International Journal of Linguistics, Literature and Translation
ISSN: 2617-0299 (Online); ISSN: 2708-0099 (Print)
DOI: 10.32996/ijllt
Journal Homepage: www.al-kindipublisher.com/index.php/ijllt

IJLLT
AL-KINDI CENTER FOR RESEARCH AND DEVELOPMENT

| RESEARCH ARTICLE

From Object Movement to Object Shift: The Development of Object-oriented Floating Quantifiers with Full DPs and Pronouns in the History of English

Siyang Xia
Assistant Professor, BA in International Studies, Nagoya University of Commerce & Business, Nisshin, Japan
Corresponding Author: Siyang Xia, **E-mail**: siyang_xia@nucba.ac.jp

| ABSTRACT
This study investigates the historical development of Object-oriented Floating Quantifiers (OFQs) in English from Old English to Present-day English, focusing on their distribution with full-DP objects and pronouns. Through a comprehensive corpus analysis, we demonstrate that while Old English exhibited multiple word order patterns for OFQs with both types of objects, similar to other Germanic languages, Present-day English shows a restricted distribution where OFQs can only follow object pronouns. The investigation reveals that OFQs with full-DP objects were lost during the Middle English period, coinciding with the change from OV to VO word order. In contrast, OFQs with object pronouns developed a new pattern through the emergence of Object Shift in Late Middle English and Early Modern English. Working within the minimalist framework, we argue that these changes can be explained through a licensing condition requiring an FQ to enter into a Multiple Agree relation with a functional head and its host DP within the same phase domain. This analysis accounts for both the loss of certain OFQ patterns and the emergence of new ones, demonstrating how changes in core syntactic properties can lead to systematic transformations in grammar.

| KEYWORDS
Object-oriented floating quantifiers, historical syntax, minimalist framework, object shift, corpora analysis

| ARTICLE INFORMATION

ACCEPTED: 01 January 2025 **PUBLISHED:** 09 January 2025 **DOI:** 10.32996/ijllt.2025.8.1.3

1. Introduction

In Present-day English (PE) transitive constructions, Object-oriented Floating Quantifiers (OFQs) exhibit an interesting distributional pattern: they can follow object pronouns but not full-DP objects. This contrast is illustrated by the following examples:

(1) a. * John saw *the men* **all.**
b. I called *them* **all**.

This distributional pattern differs significantly from other Germanic languages, where OFQs can associate with full-DP objects in transitive constructions. For example, German permits constructions like the following:

(2) Der Lehrer hat *den Schülern* **allen** eine Fünf gegeben.
the teacher has the students all an F given
'The teacher has given all the students an F'

In such cases, the quantifier "allen" ("all") is syntactically associated with the full-DP object "den Schülern" ("the students"), a construction that is ungrammatical in PE. This cross-linguistic variation raises important questions about the syntactic licensing and distribution of OFQs.

Historically, Old English (OE) exhibited syntactic behavior resembling modern West Germanic languages, as full-DP objects were compatible with OFQs. For instance, OE examples show quantifiers following objects in both transitive and intransitive

constructions, which suggests that earlier stages of English allowed a wider distribution of OFQs compared to PE. This historical flexibility aligns with the hypothesis that object movement and cliticization played a significant role in the licensing of OFQs in OE and Middle English (ME). Additionally, the flexibility in word order in OE, such as the OV (Object-Verb) order, allowed a syntactic environment conducive to OFQs. The transition to a more rigid VO (Verb-Object) order in Middle English, traditionally dated to around 1200, significantly altered these patterns. This change coincided with the decline of cliticization and object movement, which are crucial for understanding the historical loss of certain OFQ patterns.

The diachronic development of OFQs in English is therefore of great theoretical interest, as it sheds light on the interaction between syntax and morphology in the evolution of English. This paper aims to explore the diachronic changes in OFQs within English, focusing on the impact of syntactic phenomena such as object movement and the loss of cliticization. By examining historical corpora, this study traces the trajectory of OFQs from OE to Early Modern English and considers how these changes inform our understanding of the minimalist framework.

The paper is structured as follows: Section 2 reviews the development of object types, Section 3 examines historical corpora data on OFQs, and Section 4 provides a theoretical account under minimalist assumptions.

2. Theoretical Background

The theoretical foundation for understanding OFQs in the history of English draws on several interconnected aspects of syntactic theory. In Present-day English, OFQs demonstrate a distinctive pattern where they can follow object pronouns but are prohibited from following full-DP objects. This asymmetry, notably absent in other Germanic languages (as shown in (2)), provides a crucial starting point for theoretical investigation. According to Giusti (1990), this difference stems from the object movement available in German, where objects can move while leaving their associated quantifiers in base position.

The syntax of Old English shares significant commonalities with modern West Germanic languages, particularly regarding object movement patterns. This connection becomes especially relevant when considering the broader historical context of English word order development. The transition from OV to VO order, traditionally dated to around 1200 (Kemenade 1987), represents a fundamental change in English syntax. However, research by Wurff (1999) has demonstrated that surface OV order persisted into Late Middle English, suggesting a more complex developmental trajectory than previously assumed.

Object pronouns present another crucial theoretical dimension, exhibiting distinct behavioral patterns throughout English history. Kemenade (1987) identifies various positions for object pronouns in Old English, including positions immediately left of the verb and at the left periphery of v*P. The ability of object pronouns to function as clitics, allowing them to appear to the left of functional heads such as T or C, gradually diminished during Early Middle English before disappearing entirely by the 1400s. This development coincides with significant changes in English syntax, particularly the emergence of new patterns of Object Shift.

The behavior of object pronouns in Late Middle English and Early Modern English, as documented by Wallenberg (2008) and Miyashita (2013), shows remarkable similarities to Icelandic weak pronouns. This parallel suggests the emergence of Object Shift, a phenomenon still observable in modern Scandinavian languages. Following Tanaka (2015, 2017), we adopt a cartographic approach to the left periphery of the v*P domain, particularly for analyzing object movement in Old English. This framework, which posits a hierarchy of functional categories including Focus and Topic projections, provides a comprehensive theoretical basis for understanding both the historical distribution of OFQs and their subsequent development.

Within the minimalist program, our analysis synthesizes these various theoretical strands, incorporating insights about object movement, pronoun behavior, and phrase structure. This integrated approach allows us to account for both the loss of certain OFQ patterns and the emergence of new ones throughout English history. By considering the interaction between object movement, cliticization, and the development of Object Shift, we can better understand the complex trajectory of OFQ development from Old English to the present day.

3. Methodology

This study employs a comprehensive corpus-based approach to investigate the historical development of Object-oriented Floating Quantifiers in English. The primary data sources consist of four major historical corpora: *the York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE), *the Penn-Helsinki Parsed Corpus of Middle English 2nd edition* (PPCME2), *the Penn-Helsinki Parsed Corpus of Early Modern English* (PPCEME), and *the Penn Parsed Corpus of Modern British English 2nd edition* (PPCMBE2). These corpora were selected for their extensive coverage of different historical periods and their detailed syntactic annotation, which allows for precise identification of quantifier constructions and their associated objects.

To ensure systematic analysis, we examined the distribution of OFQs with respect to two distinct types of objects: full-DP objects and object pronouns. For full-DP objects, we analyzed all instances where quantifiers appeared in potential floating positions, paying particular attention to four possible word order patterns: OVQ (Object-Verb-Quantifier), OQV (Object-Quantifier-Verb), VOQ (Verb-Object-Quantifier), and QVO (Quantifier-Verb-Object). The investigation spanned multiple periods, including Early Old English (EOE), Late Old English (LOE), Early Middle English (EME), Late Middle English (LME), and the Early Modern English periods (E1, E2, E3).

For object pronouns, our analysis focused on three primary word order patterns: OVQ, OQV, and VOQ. We carefully distinguished between cases where quantifiers formed constituents with pronouns and instances of genuine floating quantification. This

distinction was particularly crucial for Old and Middle English data, where the relationship between pronouns and quantifiers differed from that in Present-day English.

The data extraction process involved several steps. First, we identified all instances of the quantifier 'all' and its historical variants (eall, alle, etc.) in the corpora. We then filtered these instances to isolate cases where the quantifier was associated with an object rather than a subject. Each instance was coded for multiple variables, including the type of object (full-DP vs. pronoun), word order pattern, clause type (main vs. subordinate), and syntactic environment (presence of auxiliaries, negation, or other relevant elements).

Particular attention was paid to transitional periods, especially the gradual loss of OV order during the Middle English period and the emergence of new patterns of Object Shift in Late Middle English and Early Modern English. We supplemented the quantitative analysis with detailed examination of individual examples, considering factors such as information structure, the presence of other elements in the clause, and the broader syntactic context.

This methodological approach allows us to track both the frequency and the nature of changes in OFQ distribution across time, providing a solid empirical foundation for our theoretical analysis of the development of floating quantification in English.

4. Results and Discussion

The investigation of OFQs through the history of English reveals significant patterns of syntactic change, particularly in their distribution and structural characteristics. This section presents our findings concerning both full-DP objects and object pronouns, beginning with a detailed examination of the former.[1]

4.1 Full-DP Objects

Our corpus analysis reveals a clear trajectory in the development of OFQs with full-DP objects from Old English to Present-day English. The distribution patterns demonstrate both quantitative and qualitative changes across different historical periods. Table 1 presents the frequency distribution of various word order patterns involving OFQs and full-DP objects.

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

The data reveals several significant patterns. In Old English, four distinct word order patterns were attested: OVQ (Object-Verb-Quantifier), OQV (Object-Quantifier-Verb), VOQ (Verb-Object-Quantifier), and QVO (Quantifier-Verb-Object). Among these, the OQV order was predominant, accounting for more than half of the attestations in both Early Old English (56.3%) and Late Old English (54.1%). This preference aligns with the general OV characteristics of Old English syntax. Examples for each order in OE are illustrated in (3-6).

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

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

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

(6) QVO order:
Ic sceall eac **ealle** forlætan *þa* þe of Perseo & of Cathma gesæde syndon
I shall also all permit those that of Perseus and of Cadmus said are
'I must also pass over all things that are said about Perseus and Cadmus' (coorosiu,Or_1:8.28.1.540)

During the Early Middle English period, we observe a significant shift in these patterns. The number of attested configurations reduced to just two - OQV and VOQ - with VOQ becoming the dominant pattern (62.5%). This shift corresponds to the broader change from OV to VO word order in the history of English. The complete absence of QVO patterns in EME represents a structural simplification in the syntax of floating quantifiers.

A particularly striking finding is the complete loss of all OFQ patterns with full-DP objects by the Late Middle English period. This development cannot be attributed to mere chance or data limitations, as it represents a systematic change in English syntax. The timing of this loss correlates with the completion of the change from OV to VO order, suggesting a fundamental restructuring of object syntax during this period.

The syntactic environments where these word orders appeared also provide valuable insights. VOQ patterns were predominantly found in main clauses exhibiting V2 characteristics, while OQV orders were more common in subordinate clauses and coordination structures with head-final characteristics. This distribution suggests that the position of floating quantifiers was closely tied to broader syntactic patterns in the clause structure.

4.2 Object Pronouns

The development of OFQs with object pronouns presents a more complex trajectory than that of full-DP objects, revealing distinct patterns of change across different historical periods. Our investigation, based on data from YCOE, PPCME2, PPCEME, and PPCMBE2, demonstrates both the persistence of certain patterns and the emergence of new configurations.

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

The distribution patterns reveal three primary word order configurations in Old English: OVQ, OQV, and VOQ. A detailed examination of these patterns shows that the OVQ order was particularly prominent in main clauses exhibiting V2 characteristics. For instance, in the Old English example (3), the object pronoun 'hig' appears to the immediate left of the finite verb 'lædde', consistent with clitic behavior.

(8) OVQ order:
Moyses *hig* lædde þa þurh Godes mihte **ealle** ofer ða Readan Sæ
Moses them led then through God's might all over the Red Sea
'Moses then led them all through the power of God over the Red Sea.' (colsigewZ, ÆLet_4_[SigeweardZ]:340.113)

Examples for OQV order and VOQ order in OE are illustrated in (9-10).

(9) OQV order:
Ða he *hig* hæfde **ealle** amyrrede þa wearð mycel hunger on þam rice
When he them had all wasted then became great hunger in the country
'When he had wasted them all, a great hunger then came over the country.' (cowsgosp,Lk_[WSCp]:15.14.4898)

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

The frequency data shows an interesting development through the Middle English period. While the OVQ and VOQ patterns persisted into Early Middle English, the OQV order, which had been relatively common in Late Old English (34.6%), disappeared entirely. This loss coincides with the general decline of OV word order in English, suggesting a systematic relationship between basic word order and quantifier floating patterns.
A particularly significant development emerges in the Early Modern English period, where we observe a new type of VOQ order. This pattern shows distinct characteristics from its Old English counterpart, as evidenced by examining the frequency data across Early Modern English and Late Modern English periods:

Table 3. Frequency of Modern VOQ Order (per 100,000 words)

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

The frequency of this new VOQ pattern increased sharply from E1 to E2 (3.9 to 7.5 instances per 100,000 words) and remained productive through E3, before showing a gradual decline in the Late Modern period. This pattern differs from the earlier VOQ configurations in its syntactic properties, particularly in the relationship between the pronoun and the quantifier.
The emergence of this new pattern correlates with the development of Object Shift in Late Middle English and Early Modern English. According to Miyashita (2013), weak pronoun Object Shift began to appear in the latter half of the 14th century and continued to be productive until the latter half of the 17th century. This timing aligns remarkably well with our observed frequency patterns for the new VOQ order.
These changes in OFQ patterns with object pronouns reflect a deeper reorganization of English syntax, particularly in terms of how object pronouns interact with quantifiers and how they behave in the clausal structure. The persistence of quantifier floating with pronouns in Modern English, in contrast to its loss with full-DP objects, suggests that pronouns maintain certain syntactic properties that allow them to participate in floating quantifier constructions.

4.3 Theoretical Implications

The observed patterns in the historical development of Object-oriented Floating Quantifiers provide significant insights into the nature of syntactic change and the relationship between different grammatical phenomena. Following Xia (2017), we adopt a licensing condition for FQs within the minimalist framework, which states that an FQ serving as a matching goal must enter into an MA (Multiple Agree) relation with a functional head as a probe and its host DP as another matching goal within the same phase domain. This licensing condition builds upon Chomsky's (2008) reformulation of Binding Condition A and Hiraiwa's (2005) theory of Multiple Agree, integrating insights about the adverbial and anaphoric properties of FQs.

(11) 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.

To illustrate how this condition operates, consider the contrast between Present-day English and Old English examples:

(12) a. * John saw *the men* **all**. (Present-day English)

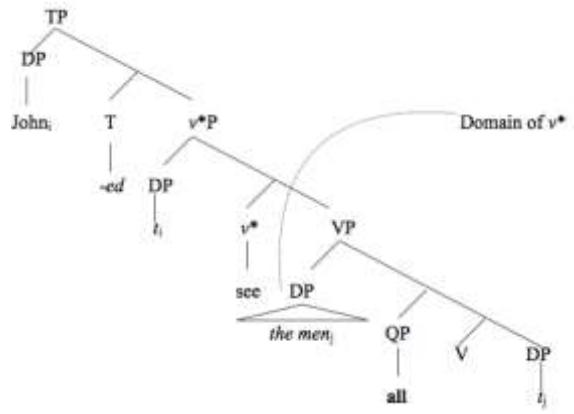
b.

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, completely unclothed.'
(coaelive,ÆLS[Forty_Soldiers]:145.2568)

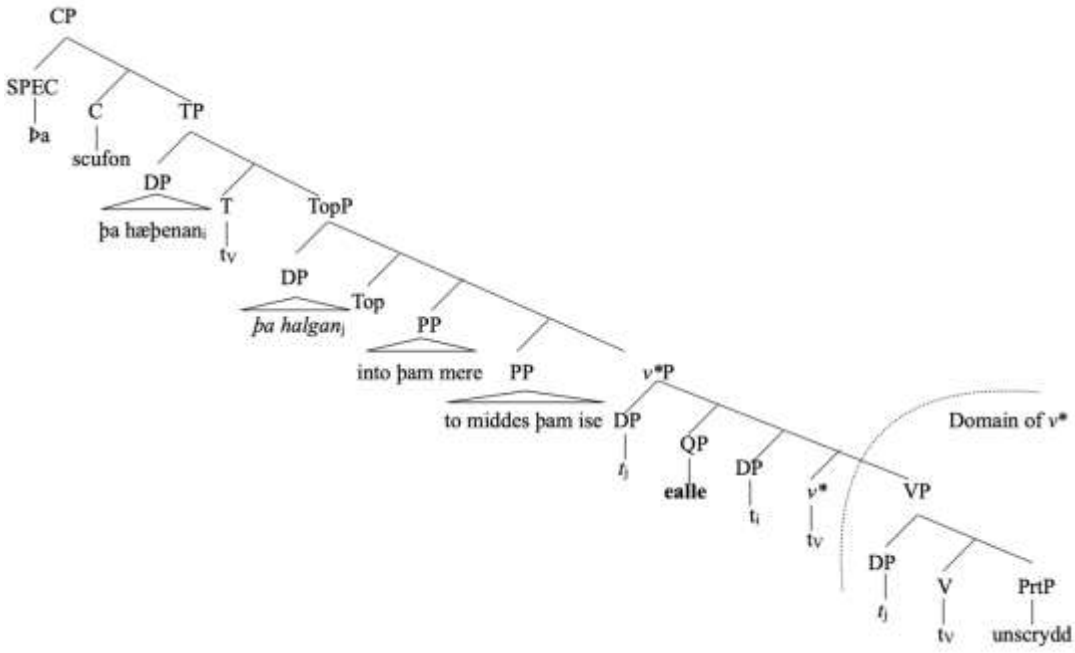
The ungrammaticality of (12a) in Present-day English follows from the inability of the FQ to enter into an MA relation with both the functional head and its host DP within the same phase domain, as illustrated in (13):

(13)



In contrast, the grammaticality of the Old English example (12b) can be explained by the availability of object movement to the left periphery of vP, which creates the necessary configuration for the licensing condition to be satisfied. The structure would be as in (14):

(14)



Under this theoretical framework, the functional head serves as a probe that can simultaneously agree with both the FQ and its host DP, provided they are within the same phase domain as defined by the Phase Impenetrability Condition (Chomsky 2000). This approach successfully accounts for the historical development of OFQs in English, particularly concerning the loss of certain patterns and the emergence of others.

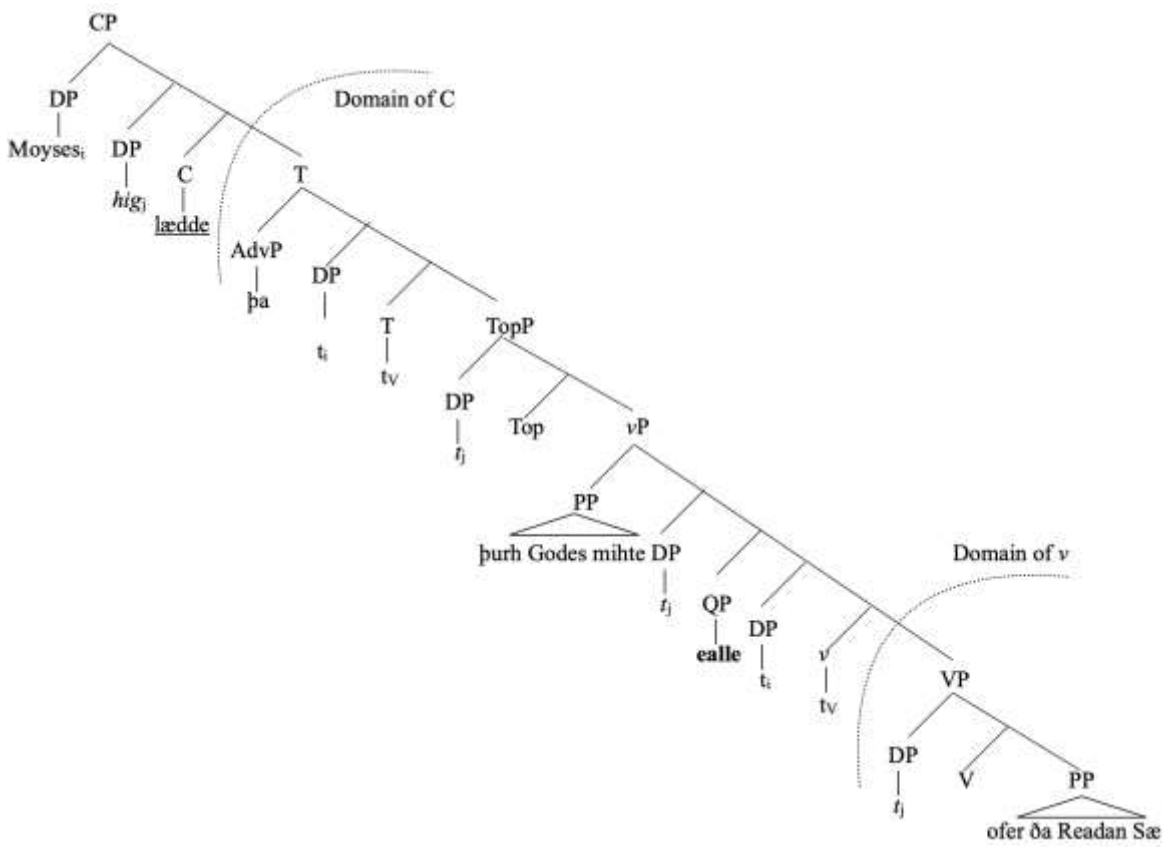
The loss of OFQs with full-DP objects during the Middle English period can be directly linked to the loss of object movement. In Old English, positive objects could move to the left periphery of the v*P domain, specifically to Spec-TopP, allowing quantifiers to be stranded in various positions. The cartographic structure of the v*P domain, with its hierarchy of functional projections including Topic and Focus positions, provided multiple landing sites for moved objects and their associated quantifiers. This movement created the necessary configuration for the licensing condition to be satisfied - the functional head could serve as a probe for both the moved object and its quantifier within the same phase domain. However, as object movement was lost, this structural configuration became unavailable, making it impossible for OFQs to satisfy the licensing condition. Without the possibility of object movement, there was no position where a quantifier could be properly licensed while maintaining an MA relation with both its host DP and an appropriate functional head.

The development of OFQs with object pronouns presents a particularly interesting case that illuminates the relationship between Object Shift and quantifier floating. In Old English, object pronouns could act as clitics, allowing them to appear in various positions relative to the verb and quantifier. These pronouns could undergo cliticization to functional heads such as T or C, creating configurations that allowed for quantifier floating. Consider the following example from Old English:

(8) OVQ order:
Moyses *hig* lædde þa þurh Godes mihte **ealle** ofer ða Readan Sæ
Moses them led then through God's might all over the Red Sea
'Moses then led them all through the power of God over the Red Sea.' (colsigewZ, ÆLet_4_[SigeweardZ]:340.113)

The structure for such cases involved clitic movement through the left periphery of the v*P domain:

(15)

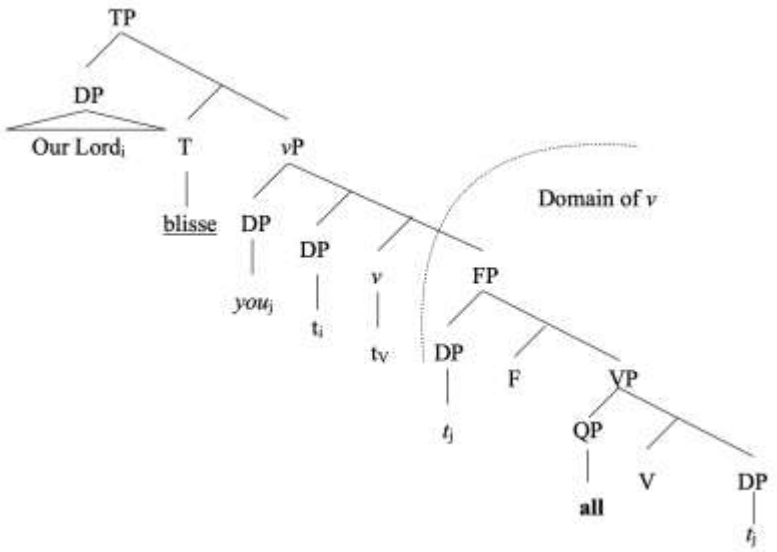


During Middle English, as the clitic status of object pronouns was lost, this pattern disappeared. However, a new configuration emerged in Late Middle English and Early Modern English, where object pronouns began to exhibit behavior similar to Scandinavian Object Shift. This is evidenced in examples like:

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

Following Chomsky's (2001) analysis of Scandinavian Object Shift, we can understand this development as involving movement triggered by an EPP feature on v. The new pattern of OFQs with pronouns emerges as a consequence of this syntactic innovation, with pronouns moving to Spec-v*P and creating a configuration where floating quantifiers can be properly licensed, as illustrated in (17):

(17)



This new structural configuration allowed object pronouns to satisfy the licensing condition on FQs in a novel way. The probe v, bearing an EPP feature, establishes an MA relation with both the pronoun and the quantifier within its phase domain. This analysis accounts for both the frequency patterns we observed - the sharp increase in VOQ order from E1 to E2 (3.9 to 7.5 instances per 100,000 words) - and the structural properties of these constructions.

The timing of this development is particularly significant, as it correlates directly with what Miyashita (2013) identifies as the period of productive weak pronoun Object Shift, from the latter half of the 14th century through the latter half of the 17th century. This synchronization suggests that the licensing of pronominal OFQs in Modern English developed as a consequence of the emergence of Object Shift, providing an elegant explanation for why floating quantifiers remain possible with pronouns even as they were lost with full DPs.

The contrasting fate of OFQs with full-DP objects and pronouns in Modern English thus reflects fundamental differences in the syntactic properties of these two types of objects. While full-DP objects lost the ability to undergo the movement necessary for quantifier floating, pronouns retained and developed new movement possibilities through Object Shift. This theoretical account explains not only the historical development of OFQs but also their current distribution in Present-day English.

These findings have broader implications for our understanding of syntactic change. They demonstrate how changes in one area of grammar (object movement, pronoun cliticization) can have cascading effects on other syntactic phenomena (quantifier floating). Moreover, they show how new syntactic possibilities (Object Shift) can emerge to license constructions that were previously licensed through different mechanisms, leading to the preservation of certain patterns despite significant changes in the underlying grammar.

5. Conclusion

This study has investigated the historical development of Object-oriented Floating Quantifiers in English, revealing significant patterns of syntactic change from Old English to Present-day English. Through a detailed corpus analysis using YCOE, PPCME2, and PPCEME, we have demonstrated that the distribution of OFQs underwent systematic changes that reflect deeper transformations in English syntax.

Our investigation has revealed that OFQs with full-DP objects were productive in Old English, appearing in four distinct word order patterns: OVQ, OQV, VOQ, and QVO. However, these patterns were gradually lost during the Middle English period, coinciding with the broader change from OV to VO word order. Working within the framework of the minimalist program and adopting the licensing condition proposed by Xia (2017), we have shown that this loss can be attributed to the disappearance of object movement to the left periphery of the vP domain. The development of OFQs with object pronouns presents a more complex trajectory. While early patterns involving pronoun cliticization were lost, a new configuration emerged in Late Middle English and Early Modern English through the development of Object Shift. The frequency data from our corpus analysis demonstrates a sharp increase in the new VOQ pattern during the Early Modern English period, particularly from E1 to E2 (3.9 to 7.5 instances per 100,000 words). This timing correlates significantly with the period of productive weak pronoun Object Shift identified by Miyashita (2013).

The contrasting development of OFQs with full-DP objects and pronouns provides important insights into the nature of syntactic change. While full-DP objects lost their ability to undergo the movement necessary for quantifier floating, pronouns developed new movement possibilities through Object Shift, leading to the preservation of floating quantifier constructions with pronouns in Present-day English. This asymmetry between full DPs and pronouns reflects fundamental differences in their syntactic properties and demonstrates how new syntactic mechanisms can emerge to license constructions previously licensed through different means.

These findings contribute to our broader understanding of historical syntax by demonstrating how changes in one area of grammar can trigger cascading effects in other domains. The loss of general object movement led to the disappearance of certain OFQ patterns, while the emergence of Object Shift provided a new mechanism for licensing OFQs with pronouns. This interconnected nature of syntactic change suggests that seemingly isolated developments may be part of larger systematic transformations in the grammar.

Future research could extend this investigation in several directions. First, a more detailed examination of the transitional periods, particularly the emergence of Object Shift, could provide additional insights into the mechanisms of syntactic change. Second, comparative studies with other Germanic languages might help clarify why English developed its particular restrictions on OFQs while related languages retained greater flexibility. Finally, the relationship between information structure and OFQ licensing could be explored more fully, potentially revealing additional factors in the historical development of these constructions.

Funding: This research was funded by the JSPS *Kakenhi* Grant, grant number 24K16097.
Conflicts of Interest: The author declares no conflict of interest.
ORCID iD : https://orcid.org/0009-0005-6523-5032
Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

[1] Chomsky, Noam (2000) "Minimalist Inquiries: The Framework," *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik,* ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89–155, MIT Press, Cambridge, MA.
[2] Chomsky, Noam (2001) "Derivation by Phase," *Ken Hale: A Life in Language,* ed. by Michael Kenstowicz, 1–52, MIT Press, Cambridge, MA. [https://doi.org/10.7551/mitpress/4056.003.0004]
[3] Chomsky, Noam (2008) "On Phases," *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud,* ed. by Robert Freidin, Carlos P. Otero and Maria Luisa Zubizarreta, 133–166, MIT Press, Cambridge, MA. [https://doi.org/10.7551/mitpress/9780262062787.003.0007]
[4] Giusti, Giuliana (1990) "Floating Quantifiers, Scrambling, and Configurationality," *Linguistic Inquiry* 21, 633–641. [https://www.jstor.org/stable/4178698]
[5] Hiraiwa, Ken (2005) *Dimensions of Symmetry in Syntax: Agreement and Clausal Architecture*, Doctoral dissertation, MIT. [https://dspace.mit.edu/handle/1721.1/28921]
[6] Kemenade, Ans van (1987) *Syntactic Case and Morphological Case in the History of English*, Foris, Dordrecht. [https://doi.org/10.1515/9783110882308]
[7] Miyashita, Harumasa (2013) *Historical Change in the Formal Licensing Conditions of Personal Pronominal Objects in English: A View from Intra-Syntactically Driven Language Change*, Doctoral dissertation, University of Tokyo. [https://repository.dl.itc.u-tokyo.ac.jp/records/39143]
[8] Tanaka, Tomoyuki (2015) "Koeigo niokeru Mokutekigoido to Hidarishuenbu (Object Movement and Left Periphery in Old English)," *Nagoya Daigaku Bungakubu Kenkyu Ronshu* 61, 71–88.
[9] Tanaka, Tomoyuki (2017) "Object Movement and Left Periphery in the History of English," *JELS* 34, 193–199.
[10] Wallenberg, Joel C. (2008) "English Weak Pronouns and Object Shift," *Proceedings of the 26th West Coast Conference on Formal Linguistic*s, 489–497, Cascadilla Press West Coast Conference on Formal Linguistics, University of California, Berkeley. [https://www.lingref.com/cpp/wccfl/26/paper1706.pdf]
[11] Wurff, Wim van der (1999) "Objects and Verbs in Modern Icelandic and Fifteenth Century English," *Lingua* 109, 237–265.[https://doi.org/10.1016/S0024-3841(99)00026-1]
[12] Xia, Siyang (2017) "A Syntactic Analysis of Floating Quantifiers in English," *IVY* 50, 27–52. [https://nagoya.repo.nii.ac.jp/records/28166]

Corpus

[13] Kroch, Anthony and Ann Taylor (2000) *The Penn–Helsinki Parsed Corpus of Middle English 2nd Edition.*
[14] Kroch, Anthony, Beatrice Santorini, and Ariel Diertani (2016) *The Penn Parsed Corpus of Modern British English 2nd edition*.
[15] Kroch, Anthony, Beatrice Santorini, and Lauren Delfs (2004) *The Penn–Helsinki Parsed Corpus of Early Modern English.*
[16] Taylor, Ann, Anthony Warner, Susan Pintzuk, and Frank Beths (2003) *The York–Toronto–Helsinki Parsed Corpus of Old English Prose.*