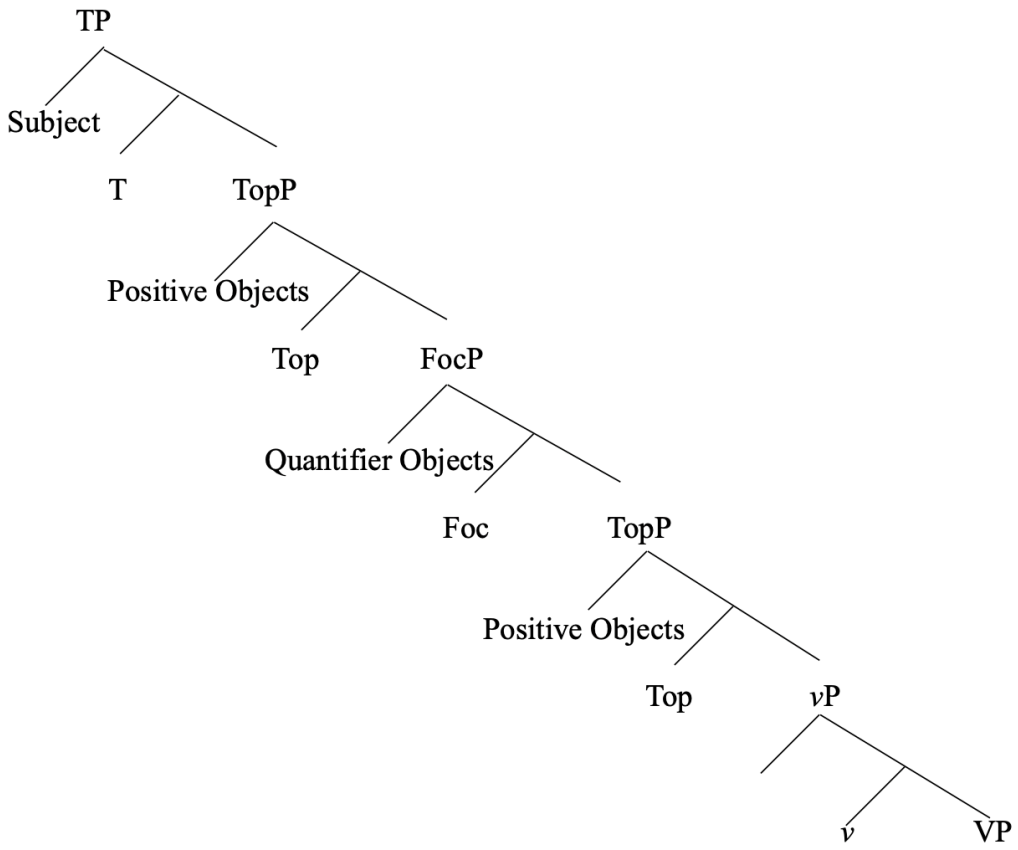
(6) And after pat I herd pese tydyngys, I kowd *no rest* have in myn hert.

(Paston 132.9-10/ Wurff (1999: 241))

To clarify the loss of OV word order, Pinzuk and Taylor (2006) provide quantitative data of OV and VO with respect to full-DP objects by dividing them into three types: positive objects, quantified objects, and negative objects. The results of their investigation indicate that the OV word order of the positive object was lost by around the 15th century, whereas that of the quantified object and negative object were still attested during LME. According to an investigation using PPCEME, Tanaka (2015, 2017) observe that the OV order of quantified and negative objects was productive until E1 but completely lost in

the latter half of the 16th century. Along the lines of Jayaseelan (2001), he adopts the cartography of syntactic structures to the left periphery of the *v*P domain and provides a principled account for this phenomenon.[1] Tanaka (2015, 2017) assume that there is a hierarchy of functional categories including Foc and Top at the left periphery of the *v*P domain in OE and that certain types of objects move to each specifier. The surface structure is represented as follows.

(7)



Based on this structure, it is assumed the target of the movement of positive objects is supposed to be either of Spec-TopP, whereas quantified objects move to Spec-FocP. This assumption is supported by the investigation of the relative

order of an object and an adverb in OE, as illustrated in (8).

(8) a. he wolde *þæt rice* **sona here** on eorþan gesettan
he would that kingdom soon here on earth build
'he would soon build that kingdom here on earth'
(coblick,HomS_46_[BlHom_11]:117.24.149/ Tanaka (2015: 81))

b. we willað **nu** *ure spræce* **her** geendian;
we will now our speech here end
'we will now end our speech here'
(cocathom2,ÆCHom_II,_41:308.138. 7003/ Tanaka (2015: 81))

A positive object can either precede temporal adverbs that may adjoin to the upper TopP (8a) or appear in a position between a temporal adverb and a VP/*v*P adverb that is probably the lower Spec-TopP (8b). This chapter adopts the syntactic structure (7) to explore the distribution of OFQs with respect to full-DP objects in the history of English.

To draw a complete map of the historical changes of OFQs, the development of another type of object, an object pronoun, should also be considered.

4.2.2. Object Pronouns

Kemenade (1987: 113) observes that the position of object pronouns was mainly in five patterns in OE: (a) to the immediate left of the verb; (b) the left

periphery of *v*P; (c) to the immediate right of the complementizer in subordinate clauses; (d) the second position in a topic-initial clause; (e) the third position in *wh*-initial, *neg*-initial, and *Þa/Þonne*-initial clauses, which exhibit V2. The relevant examples are illustrated in (9a–e), respectively.

(9) a. Hwi wolde God swa lytles þinges *him* forwyrnan
Why would God such small thing him deny
'Why would God deny him such a small thing'
(AHTh, I, 14/ Kemenade (1987: 112))

b. þæt he *us* rume wununge on heofenan rice forgift
that he us spacious dwelling in heaven′s kingdom give
'lest he give us a spacious dwelling in the kingdom of heaven'
(AHTh, I, 36/ Kemenade (1987: 113))

c. þæt *him* his fiend wæren æfterfylgende
that him his enemies were following
'that his enemies were chasing him'
(Oros, 48, 12/ Kemenade (1987: 113))

d. God *him* worthe þa reaf of fellum
God them wrought then garments of skins
'then God made garments of skin for them'
(AHTh, I, 18/ Kemenade (1987: 114))

e. Ne geseah *hine* nan man nates-hwon yrre

not saw him no man so little angry

'no one ever saw him so little angry'

(ASL, XXXI, 306/ Kemenade (1987: 114))

It has been argued that object pronouns can act as clitics in OE (Kemenade (1987), Pintzuk (1991)). They may occur to the left of a functional head, such as T or C, under cliticization. The positions of object pronouns in (d) and (e) are identical to those of subject pronouns. The cliticization of object pronouns gradually declined in EME and was lost by around the 1400s (Kemenade (1987: 188)).

Moreover, it has been observed that object pronouns behaved identically to Icelandic weak pronouns in LME and EModE, as illustrated in (10) (Wallenberg (2008), Miyashita (2013)).

(10) a. Nemandinn las (hana) **ekki** (*hana).

student-the read it not it

'the student didn't read it'. (Thráinsson (2001: 150)/ Icelandic)

b. I know *him* **not**. (King Henry V, III.vi.19/ Miyashita (2013: 28))

Miyashita (2013) investigates historical data of OS as in (10b) and concludes that ,

As discussed in Chapter 3, examples of V-movement were still found in ME and

EModE with finite main verbs. Thus, it is not implausible to assume that the examples of OS in (10) are triggered by V-movement to the TP domain.

Considering these facts, the next section examines the distribution of OFQs with respect to the two types of objects in the history of English.

4.3. The Quantitative Data of OFQs in the History of English

4.3.1. The Data of OFQs with Full-DP Objects

This section investigates the historical change in the word orders of OFQs in transitive constructions by employing the corpora of YCOE, PPCME2, and PPCEME. The results are listed in Table 1.

Table 1. Word Orders of OFQs with Full-DP Objects

	EOE	LOE	EME	LME	E1	E2	E3
OVQ	5(15.6%)	13(9.8%)	0(0.0%)	0	0	0	0
OQV	18(56.3%)	72(54.1%)	6(37.5%)	0	0	0	0
VOQ	7(21.9%)	38(28.6%)	10(62.5%)	0	0	0	0
QVO	2(6.3%)	10(7.5%)	0(0.0%)	0	0	0	0

Four main word order patterns emerged in OE: OVQ, OQV, VOQ, and QVO. They declined to two patterns in EME, namely, OQV and VOQ, and were completely lost in LME onward. The OQV order was preferred over the other three order patterns in OE. However, the frequency of the VOQ order was

superior to that of OQV in EME. This is probably because of the change from OV to VO during the 1200s. All the full-DP objects found in this investigation are positive objects, the OV order of which was lost during LME. Therefore, the results in Table 1 are consistent with this fact. Examples of each order in OE are illustrated in (11).

(11) a. & we þrær *ure geteld* bræddon **ealle** on æfen.
and we there our tents broaden all on evening
'and we broaden all our tents there in the evening'
(coalex,Alex:30.1.363/ OVQ order)

b. & *helle geatu* & *hire þa ærenan scyttelas* he **ealle**
and hell gate and their the brass bolts he all
<u>*tobræc*</u>
broke
'and he broke the gate of hell and their brass bolts completely'
(coblick,HomS_26_[BlHom_7]:85.30.1059/ OQV order)

c. Þa <u>scufon</u> þa hæþenan *þa halgan* into þam mere,
then shoved the heathens the saints into the mere,
to middes þam ise **ealle** unscrydde
to middle the ice all unclothed
'Then the heathens shoved all the saints into the mere, into the middle of the ice, unclothed'

(coaelive,ÆLS[Forty_Soldiers]:145.2568/ VOQ order)

d. Ic sceall eac **ealle** forlætan *þa* *þe* *of* *Perseo*
I shall also all permit those that of Perseus
& *of* *Cathma* *gesæde* *syndon*
and of Cadmus said are
'I must pass over all things that are said of Perseus and Cadmus'

(coorosiu,Or_1:8.28.1.540/ QVO order)

All the examples of VOQ order exhibit V2, as illustrated in (9c). In contrast, the examples of OQV order are mainly attested in subordinate clauses and coordinate clauses with head-final structure, as illustrated in (9b). One interesting pattern is the QVO order, which only occurs in OE.[3] As in (9d), the object may be base-generated by the OV order within VP and undergo heavy NP shift to adjoin to the right side of *v*P. According to Tanaka (2015, 2017), the movement of positive objects in OE was productive until EME but lost in LME. If the object appears in the base-generated position, there would be no position for the OFQs to adjoin to as the ungrammatical sentence (1a), the analysis of which has been provided in Chapter 2. Therefore, it seems that the loss of the distribution of OFQ is due to the loss of object movement during ME.

4.3.2. The Data of OFQs with Object Pronouns

Now, let us consider the distribution of OFQs with respect to object pronouns,

based on an investigation of the corpora of YCOE, PPCME2, PPCEME, and the *Penn Parsed Corpus of Modern British English, 2nd edition* (PPCMBE2). The results are presented in Table 2, followed by examples of the three order patterns (12a–c).[2]

Table 2. Word Orders of OFQs with Object Pronouns

	EOE	LOE	EME	LME	E1	E2	E3
OVQ	1(33.3%)	12(46.2%)	3(50.0%)	0	0	0	0
OQV	0(0.0%)	9(34.6%)	0(0.0%)	0	0	0	0
VOQ	2(66.6%)	5(19.2%)	3(50.0%)	0	0	0	0

(12) a. Moyses *hig* <u>lædde</u> þa þurh Godes mihte **ealle**
Moses them led then by God′s power all
ofer ða Readan Sæ, swa swa we rædað on bocum
over the red sea as we read in book
'Moses then led them by the power of God over the Red Sea, as we read in the book.' (colsigewZ, ÆLet_4_[SigeweardZ]:340.113/ OVQ)

b. Ða he *hig* <u>hæfde</u> **ealle** <u>amyrrede</u>
When he them had all wasted
þa wearð mycel hunger on þam rice
then was many hunger to the country
'When he had wasted them all, then a great hunger came over the

country' (cowsgosp,Lk_[WSCp]:15.14.4898/ OQV)

c. Ac he gebohte *us* þa **ealle** mid his deorwurðan
But he redeemed us then all with his precious
blode of helle wite
blood of punishment
'But he redeemed us then all with his precious blood of punishment'
(cowulf,WHom_13:45.1242/ VOQ)

Three main word order patterns emerged in OE: OVQ, OQV, and VOQ. They declined to two patterns in ME, namely, OVQ and VOQ. Twelve of 13 examples of OVQ order are attested in main clauses, which generally exhibit V2. As in (12a), the subject *Moyses* 'Moses' is in the topic-initial position, and the clitic object pronoun *hig* 'them' is to the immediate left of the finite verb *lædde* 'led'. As argued by Pintzuk (1991), an object pronoun can undergo cliticization to the left of the finite verb in C and thus does not 'count' for the syntax. If this is correct, (12a) is a case of V2, and the OFQ *ealle* 'all' can adjoin to *v*P, following the temporal adverb *þa* 'then' and the PP *þurh Godes mihte* 'by the power of God'. Another one of which the examples are attested only in main clause exhibiting V2 is the VOQ order. As in (12c), the object pronoun *us* occurs to the immediate right of the finite verb *gebohte* 'redeemed' in the second position. As for the examples of OQV, two of the nine examples are coordinate clauses with head-final structures and the other seven are subordinate clauses, as

illustrated in (12b). The object pronoun *hig* 'them' appears in a so-called 'Wackernagel position' in subordinate clauses (Miyashita (2013: 15), following the subject *he* and preceding the auxiliary *hæfde* 'had'. As mentioned above, OV order started to change to VO order during EME, which could lead to the loss of the OQV order in the same period.

On the other hand, the PE type VOQ order, as in (1b), where the OFQ immediately follows the object pronoun was still productive during the EModE period. The results of the investigation of PPCEME and PPCMBE2 are demonstrated in Table 3 and Figure 1, followed by the examples of each period (13–14).

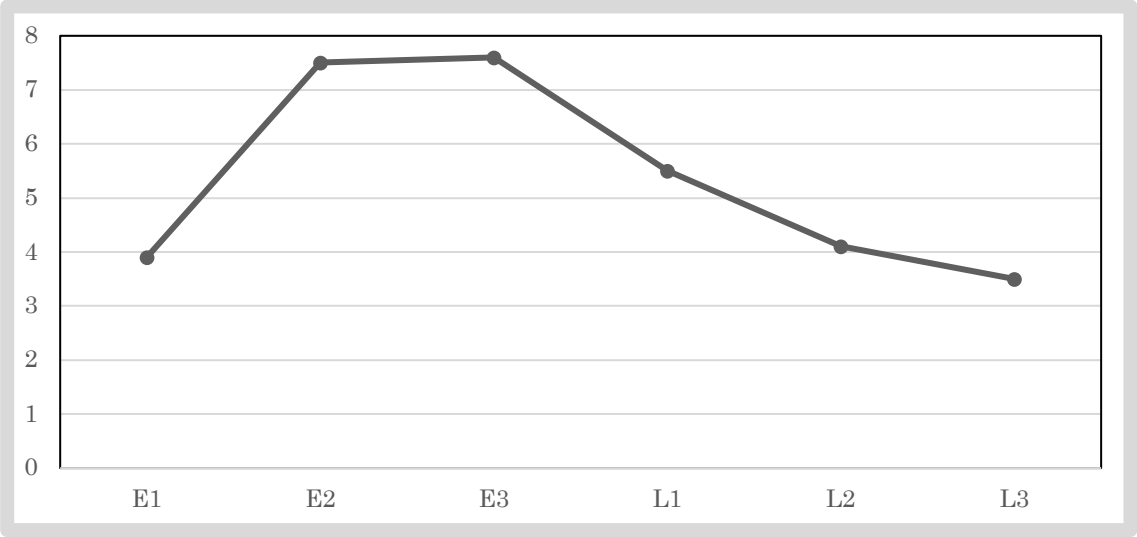
Table 3. The Frequency of the VOQ Order from EModE Onward

(per 100,000 words)

	E1	E2	E3	L1	L2	L3
VOQ	3.9	7.5	7.6	5.5	4.1	3.5

Figure 1. The Frequency of the VOQ Order from EModE Onward

(per 100,000 words)



(13) a. Our Lord blisse *you* **all**. (MORELET2-E1-H,508.59/ E1)

b. yet I, & my fellow Tilbery we being both his Maiesties watermen did by Gods assistance safely escape *them* **all**,

(JOTAYLOR-E2-P2,3,99.C2.365/ E2)

c. God forgive *us* **all**. (PEPYS-E3-P2,8,325.115/ E3)

(14) a. Betty. It has always been the Study of my Life, Madam, to serve, and please *you* **both**; (STEVENS-1745,25.206/ L1)

b. but I feel *them* **all**, (WELLESLEY-1815,852.316/ L2)

c. and as soon as it was over His Majesty took *us* **all** out to walk about the place, see the dairy and a beautiful Bretonne cow he ordered to be

brought out, and then to scull on the lake, or e'tang, which gives its name to the place. (GREVILLE-1855-2,1,270.463/ L3)

The frequency of the VOQ order increased sharply from E1 to E2 and remained productive until E3. Then, it gradually decreased during the LMode period. As previously mentioned, an object pronoun may undergo OS as in Icelandic. According to Miyashita (2013), the weak pronoun OS emerged in the second half of the 14th century and declined in the second half of the 17th century. Thus, the high frequency of the VOQ order in the EModE period may due to the emergence of this phenomenon. Recall the analysis of the derivation of (1b) presented in Chapter 2, where the PE object pronoun may undergo a short-term OS to Spec-FP within *v*P. The target of OS by the EModE object pronoun is probably Spec-*v*P, as proposed by Chomsky (2001) for Scandinavian OS, trigged by [EPP] on *v*. Because of the decline of V-movement, *v* is weakened and cannot bear [EPP] anymore, and then OS can apply only within *v*P.

In summary, it has been observed that examples of OFQs with respect to two types of objects are attested in earlier English. Both types of OFQs are lost in EME due to the loss of the OV order. Moreover, the emergence of the PE type VOQ order in EModE was probably due to the emergence of OS, which was undergone by weak pronouns from LME to LModE.

4.4. The Syntactic Structures of OFQs in OE

This section attempts to account for the distribution of SFQs and OFQs in OE based on the licensing condition in (36) in Chapter 2 (repeated here as (15)).

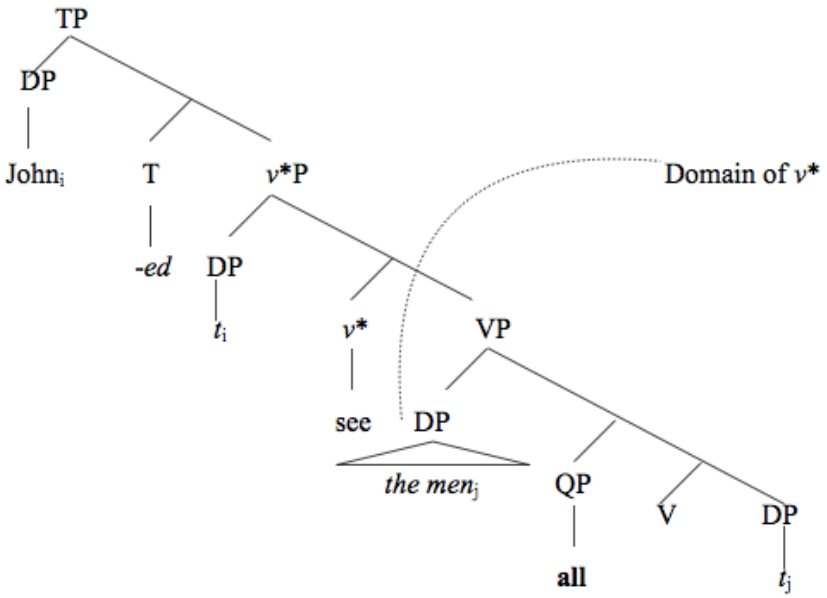
(15) Licensing Condition on FQs

An FQ serving as a matching goal enters into an MA relation with a functional head as a probe and its host DP as another matching goal within the same phase domain.

Based on this condition, the grammaticality of the sentences with OFQs in (1), repeated here as (16), can be accounted for as follows.

(16) a. * John saw *the men* **all**.

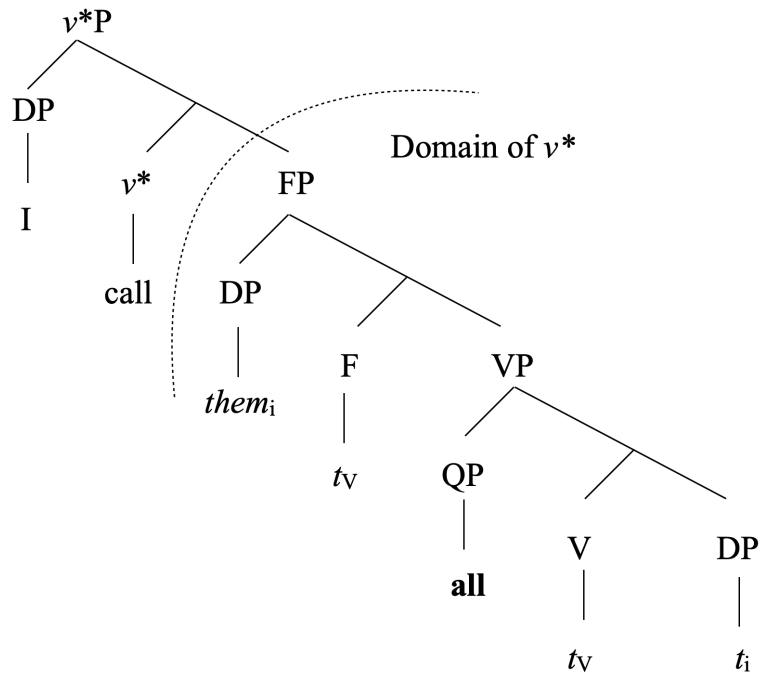
b.



In (16b), the OFQ cannot enter into an MA relation with V because the OFQ, which is adjoined to VP, is not in the search domain of V, violating the condition in (15). As a result, [*u*φ] and [*u*Case] on the OFQ are not valued, causing the derivation to crash.

(17) a. I called *them* **all**.

b.



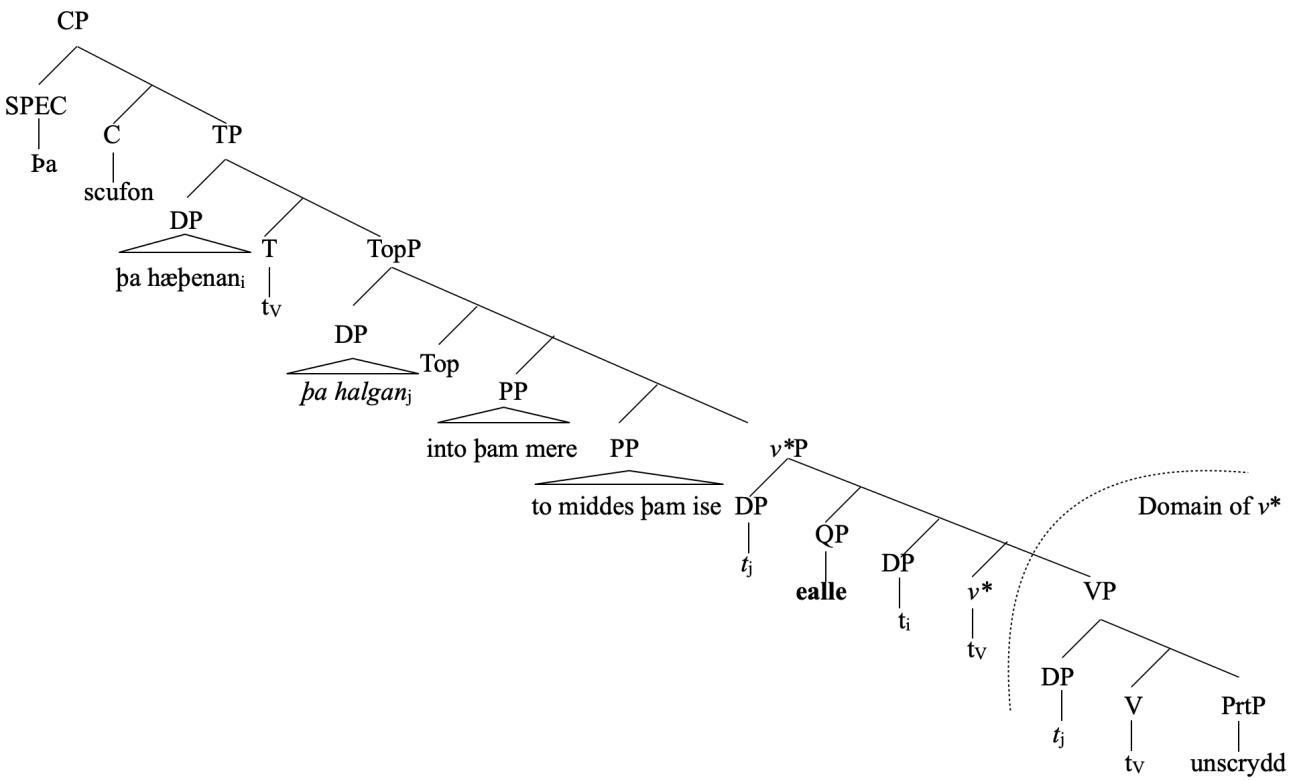
In (17b), the OFQ successfully enters into an MA relation with the probe F and the object pronoun. As a result, F assigns the accusative Case to the object; at the same time, [*i*φ] of the object values [*u*φ] of F. Then, the object moves to Spec-FP to satisfy [EPP] on F.

4.4.1. The Syntactic Structure of OFQs with Full-DP Objects in OE

The first element to consider is the structure of OFQs with full-DP objects. This chapter assumes, following Tanaka (2015, 2017), that positive objects move to the left periphery of the *v*P domain to function as a topic. The cartography represented in (7) is adopted for an account of OFQs with full-DP objects. The derivation of the example (18a) is illustrated in (18b).

(18) a. Þa scufon þa hæþenan *þa halgan* into þam mere,
then shoved the heathens the saints into the mere,
to middes þam ise **ealle** unscrydde
to middle the ice all unclothed
'Then the heathens shoved all the saints into the mere, into the middle of the ice, unclothed' (coaelive,ÆLS[Forty_Soldiers]:145.2568)

b.



In (18b), the OFQ successfully enters into an MA relation with the probe Top, and the host DP moves to [Spec-*v**P]. The loss of object movement in the 14th led to the loss of OFQs in LME because the V became the only probe capable of entering into an MA relation with the objects.

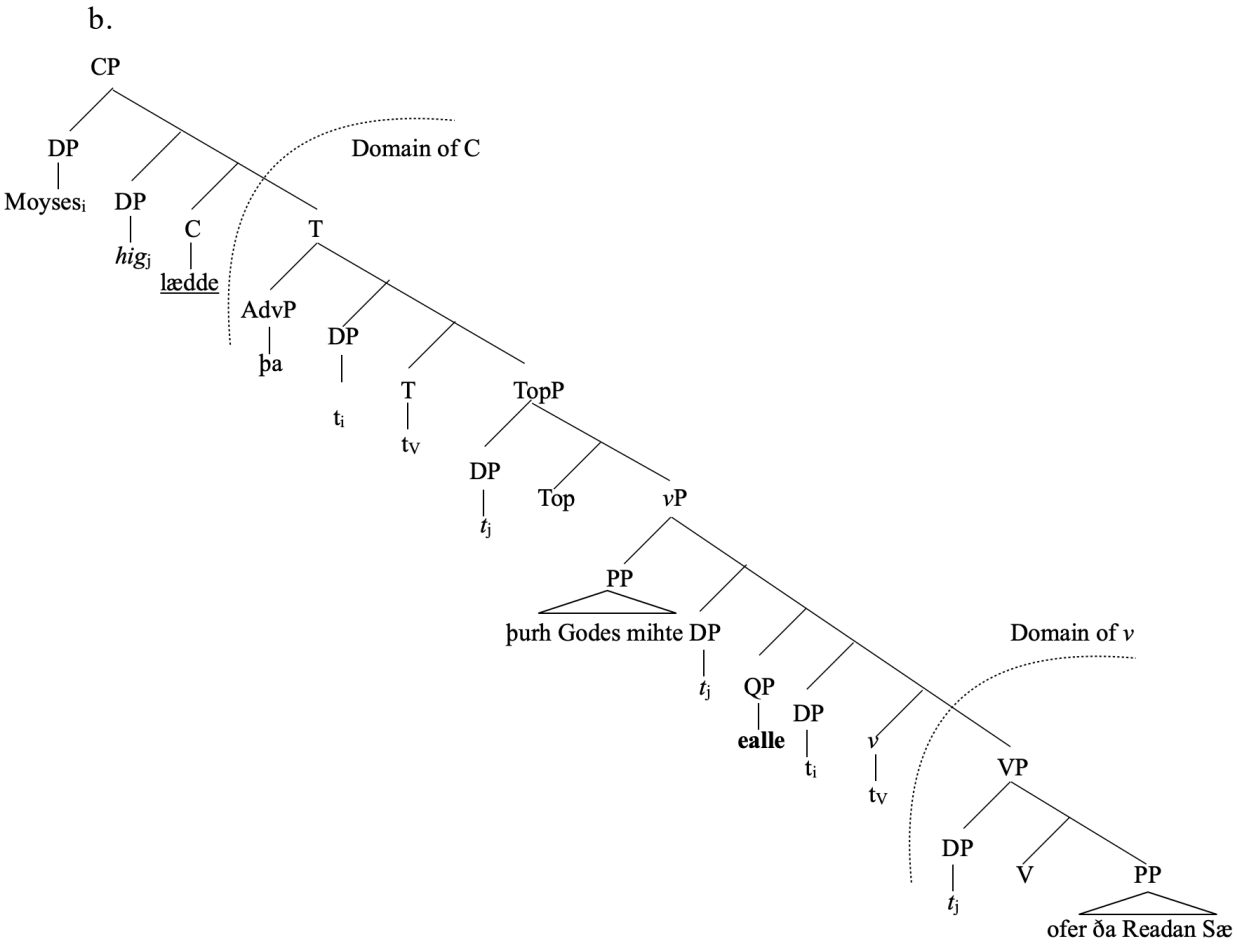
4.4.2. The Syntactic Structure of OFQs with Object Pronouns in OE

The next structure to consider is that of OFQs with object pronouns in OE. It is assumed that the target of cliticization is the CP domain and that a clitic bearing [Top] and [iφ] undergo successive cycle A′-movement through the left periphery of the *v*P domain. Based on this assumption, the derivation of (19a)

is represented in (19b).

(19) a. Moyses *hig* lædde þa þurh Godes mihte **ealle**
Moses them led then by God′s power all
ofer ða Readan Sæ, swa swa we rædað on bocum
over the red sea as we read in book
'Moses then led them by the power of God over the Red Sea, as we read in the book.' (colsigewZ, ÆLet_4_[SigeweardZ]:340.113)

b.



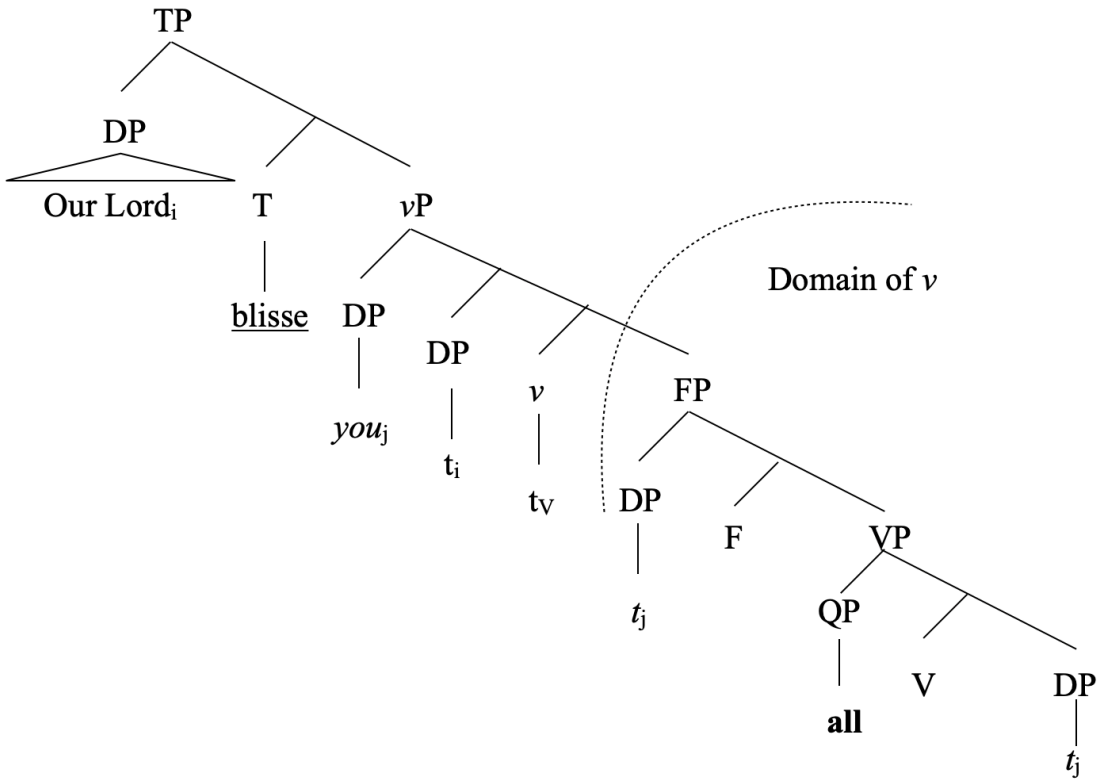
In (19b), the OFQ successfully enters into an MA relation with the probe Top, and the host DP moves to [Spec-*v*P]. Then, the subject and the object pronoun move further to the CP domain.[4] As previously discussed, OV order declined from the 1200s and was lost by the 14th century. The clitic status of object pronouns was lost in the same period. As a consequence, these changes may lead to the loss of the OVQ order, the OQV order, and the OE type of VOQ order.

4.4.3. The Syntactic Structure of OFQs with Object Pronouns in EModE

The final topic to consider is the derivation of the EModE type of VOQ order. As previously mentioned, it is assumed with Chomsky (2001) that object shift is a movement triggered by [EPP] on *v* to its specifier. This chapter also assumes that an OFQ is adjoined to VP enter into an MA relation with the probe F and the object pronoun within *v*P whose structure is identical with PE type of OFQs as presented in Section 2.5.1.2 for the short-term object shift in PE. Then, the object pronoun can move further to Spec-*v*P in EModE due to the retainment of V-movement. Based on this assumption, the derivation of (20a) is presented in (20b).

(20) a. Our Lord blisse *you* **all**. (MORELET2-E1-H,508.59)

b.



In (20b), the OFQ successfully enters into an MA relation with the probe F and the object pronoun. Then, the object moves to Spec-FP to satisfy [EPP] on F and move further to Spec-*v*P.

4.5. Conclusions

This chapter has accounted for the development of OFQs in the history of English under the licensing condition of FQs proposed in Chapter 2. By employing the historical corpora, this chapter has investigated the distribution of OFQs. The results of these investigations have revealed that the distribution of

OFQs with two types of objects was lost during EME, and that the emergence of the PE type of VOQ order in EModE was probably due to the emergence of OS undergone by weak pronouns from LME to LModE.

Notes to Chapter 4

[1] For convenience, in this chapter, all light verb projections are expressed in *v*P and correspond to the transitive *v**P phase discussed in Chapter 2.

[2] This investigation excludes OE and ME sentences whose quantifiers immediately follow the object pronouns, like those in (i), as the quantifiers in such sentences may be base-generated within DP, contrary to PE discussed in Section 2.5.1.2.

(i) a. ne þeah hwæðere we ne magon *hi* **ealle** gereccan…
not yet we not may them all reckon
'yet can we not reckon them all'
(cocathom2, ÆCHom_II,_1:9.214.191)

b. ac ic bebeode minum þeowum þæt hi *hi* **ealle**
but I command my servants that they them all
tobryton.
to-break
'but I command my servants to break them (the idols) all to pieces'
(coaelive, ÆLS_[Sebastian]:235.1351)

There are two pieces of evidence to support this position. One is the absence of an inversion order of the pair [*them all*] in OE and ME, which is expressed as an

of-genitive form [*all of them*] in PE. According to the investigation of the relative order of a noun and a quantifier in OE and ME by Yanagi (2012, 2015), the order of (i) is the only choice for object pronouns. The quantitative data of the quantifier *all* are listed in (ii).

(ii) The Distribution of the Quantifier *All* with Object Pronouns

	OE	ME
	eall 'all'	**all**
Q-pronoun	3 (1.8%)	1 (0.9%)
Pronoun-Q	164 (98.2%)	113 (99.1%)

(cf. Yanagi (2012: 145, 2015: 25))

The low frequency of Q-pronoun order is probably because of the delay in the emergence of the *of*-genitive for the universal quantifiers *all* and *both* (Carlson (1978: 305)). Although the *of*-genitive had gradually replaced the inflected genitive since EME (cf. Mustanoja (1960: 75)), the quantifiers *all* and *both* did not share this construction until the end of the 16th century. The late emergency of the *of*-genitive may be reason why the [*all of them*] type of FQs can be attested from E1, as illustrated in (iii).

(iii) a. And *they* made **both of them** a bonde together.

(TYNDOLD-E1-P1,XXI,20G.965)

b. The Lord made not this couenant with our fathers, but with vs: euen vs, *who* are **all of vs** here aliue this day. (AUTHOLD-E2-P2,V,1D.454)

Another piece of evidence is the different behaviour in topicalization between the pair [*them all*] in PE and their OE or ME counterpart. While [*them all*] cannot be topicalized in PE, which suggests that they do not form a constituent as mentioned in Chapter 2, it is allowed in OE, as demonstrated by the contrast between (iva) and (ivb).

(iv) a. and *us* **ealle** se goda hyrde ætgædere <u>fede</u> mid
and us all the good keeper together feed with
þære gife þæs halgan gastes.
the gift the Holy Ghost
'and the good keeper feed us all together with the gift of the Holy Ghost' (comary,LS_23_[MaryofEgypt]:79.53)
b. * *them* **all**, I like. (Brisson (1998: 240))

[3] Note that the example in (11d) is not an instance of the L-*tous* phenomenon in French (Kayne (1969, 1975)), as illustrated in (i).

(i) a. J'ai **tous** voulu *les* lire.
I have all wanted them read

'I want to read them all.'

b. * J'ai **tous** voulu lire *les* *livres*

I have all wanted read the books

'I wanted to read all the books' (cf. Kayne (1969: 9))

As noted by Kayne (1969), the L-*tous* can only apply to a quantifier associated with a clitic, but a not full-DP. As the analysis of this phenomenon is beyond the scope of this thesis, this issue has been left for further research. However, Doetjes (1992) presents a detailed consideration.

[4] The cartographic structure of the left periphery of CP is simplified.

Chapter 5

The Development of Floating Quantifiers in Passive Constructions

5.1. Introduction

It is widely accepted that SFQs cannot appear in a position following passive participles in PE, as shown in (1).

(1) a. *The buildings* were **all** demolished.

b. * *The buildings* were demolished **all**. (Harwood (2012: 220))

In contrast, the Participle SFQ (Part-SFQ) word order was permissible in the earliest stage of English, as the examples from YCOE illustrate in (2).

(2) a. ac *hys wundra* næron awritene **ealle**
but his wonders were written:NOM;M;PL all:NOM;M;PL
'but his wonders were all written'
(coaelhom, ÆHom_6:318.1025)

b. *Hi* wurdon ða gebysgode on heora gebedum **ealle**,
They were then engaged:NOM;M;PL in their prayer all:NOM;M;PL
'Then they were all engaged in their prayer'

(coaelive, ÆLS_[Sebastian]:350.1421)

In (2), both the passive participles *awritene* 'written' and *gebysgode* 'engaged' exhibit overt agreement inflection in terms of Case, gender and number.

It is noteworthy that instances with the same word order pattern as (1b) are allowed cross-linguistically as shown in (3), (4) and (5) which are from Italian, Spanish and Romanian, respectively.

(3) a. *I libri* sono **tutti** letti. (Italian)
the books are all read
b. *I libri* sono letti **tutti**.
the books are read all
'The books are all read.' (Cirillo (2009: 32))

(4) a. *Los libros* son **todos** leídos. (Spanish)
the books are all read
b. ?*Los libros* son leídos **todos**.
the books are read all
'The books are all read.' (Cirillo (2009: 38))

(5) a. *Fimele* sunt **toate** văzute. (Romanian)
films-the are all seen

b. ?Fimele sunt <u>văzute</u> **toate**.
films-the are seen all
'The films are all seen.' (Cirillo (2009: 64))

As noted by Cirillo (2009), passive participles show morphological agreement in gender and number with their subjects in some Romance Languages such as Italian and can optionally be moved to a higher position within the VP. It is therefore reasonable to consider that the OE past participles in (2) may move to the higher positions of the sentence in the same way as it does in Italian. This chapter investigates the historical development of the word-order pattern in (2) by employing the historical corpora, YCOE, PPCME2, PPCEME, and PPCMBE. The results of this investigation demonstrate that Part-SFQ started to decline at the beginning of ME and was eventually lost during the L1 period. Furthermore, it provides a theoretical explanation of the syntactic derivation of this word-order pattern within the minimalist framework by adopting the licensing condition of SFQs proposed in Chapter 2. In accordance with Hiraiwa′s (2005) MA operation, it claimes that the passive participle may enter into an MA relation with the probe T, the internal argument DP and the SFQ in (2). As a result of MA, the passive participle moves out of *v*P to a higher position via head-movement. Since participles lost their agreement inflections during the 13th century, it may lead to the rapid decline of the movement of the passive participle.

This chapter is organized as follows. Section 5.2 clarifies the distribution and the development of the Part-SFQ order pattern by conducting a corpus-based research into the history of English. Section 5.3 outlines the previous analyses of passive participle movement. Section 5.4 accounts for the historical development of the movement of passive participles in the history of English. Section 5.5 concludes the chapter.

5.2. The Quantitative Data

This section investigates the distribution of passive participles movement in the history of English by employing YCOE, PPCME2, PPCEME and PPCMBE. As the interpretation of participles in BE passive is sometimes ambiguous between verbal and adjective, it is difficult to distinguish this category based on their forms. As Wasow (1977) demonstrated, verbal passive participles are neither formed from unaccusative verbs nor prefixed with *un*-. This investigation focuses on participles of transitive verbs without the *un*- prefix. The results of this investigation are summarised in in Table 1, Table 2 and Figure 2.

Table 1. Word Orders of SFQs in Passive Constructions in the History of English

	OE	ME	E1	E2	E3	L1	L2	L3
SFQ-Part	68	47	17	38	25	51	16	17

Part-SFQ(%)	21(25.6)	8(14.5)	5(22.7)	1(2.6)	4(13.8)	2(3.8)	0	0

Table 2. The frequency of the Part-SFQ order (per 100,000 words)

	OE	ME	E1	E2	E3	L1	L2	L3
Part-SFQ	14.5	4.1	0.9	0.2	0.7	0.7	0	0

Figure 1. The frequency of the Part-SFQ order (per 100,000 words)

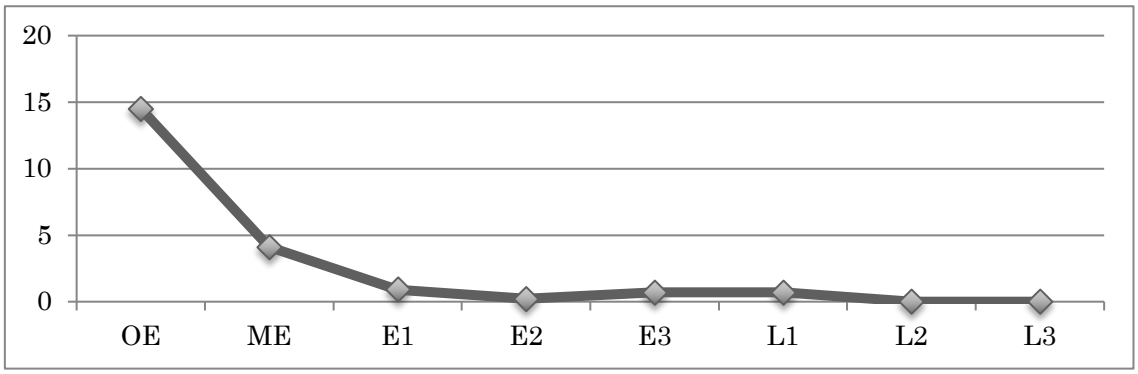


Table 1 provides clear evidence that the distribution of Part-SFQ order occurred with a certain frequency until the end of ME, even though this distribution is lower than that of the SFQ-Part order. In L1, however, the SFQ-Part order was attested only occurred at the rate of 3.8% and was ultimately lost during the 18th century. Examples of each order pattern from each period are depicted in (6–11), respectively.

(6) SFQ-Part in OE:

a. *Hi* wurdon þa **ealle** þurh þa wundra <u>onbryrde</u>

They were then all though the wonder encouraged

'They were all encouraged by these miracles'

(coaelive, ÆLS_[Sebastian]:148.1298)

b. and *þa* wurdon **ealle** wundorlice gehælde binnan þrym wucum

and they were all wondrously healed within three weeks

'and they were all wondrously healed within three weeks'

(coaelive, ÆLS_[Swithun]:318.4418)

(7) Part-SFQ in OE:

a. ac *hys wundra* næron awritene **ealle**

but his wonders were written all

'but his wonders were all written' (coaelhom, ÆHom_6:318.1025)

b. *Hi* wurdon ða gebysgode on heora gebedum **ealle**,

They were then engaged in their prayer all

'Then they were all engaged in their prayer'

(coaelive, ÆLS_[Sebastian]:350.1421)

(8) SFQ-Part in ME:

a. and were **bothe** beryed togedyr, *Adam and Eue*.

'and Adam and Eue were both buried together' (CMREYNES,255.423)

b. and all þa pepull sewet hym, tyll *þay* wer **all** ouerpassyd.

'and all the people sewed him, till they were all overpassed'

(CMMIRK,102.2762)

(9) Part-SFQ in ME:

a. So whan the duke and his wyf were comyn unto the kynge, by the meanes of grete lordes they were accorded **bothe**.

'so when the the duke and his wife had come to the king, by the means of the great lord they were both granted' (CMMALORY,2.11)

b. And so were they buryed **bothe**,

'And so they were both buried' (CMMALORY,69.2362)

(10) SFQ-Part in EModE:

a. But now we are **all** deceiued quoth the Parson,

'But now we are **all** deceived, said the person'

(DELONEY-E2-P1,19.332)

b. and they are **all** polished over,

'and they are all polished over' (FIENNES-E3-P2,174.153)

(11) Part-SFQ in EModE:

a. but they must be well couered **bothe**.

'but they must be both well covered' (FITZH-E1-H,39.109)

b. and florysshyd theym with dyuerse paynturys sette out with dyuerse colours and oylys, so that they were coueryd **all** excepte the facys;

'and flourished them with diverse paintings set out with diverse colors and oils, so that they were all covered except the faces'

(FABYAN-E1-P1,558.40)

(12) SFQ-Part in LModE:

a. It is very sweet to be here, though a hot soft wind this morning roars in the pines, and the laburnums are **all** dishevelled.

(BENSON-190X,117.375)

b. It is written in the prophets, And they shall **all** be taught of God.

(ERV-NEW-1881,6,40J.486)

(13) Part-SFQ in LModE:

a. If two phials were charged **both** through their hooks, a cork ball suspended on silk, and hanging between them, would first be attracted, and then repelled by both; (PRIESTLEY-1769,157.60)

b. and soon returned with an Account, that the two Gentlemen were got **both** into the same Bed. (FIELDING-1749,3,14.464)

Furthermore, as stated in Cinque's (1999) cartographic analysis on the position of the adverb, since cartography is universal, the word order relations between adverbs and past participles provide evidence for the movement of the past participle in the history of English. Selected examples from the

investigation are presented in (13).

(14) a. and efne heo is gehæled **halwendlice** ðurh Crist.
and even she is healed entirely through Christ
'and even she is entirely healed by Christ'
(coaelive, ÆLS[Lucy]:28.2184)

b. and beo ðu swylc swa Iouis, þin sceandlica god, wæs,
and be you such so Jove, your shameful god was
þæt git magon beon getealde **eac** betwux þam godum.
that you may also be numbered each among the gods
'and be you such as Jove was, your shameful god, that you two may
also be numbered among the gods' (coaelive, ÆLS[Agatha]:65.2050)

Moreover, Cinque (1999) claims that completive aspect adverbs such as *entirely* are designated parts of functional projection above VoiceP. Therefore, it is assumed that the past participle moves to the position above VoiceP.

(15) … $AspP_{Completive}$ > VoiceP > $AspP_{celerative}$… (Cinque (1999:106))

This chapter proposes that the past participle moves to a functional projection higher than VoiceP via head-movement. In addition, since OE past participles exhibit overt agreement inflections, it is suggested that the past participle enters

into an MA relation with the Probe T, internal argument and SFQ. Before turing to the analysis of the derivation of the participle movement, the following review outlines the previous analyses of passive participle movement and the licensing condition which will be adopted in this chapter.

5.3. The Analysis

5.3.1. Previous Studies on Participle Movement

Caponigro and Schütze (2003) provide a comparison between the placement of English and Italian passive participles. The phenomenon is delieated as follows.

(16) a. There've been *some men* arrested

b. *There've been arrested *some men*.

(Caponigro and Schütze (2003: 293))

(17) a. *Sono stati *alcuni unomini* arrestati.

are been some men arrested

b. Sono stati arrestati *alcuni uomini*.

are been arrested some men

(Caponigro and Schütze (2003: 293))

The contrast in word order between expletive passives in PE (16) and those in

Italian (17), shows that the position of the Italian participle is higher than the participle in PE. In addition to passive participles, Caponigro and Schütze (2003) also explore the placement of active participles in PE and Italian. The relevant examples are exemplified in (18–19)

(18) a. *There have *many typhoons* arisen in the Pacific this year.

b. There have arisen *many typhoon*s in the Pacific this year

(Caponigro and Schütze (2003: 293))

(19) a. *Sono *molti tifoni* comparsi quest'anno nel Pacifico.

are many typhoons appeared this year in-the Pacific

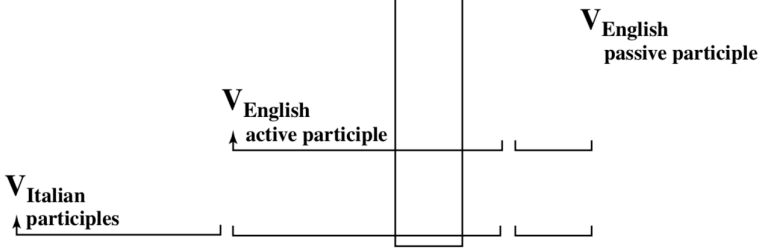
b. Sono comparsi *molti tifoni* quest'anno nel Pacifico.

are appeared many typhoons this year in-the Pacific

(Caponigro and Schütze (2003: 293))

In (18) and (19), the two languages do not exhibit differences in active participles. Caponigro and Schütze (2003) conclude that the contrast in (16) and (17) must depend on the distinct behaviour of passive participles in PE and Italian. Given these observations, they postulate a schema for representing the different behaviours of participles in these two languages.

(20) $[_{IP}[_{FP}$ F $[_{VoiceP}$ Voice $[_{Agr_oP}$ **DP$_i$** Agr_O $[_{VP}[_V$] $t_i]]]]]$



(Caponigro and Schütze (2003: 294))

In order to account for these behaviours, they propose that the participle-associate DP order (17b) is derived from the associate DP-participle order like in (17a) via participle movement. Therefore, the derivation of (16) and (17) involves the obligatory raising of the Italian passive participle, rather than the DP movement in PE. This assumption is supported by the evidence offered in (21) with respect to adverbs.

(21) a. Ever since then, our invitations have no longer **always** been accepted by your parents.

b.??/*Da quella volta in poi, i nostri inviti non sono più
from that time in then the our invitations not are any-longer
sempre stati accrttati dai tuoi genitori.
always been accepted by-the your parents

(Caponigro and Schütze (2003: 296))

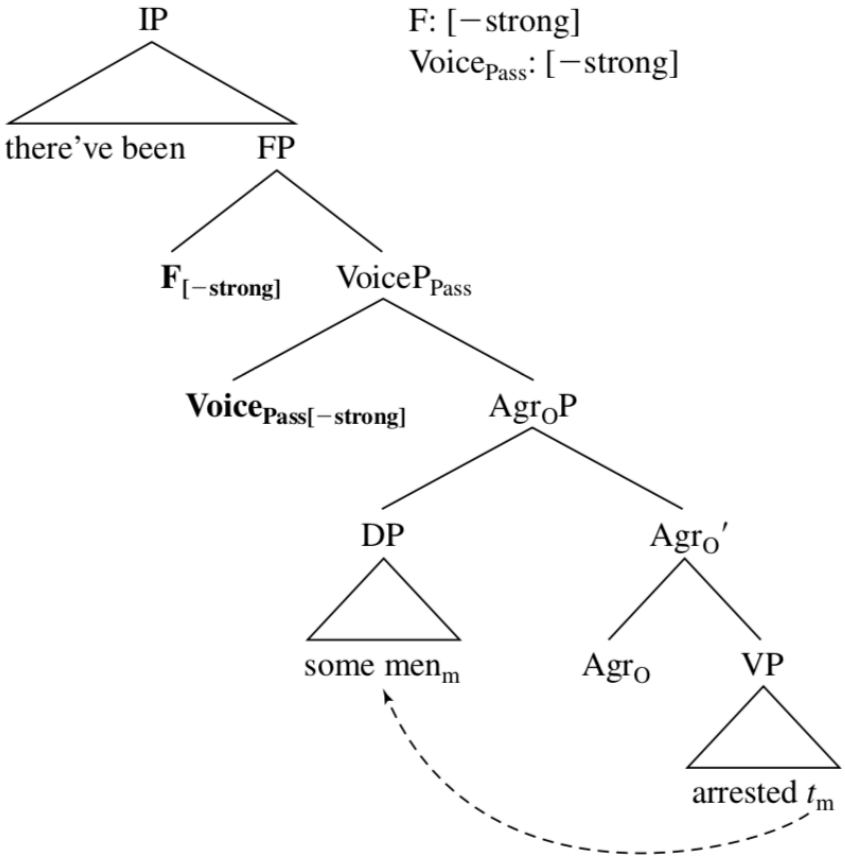
(22) a.??/* Ever since then, our invitations have no longer been **always** accepted by your parents.

b. Da quella volta in poi, i nostri invite non sono più
from that time in then the our invitations not are any-longer
stati accrttati **sempre** dai tuoi genitori.
been accepted always by-the your parents

(Caponigro and Schütze (2003: 296))

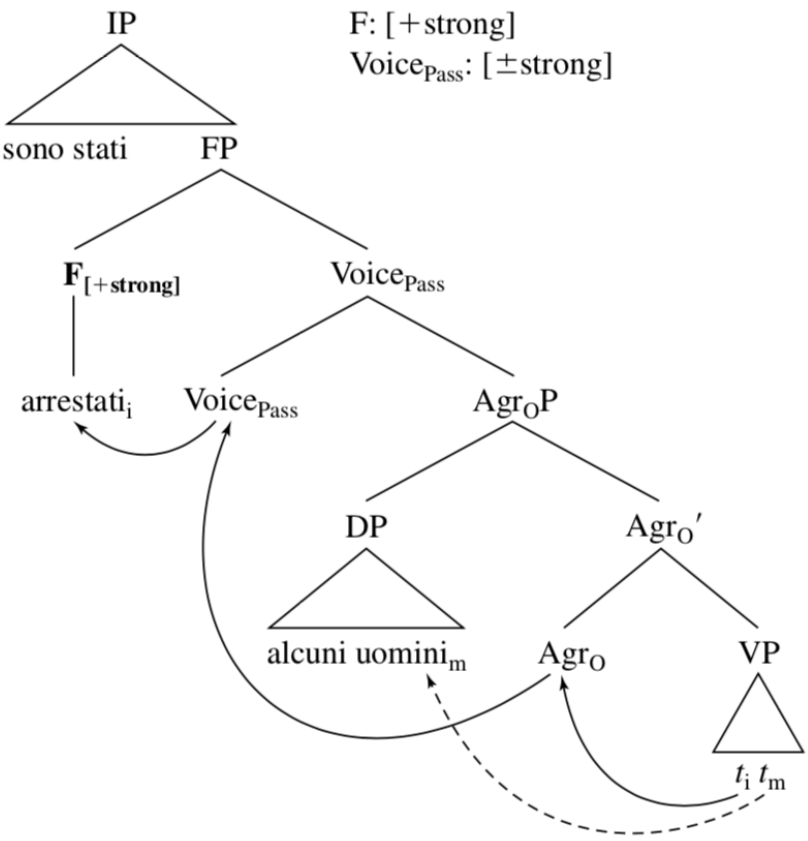
Considering that adverb positions are universal (Cinque 1999), the evidence demonstrates that Italian passive participles can raise higher than PE passive participles. In contrast with (21a) and (22a), the adverb in PE always can only precede the passive participle, whereas the Italian adverb inherently follows the passive participle, as (21b) and (22b) illustrates. This chapter follows the assumption that Italian passive participles move higher than those in PE. The derivations of the movement of passive participles are represented as follows.

(23) English passive participles (cf (16))



(Caponigro and Schütze (2003: 299))

(24) Italian passive participles (cf (17))



(Caponigro and Schütze (2003: 300))

The Italian passive participles is triggered to a higher position of by the [+strong] feature on functional head F, which is a parametric variation. Analogous to Italian passive participles, it can be presumed that OE passive participles can also raise higher than those in PE.

Moreover, as the beginning of this chapter states, past participles show overt inflections in Romance Languages, obligatorily agreeing with associate DP and finite verbs, as shown in (25).

(23) a. Le ragazze sono arrivate.
the.F.PL girls.F.PL are.PL arrived.F.PL
'The girls have arrived.'

b. Le ragazze sono state arrestate.
the.F.PL girls.F.PL are.PL been.F.PL arrested.F.PL
'The girls have been arrested.'

c. Si sono viste le ragazze.
si are.PL seen.F.PL the.F.PL girls.F.PL
'We have seen the girls./The girls have been seen.'

d. Le ragazze si sono guardate allo specchio.
the.F.PL girls.F.PL selves are.PL looked.F.PL at.the mirror
'The girls have looked at themselves in the mirror.'

e. Le abbiamo salutate.
them.F.PL we.have greeted.F.PL
'We have greeted them'. (D'Alessandro and Roberts (2008: 478))

Therefore, what triggers the participle here is the requirement of MA. Particularly, under the minimalist framework and MA, it is accepted that the passive participle bearing [*u*φ] and [*u*Case] enters into an MA relation with T and internal argument.

In the next section, the syntactic derivation of passive construction with SFQs is explored.

5.3.2. The Syntactic Derivation of Participle Movement in Old English

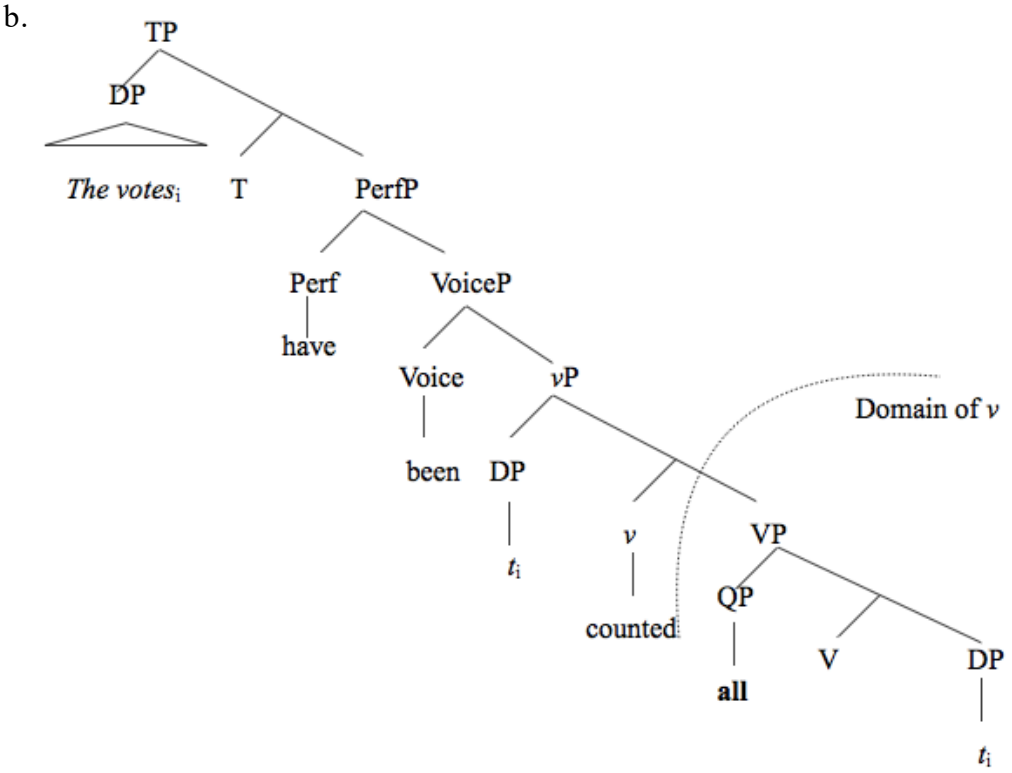
This section provides a theoretical account of the derivation of passive movement and agreement in OE. Before going on analyzing the historical data, let us review the account of SFQs in PE passive constructions. Based on the licensing Condition on FQs in (24), the syntactic structure of the ungrammatical sentence (25a) is represented in (25b).

(24) Licensing Condition on FQs

An FQ serving as a matching goal enters into an MA relation with a functional head as a probe and its host DP as another matching goal within the same phase domain.

(25) a. * *The votes* have been counted **all**.

b.



In (25), the SFQ cannot enter into an MA relation with T and the host DP, because it is in the domain of v and is not accessible to operations at the CP phase due to the PIC, violating the condition in (24). This results in a nonconvergent derivation because [uφ] and [uCase] of the SFQ are not valued.

Here the configuration advanced an extension of SFQs. The derivation of particle movement and agreement operation in OE with respect to SFQs is proposed in (26).

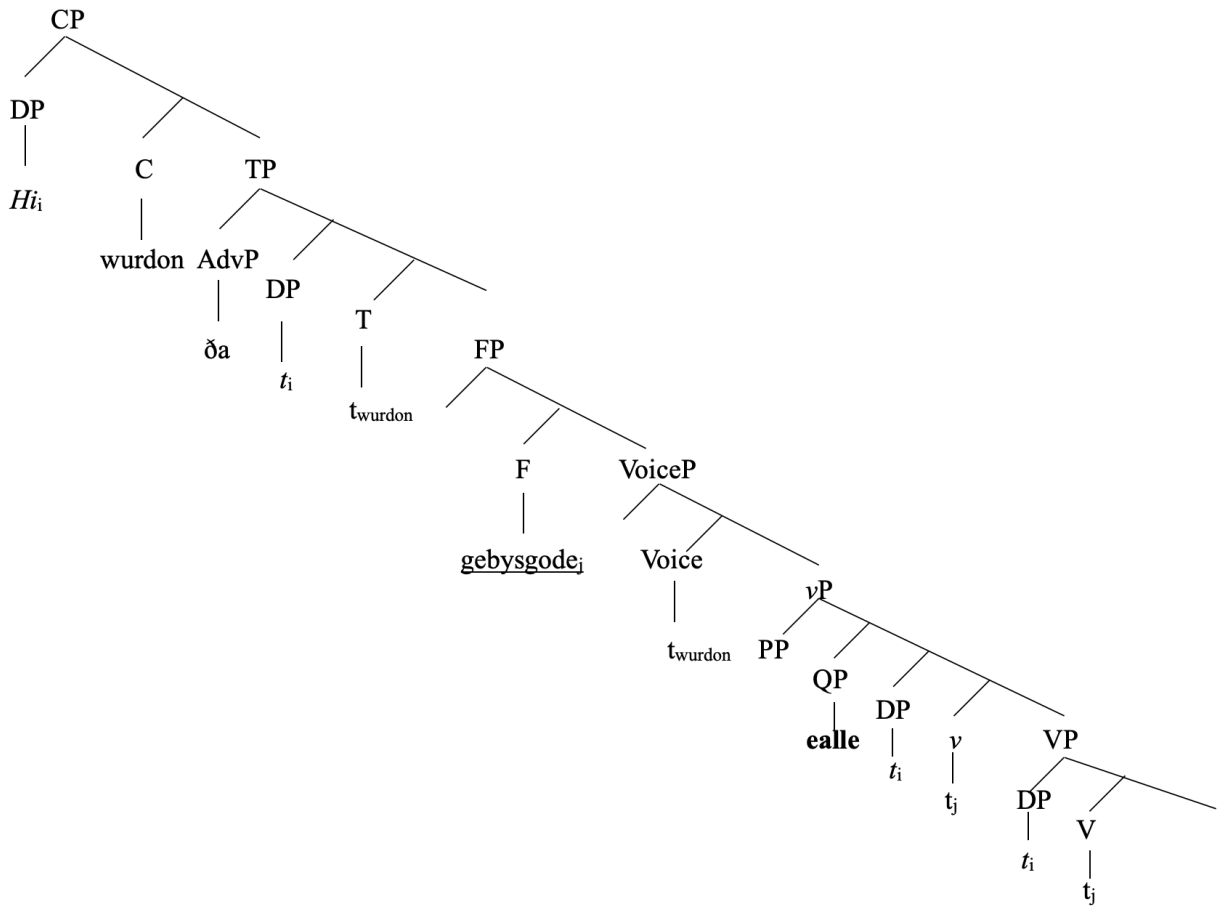
(26) An OE participle bearing [*u*φ] and [*u*Case] can enter into an MA relation with the probe T, the subject DP, and the SFQ with in the same phase

domain.

Moreover, this chapter adopts Caponigro and Schütze's (2003) analysis to account for the derivation of participle movement and agreement in OE with a slight refinement by using the latest terminology in generative grammar. It argues that a functional head F bearing [EPP] which can trigger the movement of the participle. As a result, Thus, the derivation of (2b), repeated here as (27a), is represented as (27b).

(27) a. *Hi* wurdon ða gebysgode on heora gebedum **ealle**,
They were then engaged in their prayer all
'Then they were all engaged in their prayer'
(coaelive, ÆLS_[Sebastian]:350.1421)

b.



In (27b), the functional head F severs as a probe and enters in to a MA relation with the participle moved to *v*, the subject moved to Spec-*v*P, and the SFQ adjoined to *v*P. Then, the participle moves to F by the [EPP] on F; the subject moves to Spec-TP and eventually to the CP domain. As a result, the surface word order in (27) is correctly derived.

5.4. Conclusion

This chapter has employed an investigation on the distribution of SFQs in passive constructions in the history of English and provided a theoretical account

of participle movement in OE. It has argued that the loss of participle movement in LModE is due to the loss of V-movement.

Chapter 6

Concluding Remarks

This thesis has investigated both synchronic and diachronic aspects of Floating Quantifiers in English, within the recent framework of the Minimalist Program.

Chapter 1 introduces the theoretical background of this thesis and discusses the two main approaches that adopted. First, it considers Phase Theory in which the syntactic derivation of a sentence is built in units of phases and the domains of phase heads are cyclically transferred to the phonological and semantic components. Next, it reviews the MA operation, in which a probe can search more than one goal to check relevant features within the same phase domain.

Chapter 2 has provided an alternative analysis of FQs in PE. Given the cross-linguistic empirical evidence, this thesis has followed the Adverbial Analysis which proposes that FQs are anaphoric adverbial elements and applies Chomsky′s (2008) reformulation of Binding Condition A to FQs. Adopting MA presented by Hiraiwa (2001, 2005), this thesis has posited that FQs must be bound and enter into an MA relation with associated DP and the head of a

predicate phrase within phase domain. Given these assumptions, this chapter has provided theoretical accounts for the distribution of SFQs and OFQs.

Chapter 3 has examined the development of SFQs in the history of English. It has focused on the development of verbs concerning SFQs according to quantitative data predicated on an exploration of the historical corpora. It has argued that the loss of V-SFQ word order can be attributed to the loss of verb movement. Under the licensing condition proposed in chapter 2, this chapter has accounted for the syntactic derivation of examples with V-SFQ word order.

Chapter 4 has discussed the development of OFQs in the history of English. It has investigated the distribution of OFQs concerning two types of objects by employing the historical corpora. It has argued that the loss of OFQs related to full-DP objects and the loss of OE type of OFQs related to object pronouns are due to the loss of object movement. Similarly, it has maintained that the advent of PE type of OFQs in terms of object pronouns is affected by the emergence of object shift in LME. Under the licensing condition of proposed in Chapter 2, the syntactic derivation of examples with OFQs has been outlined.

Chapter 5 has explored the development of FQs in passive constructions throughout the history of English. It has focused on the development of participle movement and agreement in connection with FQs, which is not possible in PE. Based on the quantitative data derived from the historical corpora, this chapter has contended that the loss of participle movement can be related to the loss of V-movement, which caused the BE auxiliary to stay with *v*P,

leaving no room for the participle to move. Under the licensing condition of proposed in Chapter 2, the syntactic derivation of FQs in passive constructions has been delineated.

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