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**VALENCY PATTERNS AND ALTERNATIONS IN OLD
AND MIDDLE ENGLISH**

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“Lange sceal leornian se ðe læran sceal”

Ælfric, 1st Letter to Wulfstan

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Introduction

Motivations, aims and structure of the present study

This dissertation aims to describe valency patterns and alternations in the earliest stages of English, as a part of the *Pavia Verb Database* (PaVeDa) project, bringing new evidence to the discussion on basic valency orientation in the history of English. The present work originates from the will of the PaVeDa team to add a diachronic perspective to the study of valency patterns, allowing not only cross-linguistic, synchronic but also intra-linguistic, diachronic comparison.

The need to add historical stages of English to the database firstly originates from the presence of Present-Day English data on valency patterns and alternations in the *Valency Patterns Leipzig Online Database* (ValPaL), on which the PaVeDa project is based. This allows to see if particular patterns and alternations were already present in the earlier stages of the language and, if not, when they developed. On the other hand, it allows to see the loss or substitution of other patterns, which were regular in Early English but have disappeared in its development.

Moreover, the addition of such data, as well as of other ancient Indo-European languages (both Germanic and non-Germanic) allows a comparative and reconstructive perspective. Indeed, the addition of Old and Middle English adds up to data of Gothic (Zanchi & Tarsi 2021), Old High German and Old Norse, which can be the basis of future studies on Proto-Germanic valency patterns and alternations.¹ This sums up to the addition of data of Old Latin (Giuliani 2021), Ancient Greek (Inglese & Zanchi 2022), Old Irish (Roma & Zanchi 2025), Middle Welsh, Sanskrit, Avestan, Classical Armenian, Hittite and Old Lithuanian.

Differently from other languages, for which only one historical stage is represented in the PaVeDa database (e.g. for German, only Old and not Middle High German), both Old and Middle English are included. This choice depends on the profound changes that the English language has undergone throughout the Middle Ages. Indeed, given the typological shift of English (from a more synthetic to a more analytic language), case loss, and the massive French influence, one may expect data from Old English to align more to other (ancient) Germanic languages, and data from Middle

¹ Germanic languages were already well represented in the ValPaL database: data on Present-Day English, German and Icelandic were already present. Within the PaVeDa project, Swedish data is also being added.

English to be more similar to Present-Day English. However, I will show in this dissertation that, when considering valency patterns and alternation, Middle English tends to align more to Old English than to Present-Day English.

The present work is structured as follows. After this **introduction**, followed by a brief description of previous studies on the topic of Historical English valency patterns and alternation in the next section, **chapter 1** will deal with the theoretical framework and the methodology. After some terminological remarks on the terms “valency” and “argument structure”, I will describe the constructionist approach to argument structure, underlying this work. I will then describe the ValPaL and PaVeDa projects, to which this work aims to contribute, and I will end the chapter with a brief description of the corpora used to retrieve data, pointing to the difficulties of using non-lemmatised resources. **Chapter 2** concerns Old English and it begins with an introductory section (2.1) on the language and texts. Here I introduce the genealogical affiliation, the chronological span and the dialectal differences of Old English, and then I continue to the discussion of the text sample I chose as reference corpus, ending the section with the description of the Old English basic sentence structure. The next section (2.2) deals with the selection of verbs as translational equivalents of ValPaL/PaVeDa meanings, taking in particular consideration the criteria for ancient languages used consistently by the PaVeDa contributors. Old English valency patterns are described in order of increasing argument slots, starting with the zerovalent verbs, and ending with three-place verbs, in section 2.3. The notion of transitivity is central in this discussion, where I also calculate the transitivity prominence of Old English. The analysis of experiential verbs in these sections is also crucial, particularly considering their link with non-canonical subject constructions. Finally, Section 2.4 presents Old English valency alternations: first I discuss those involving a direct case alternating with a prepositional phrase, i.e. the conative alternation, the dative alternation, the instrument to subject and to object alternations, the partitive alternation, the to-resultative alternation and the topic-about alternation. After these, I discuss other uncoded alternations, i.e. those alternations that are not explicitly marked on the verb, namely the benefactive and malefactive alternations, alternations involving a body part, the insertion of cognate or kindred arguments, the insertion and the omission of generic objects, and the reflexive and reciprocal alternations. I conclude the chapter with the coded alternation, i.e. those marked on the verb, discussing the applicative alternation, the causal/non-causal alternation, the passive and the indefinite pronoun *man*. It has to be noted, however, that even though I discuss the applicative and the causal/non-causal among coded alternations, examples of uncoded applicatives and labile verbs are found and discussed. Middle English data is presented and discussed in **chapter 3**, which

mirrors the structure of chapter 3: it begins, in section 3.1, with a description of the historical facts, which influenced the usage of the English language in Medieval England after 1066. Then I describe the chronological span and dialectal differences of Middle English. After this, I discuss the texts included in the reference sample and present the basic sentence structure of Middle English. Section 3.2 focuses on choosing the Middle English verbs that serve as translational equivalents for ValPaL/PaVeDa meanings, with special attention to the criteria consistently applied by PaVeDa contributors for ancient languages, with a particular attention to continuity of attestation throughout the history of English. In section 3.3, Middle English valency patterns are detailed in order of increasing argument slots, beginning with zerovalent verbs and concluding with three-place verbs. As for Old English, the transitivity prominence of Middle English is calculated and the link between non-canonical subjects and experiential verbs discussed, showing the development of nominative experiencer in Middle English. The chapter ends with section 3.4, in which I present Middle English valency alternations. Initially, I examine those involving a direct case alternating with a prepositional phrase, such as the conative alternation, the dative alternation, the instrument-to-subject and instrument-to-object alternations, the partitive alternation, the into-resultative alternation, and the topic-about alternation. Following this, I examine other uncoded alternations, which are not explicitly marked on the verb. These include the benefactive and malefactive alternations, alternations involving a body part, the insertion of cognate or kindred arguments, the insertion and omission of generic objects, and the reflexive and reciprocal alternations. The section concludes with coded alternations, which are marked on the verb. These include the causal/non-causal alternation, the passive, and the indefinite pronoun *man/me*, which is gradually lost during the Middle English period. This dissertation ends with the **conclusions**, which summarize my findings and suggest further paths of investigation in the field of valency in the history of English.

The study of valency in English Historical Linguistics

The study of verbal valency has long been a well-established field in linguistics, consistently attracting renewed scholarly attention. As a topic of shared interest across various theoretical frameworks, it greatly benefits from insights in syntax, semantics, and typology. Indo-European studies are well-acquainted with this topic. This research area is closely linked to typologically oriented approaches to transitivity phenomena, such as studies on valency classes, valency alternations, and basic valency orientation (see, for example, Nichols et al. 2004; Malchukov & Comrie 2015; Hellan et al. 2017). Basic valency has been explored in many Indo-European languages, including Sanskrit (Kulikov 2009), Hittite (Luraghi 2012), Latin (Inglese 2021) and Homeric Greek

(Sausa 2016). Notable studies on Germanic include research on single languages, such as on Gothic (Zanchi & Tarsi 2021, Tarsi & Zanchi 2025) or Old Norse (Cennamo et al. 2015), but also in a comparative and reconstructive perspective (Ottósson 2013, on Gothic, Old Norse, Old High German and Old English; Plank & Lahiri 2015, on Proto-Germanic). Moreover, many studies on specific phenomena have been carried on: in the field of Old Germanic languages, for example, much work has been done on the so-called oblique subjects (cf. among others, Bucci & Barðdal 2024; Barðdal 2023), and on the ditransitive construction (e.g. Vázquez-González & Barðdal 2019; Zehentner et al. 2023; Barðdal 2007).

Numerous studies have focused on different aspects of valency in Old English. For instance, Van Gelderen (2011), working within a generative theoretical framework, analyses the basic valency pattern throughout the history of English, with a particular emphasis on the Old English period. Notably, her research concentrates on the causal vs. non-causal alternation and labile verbs. García García (2020) also pays special attention to causatives: despite the importance of these aspects in the analysis of valency pattern and the significant role of the causal vs. non-causal alternation, no comprehensive study on valency classes in Old English has been conducted. Other studies examine argument structure and valency patterns in Old English, focusing on specific verb classes (e.g., perception verbs in Klein 1998), or specific valency alternations (e.g., passive in Vezzosi 1998 or labile verbs in Ruiz Narbona 2018). Concerning specific verbal classes, speech verbs have been investigated by Goossens (1985), whereas the different patient-marking of verbs of tasting in Old English has been analysed by Ogura (2008). Moreover, a significant work has been carried out by the research group in the University of La Rioja. Within the framework of Role-Reference Grammar (RRG, Van Valin & LaPolla 1997), the group has investigated verbs of depriving (Lacalle Palacios 2022, 2024), verbs of increasing (Lacalle Palacios 2021a), verbs of learning (Lacalle Palacios 2021b), end verbs (Ojanguren López 2020), verbs of prohibition (Ojanguren López 2019a), verbs of action (Ojanguren López 2019b), verbs of inaction (Ojanguren López 2018), verbs of envy (Vea Escarza 2020) verbs of be sorry and grieve (Vea Escarza 2019), verbs of honour and reverence (Vea Escarza 2018) and verbs of perception (Vea Escarza 2017). Furthermore, they also investigated semantic primes (Mateo Mendaza 2021, 2020, 2016a, 2016b, 2013) and the *Aktionsart* and lexical entailment of strong verbs (Fidalgo Allo 2022).

Moreover, the link between case marking and valency patterns has been largely investigated, for example, by de Cuyper (2015), Middeke (2022), and Vázquez-González (2024). The so-called “impersonal verbs”, i.e. those verbs with a non-nominative subject (cf. section 2.3.2.2 and 2.3.3.3)

have been widely investigated in the literature, starting with the reference work of Cynthia Allen (1995), but also Pocheptsov (1997), Möhlig-Falke (2012) and Myura (2015). Specific investigations on single alternations are also widely present in the literature, for instance the so-called “dative alternation” has been the subject of many works, among which the more recent and comprehensive are De Cuypere (2015b), Zehentner (2018, 2019) or Zehentner & Traugott (2020). The link between the “dative alternation” and the “benefactive alternation” is also the topic of Traugott’s (2020) and Broccias & Torre’s (2020) studies, the latter of which investigates processes of attraction between the two constructions. Object insertions (both cognate and non-cognate) and omissions have been investigated in Lavidas (2014). The domain of passive voice has been analysed, among others, by Vezzosi (1998), but also by Petré (2010), on the functions and loss of the auxiliary *weorðan*, or Petré & Cuyckens (2008), together with the various studies on the usage and loss of the indefinite pronoun *man* (e.g. Rissanen 1987, 1997; Los 2002 and van Bergen 2003). Also, the domain of co-referentiality has been studied by van Gelderen (2000), Sinar (2006) and Pielecha (2014), while Vezzosi (2015) extensively described the expression of reciprocity. However, I have not found any study focusing on the link between passive-middle voice and reflexive, well known in other languages (cf. Kemmer 1993). Given the extremely higher number of labile verbs in English today, compared to other Germanic and non-Germanic languages, the rise and development of lability has also a big topic of discussion among scholars. Thus, starting from the reference works of Royster (1998) and McMillion (2006), the causal/non-causal alternation has also been studied in the more recent works of García García & Ruiz Narbona (2021) on Old English, Ingham (2020) and García García & Ingham (2023) on the influence of Old French (specifically Anglo-Norman) on the development of labile verbs in Middle English, and García García (2023) on the link between word order and lability.

Chapter 1. Theoretical framework and methodology

This chapter presents an overview of the fundamental terminology and theoretical framework at the basis of this study, i.e. Construction Grammar (Fillmore & Kay 1993; Lakoff 1987; Brugmann 1988). Section 2.1 deals with the concepts of valency and argument structure, while section 2.2 focuses on the core principles of constructionist approaches, drawing on Goldberg's (1995, 2006) research on argument structure. In this chapter, I will then describe the *Valency Patterns Leipzig Project* (henceforth ValPaL, Hartmann et al. 2013; Malchukov & Comrie 2015) and *Pavia Verb Database* (henceforth PaVeDa, Zanchi et al. 2022; Luraghi et al. 2024), underlying the methodology of this work (section 1.3), and I will conclude, in section 1.4, with a discussion of the corpora used for data retrieval, namely *The York-Toronto-Helsinki Parsed Corpus of Old English Prose* (henceforth YCOE, Taylor et al. 2003), *The York-Helsinki Parsed Corpus of Old English Poetry* (henceforth YCOEP, Pintzuk & Plug 2002), the *Penn-Helsinki Parsed Corpus of Middle English, second edition* (henceforth PPCME2, Kroch & Taylor 2000), and *The Parsed Corpus of Middle English Poetry* (henceforth PCMEP, Zimmermann 2014).

1.1. Valency and argument structure

In the literature, the term “valency pattern” is sometimes used interchangeably with “argument structure” (e.g., Malchukov 2015) and refers to a set of argument positions taken by verbs along with their grammatical properties. However, the meanings of “valency” and “argument structure” do not completely overlap.

The concept of valency was first introduced by Tesnière (1959) within the framework of Dependency Grammar. It defines the number of *actants*, or obligatory complements, which are necessary to complete the verb meaning, which represents a *procès*, or event. In other words, “valency” refers to the number of arguments a verb requires to form fully grammatical sentences. The term is borrowed from chemistry, where verbs are likened to atoms that can combine with other atoms. Thus, the valency of a verb is the number of arguments it can combine with, making it a specific property of a given lexical item, i.e., a particular verb. Consequently, the information conveyed by valency structures is idiosyncratic and word-specific (Herbst & Gotz-Votteler 2007: 15).

While the term “valency” is borrowed from chemistry, the label “argument” originates from mathematics, specifically logic (Ježek 2016: 113). In linguistics, “argument” is the technical term

used to denote syntactic elements that obligatorily combine with the verb. The obligatoriness of arguments theoretically distinguishes them from “adjuncts,” also known as “adverbials” or “circumstantials.” Adjuncts are additional complements that can combine with the verb, but their absence does not affect the grammaticality of the sentence; for this reason, they are considered optional. Consider, for example, the sentence in (1):

- (1) & *he* *eorre* *þone* *cyning*
 and 3SG.NOM.M angry.NOM.SG.M DET.ACC.SG.M king(M).ACC.SG
liggende *gehran* *mid* *þære* *gyrde*
 lay.PTCP.PRS touch.IND.PRET.3SG with DET.DAT.SG.F staff(F).DAT.SG
 “[Then the bishop dismounted also at the same time,] and in his anger touched the king, as he lay, with the rod [he had in his hand;]” (cobede,Bede_3:16.228.18.2345)

The verb *hrinan* ‘touch’ has two arguments, i.e. the performer performing the action of touching (*he eorre* ‘he angry’) and the person or thing being touched (here *þone cyning liggende* ‘the king laying’), whereas the constituent *mid þære gyrde* ‘with the staff’ is conceived as an adjunct, which specifies the instrument with which the event of touching is performed. Since it takes two arguments, *hrinan* ‘touch’ is considered a “two-place verb” or with the near-synonym a “bivalent verb”. The former terminology will be used in the present work. Together with manner, adjuncts typically convey information about time and space of the event denoted by the verb (Luraghi 2010). However, the distinction between arguments and adjuncts is not always easy to define. Following the ValPaL methodology (Malchukov 2015: 91), I will occasionally discuss adjuncts frequently recurring with certain verbs in sections 2.3 and 3.3, even though the present work is focused on arguments.

The term “argument structure” (Grimshaw 1990) typically refers to the number of arguments associated with a lexical item, their syntactic expression, and their semantic relationship to the item. Levin & Rappaport Hovav (2005) define “argument realization” as the study of the possible syntactic expressions of arguments. In this work, I will use the term “argument coding” to describe aspects of argument realization. Additionally, some verbs can exhibit alternating expressions of their arguments, which can be referred to as “argument alternation.” This term encompasses alternations in the coding patterns of arguments, such as case-marking or adpositions, as well as changes in their number, such as argument addition or omission. Levin & Rappaport Hovav (2005)

1. Theoretical framework and methodology

define argument alternation as “multiple argument realization.” However, in this work, I will use the term “valency alternation,” in line with the ValPaL project (Malchukov & Comrie 2015). In the next section (1.2.), I will briefly outline the theoretical framework underlying this work, namely Construction Grammar (e.g., Goldberg 1995; Kay & Fillmore 1999). However, it must be mentioned that verb valency, argument structure, and alternation have been examined also within other theoretical frameworks (e.g., Apresjan 1969; Dixon 1991; Levin 1993; Levin & Rappaport Hovav 2005; Van Valin & LaPolla 1997), addressing their syntactic, semantic, and cognitive aspects.

1.2. Construction Grammar

In this paragraph, I will provide a brief overview of the theoretical framework underlying this work, namely Construction Grammar (Fillmore & Kay 1993; Lakoff 1987; Brugmann 1988). First, I will introduce the fundamental principles of this approach, and then I will focus on how it deals with argument structure (Goldberg 1995; 2006).

The term “Construction Grammar” refers to the cognitive linguistic approach to syntax (Croft & Cruse 2004). A fundamental principle of Construction Grammar is that “constructions” (i.e., correspondences between form and meaning) are the basic units of language. Consequently, all linguistic knowledge is represented as form-meaning pairings, or constructions, in the speaker’s mind (Croft & Cruse 2004: 255). These constructions form a structured inventory, typically represented as a taxonomic network of constructions (Croft & Cruse 2004: 262). However, the term “Construction Grammar” encompasses several different versions, such as Cognitive Construction Grammar (Lakoff 1987; Goldberg 1995, 2006), Sign-Based Construction Grammar (Boas & Sang 2012), Radical Construction Grammar (Croft 2001, Barðdal 2006), Embodied Construction Grammar (Bergen & Cang 2013), and Fluid Construction Grammar (Steels 2011, 2012). Goldberg (2013: 15-16) outlines several features that are common to various forms of construction grammar, distinguishing them from mainstream generative approaches to the structure of human language:

- a. Language, from lexical items to phrasal constructions, is a system of interconnected, conventionalized form-meaning pairings.
- b. There are no operations (e.g. merge or move) transforming one structure into another.
- c. Language is a conceptual network where inheritance and extension links connect one constructional node to another.

- d. Language is a dynamic phenomenon; similarities across languages can be explained either by the properties of the constructions themselves or by “domain-general cognitive processes” (Goldberg 2013: 16).

The fundamental principle of Construction Grammar is that a construction represents a pairing of form and meaning or form and function, with symbolic connections between the form and its meaning (Langacker 1987, 1991, 2008). Consequently, a construction is considered a “sign” in the sense of Saussure, symbolizing a unit that corresponds to form-function or form-meaning, as depicted in Figure 1 (Croft & Cruse 2004: 258).

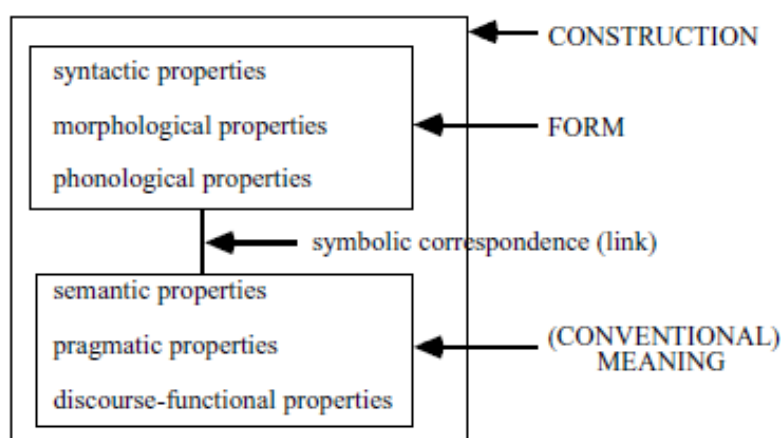


Figure 1: The symbolic structure of a construction (Croft & Cruse 2004: 258)

Constructions are on a continuum on two dimensions: (a) from atomic units, such as morphemes and words, to complex units, such as phrases and idioms;¹ and (b) from substantive to schematic. Fully substantive constructions are idioms where no lexically open element is present and all grammatical categories are specified (e.g., *It takes one to know one*, where any different verb inflection would be unacceptable). Conversely, schematic constructions are fixed except for grammatical inflectional categories (e.g., *kick the bucket*, where the verb can be inflected differently). Schematic constructions can contain more than one lexically open element; in fully schematic constructions, every element is lexically open. Examples of fully schematic constructions include the passive construction (e.g. *Janet was promoted by the company*) and the resultative construction (e.g. *the river froze solid*). An implication of this viewpoint is the assumption of a syntax-lexicon continuum (Croft & Cruse 2004: 155-156), meaning that there is no clear-cut

¹ Idioms are defined as grammatical units larger than a word which are idiosyncratic in some respect. (Croft & Cruse 2004: 230).

1. Theoretical framework and methodology

division between lexicon and syntax. Table 1 provides a summary of constructions that differ in their level of abstractness (substantive vs. schematic constructions) and complexity (atomic vs. complex).

CONSTRUCTION TYPE	EXAMPLE
Complex and (mostly) schematic	Passive (e.g. <i>Janet was promoted by the company</i>); Resultative (e.g. <i>the river froze solid</i>)
Complex and (partially) schematic	Idiom (e.g. <i>kick the bucket</i>)
Complex and (fully) schematic	Idiom (e.g. <i>it takes one to know one</i>)
Atomic and schematic	Morphemes (e.g. <i>-ed</i> past tense of weak verbs)
Atomic and substantive	Word (e.g. <i>that, red, bag</i>)

Table 1: The syntax-lexicon continuum (adapted from Croft & Cruse 2004: 255)

Goldberg (1995, 2006) presents a constructionist approach to argument structure, and defines a construction as a form-meaning pairing where some element is not entirely predictable from its parts or other constructions (Goldberg 2006: 5). She argues that “basic sentence structure can be understood to involve constructions, that is, the verb can be conceived as combining with an argument structure construction” (Goldberg 2006: 6). Goldberg (1995) challenges projectionist approaches like Levin’s (1993), where the verb determines its argument structure, and the concept of valency is developed. Instead, Goldberg argues that the argument structure construction is stored in the speaker’s mind as an independent form-meaning pair. This construction exists separately from specific verbs and thus carries meaning independently of the lexical items that instantiate them. Consider what Goldberg (1995: 75, 141): calls “ditransitive construction”, in example (2):

(2) Ditransitive

Form: Subj V Obj Obj2

Meaning: X causes Y to receive Z

Examples: a. Joe gave Sally the ball.
 b. Sally baked her sister a cake.

This construction represents a transfer scenario involving three arguments. It can be paraphrased as “X causes Y to receive Z”, where X is the subject (Subj), Y is the indirect object (Obj), and Z is the direct object (Obj2) of the clause. Goldberg (1995: 5) directly links argument structures to semantic structures, which are fundamental scenes familiar to human experience. For example, these

semantic structures include the intentional transfer of something to someone (known as the “ditransitive construction”) or an individual causing something to move or change state (referred to as the “caused-motion construction”, as illustrated in example (3) below). This concept reminds of Fillmore’s (1992) “frame semantics”, which defines “semantic frames” as cognitive structures activated by specific lexical items. These frames include the lexical items that evoke them and the participants involved, termed “frame elements”, which are identified by their semantic roles. Returning to Goldberg’s work (1995: 28), she argues that “the mapping between syntax and semantics is achieved through constructions rather than lexical entries”. According to Goldberg (2006: 21), a verb, along with its inherent meaning and associated arguments, is integrated with the predicate and the arguments of the construction. Lexically, a verb determines the obligatory highlighted aspects of the frame semantics. These lexically highlighted roles are the participants in the frame semantics associated with that verb; they are necessarily accessed and serve as focal points within the scene, achieving a notable degree of prominence (Goldberg 2006: 44). In addition to lexical items, constructions specify which argument roles (slots in the argument structure) are highlighted. The roles that are highlighted are those expressed as grammatical relations. Argument roles are named according to traditional semantic role names. For instance, the ditransitive construction in example (2) highlights the roles of agent (X), patient (Z), and recipient (Y). In sentence (a), the verb *gave* profiles these same three participants, indicating the successful transfer of an inanimate entity from a volitional animate agent to a willing animate recipient. Thus, the three argument roles of the ditransitive construction are integrated with the verb’s participant roles, which exist independently.

However, Goldberg (2006: 21) notes that “an argument role of the construction might be contributed by the construction without a corresponding role existing as part of the inherent verbal meaning”. This means that the corresponding participant role of the verb does not necessarily need to exist. An example of this is sentence (b) in example (2), where the recipient participant is not inherently provided by the semantics of *bake*, but rather by the ditransitive construction. Therefore, Goldberg (1995: 141) argues that systematic differences in the meanings of the same verbs in different constructions should be attributed directly to the construction itself. Goldberg (1995: 40-43) also uses the prototype theory², borrowed from Cognitive Linguistics, to explain the polysemy of argument constructions. Consequently, an argument structure construction is linked to several related senses (basic human experiences), ranging from the most prototypical to less prototypical

² The standard references for the prototype theory are the work of Rosch on colours (Ježek 2016: 62).

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ones. Referring back to the ditransitive construction in example (2), the prototypical sense associated with this semantic structure is best illustrated by the verb *give* in sentence (a). Its meaning aligns with the construction's semantics (Goldberg 1995: 33), representing a successful transfer between a volitional agent and a willing recipient. Conversely, the verb *bake* in sentence (b) exemplifies an extension of the basic sense through various metaphors (see Goldberg 1995: 141-151 for more details).

Though Construction Grammar differs in some respects from projectionist approaches, it appears to be compatible with studies on argument structure and valency classes carried on with these approaches (e.g. Jackendoff 1990; Levin & Rappaport Hovav 2005). A key point of divergence between the two approaches is the realization of arguments. The projectionist perspective views argument realization as dependent on the syntactic projection of idiosyncratic, inherent, and structural aspects of verbal meanings, which form the basis of event structure (Levin & Rappaport Hovav 2005: 189-194). In contrast, Construction Grammar considers argument realization to be determined by the syntactic construction in which the verb appears. Consequently, projectionists regard argument alternations as “by-products of verbal polysemy: a verb with multiple meanings would be expected to have multiple argument realizations” (Levin & Rappaport Hovav 2005: 189). In Construction Grammar, argument alternations occur when a verb is compatible with multiple constructions. For instance, in the “dative alternation” (refer to sections 2.4.1.2 and 3.4.1.2 for this alternation in Old and Middle English), two constructions are possible: the double object variant (DOC, “double object construction”), which is a subtype of the “ditransitive construction” as shown in example (2), and the variant with the preposition *to* (POC, “prepositional object construction”), which exemplifies the “caused-motion construction” (Goldberg 1995: 152-153; Levin & Rappaport Hovav 2005: 191), as illustrated in example (3).

(3) Caused-motion construction

Form: Subj V Obj Obl

Meaning: X causes Y to move to Z

Examples: a. John sent a book to New York.
 b. John sent a book to Mary.

This construction depicts a scene involving three arguments. It can be paraphrased as “X causes Y to move to Z”, where X is the subject (Subj), Y is the indirect object (Obj), and Z is the oblique object (Obl) of the clause. The basic meaning of this construction is illustrated in sentence (a). In

contrast, sentence (b) represents a change-of-possession meaning of the ditransitive construction, which is associated with the *to*-variant. This stems from the metaphor of “transfer of ownership as a physical transfer”, allowing the caused-motion construction to encode the change-of-possession (Goldberg 1995: 89-90). Despite their differences, the projectionist and constructivist views on argument structure are reconciled in Perek’s (2015) usage-based valency theory. However, also Goldberg (2006: 38) acknowledges the importance of verb meaning within a constructionist approach, particularly in instances of constructional ambiguity, where it is necessary to consider the specific verb class. The compatibility of the two views is also supported by Levin & Rappaport Hovav (2005: 192-194) and contributors to the ValPaL project. For example, Malchukov (2015: 74) argues that the possible interpretations of a verb, as manifested in different constructions, largely depend on the verb’s “core” meaning.

As with most linguistic theories, Construction Grammar was initially created to model the linguistic knowledge of speakers synchronically, rather than as a theory of language change. It emerged as a response to mainstream generative linguistics in the USA during the 1980s and 1990s and shares certain features with other cognitive theories of language. More recently, the question has emerged regarding what exactly a “diachronic version” of Construction Grammar would entail. This approach, known as Diachronic Construction Grammar, examines how constructions and their meanings evolve over time (Barðdal et al 2015). From a diachronic point of view, constructions may change a) their meaning; b) their form or c) the mapping between form and meaning (Barðdal & Gildea 2015: 14-16). When constructions change their meaning, there may be changes in the lexical semantics of specific words or changes in the propositional semantics, i.e. the “semantics of the whole” (Barðdal & Gildea 2015: 14). In the former case, the change affects one of the symbolic subunits of the construction, generally not affecting the meaning of the construction as much. On the other hand, when changes in the propositional semantics occur, “the most likely outcome is that a new construction arises out of the old one, usually because the meaning has changed from being compositionally derivable to becoming unpredictable from the sum of its parts” (Barðdal & Gildea 2015: 14). When constructions change their forms, they can involve various types of changes, such as morphological, phonological, and syntactic changes, e.g the morphological deflection of Germanic (Barðdal 2009). Lastly, changes in the mapping between form and meaning - or in Croft’s (2000) terms “reanalysis” - can involve three different paths (Barðdal & Gildea 2015: 14-16): first, changes in meaning create polysemy, causing a change in the mapping between form and meaning. In the early stages of these changes, each form acquired a new meaning while preserving the old one, resulting in the creation of a new mapping from the same forms to the new meanings.

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Secondly, the mapping between form and meaning may be altered through simple change in use. Lastly, it is also possible to have a reanalysis of the form-meaning mapping without any change in form nor in meaning (e.g. the change from dative, genitive and instrumental objects to accusative objects in Indo-European languages, Croft 2000: 121-125). Remarkably, from a constructional perspective, clause-level constructions are form-meaning correspondences that can be inherited from earlier stages. Consequently, they can be identified as cognates and compared across daughter languages. Thus, it is also possible to reconstruct argument structure constructions for proto-stages (Barðdal & Gildea 2015: 16). In English historical linguistics, Diachronic Construction Grammar has gained more popularity, as it helps to explain patterns of change (cf. e.g. Trousdale 2016 and the literature therein), but also to analyse poetic patterns (as in Ginevra et al 2024). Particularly relevant for this study is the work of Kirsten Middeke (2022). In her book *The Old English Case System. Case and argument structure constructions*, Construction Grammar allows her “to represent the Old English morphological cases as radial or family-resemblance categories and to understand their function as structured networks, shaped by conceptual metaphor and other processes of semantic change” (Middeke 2022: 3).

Although this research is conducted within the theoretical framework of Construction Grammar, it also draws on studies from typological and projectionist approaches, which have thoroughly analyzed the lexical-aspectual and thematic constraints on argument structure and realization (e.g., Tsunoda 1981; Levin 1993). In fact, I refer to the event template structure of certain verbs when analyzing their valency classes. This concept traces back to Vendler’s (1957) *Aktionsart* theory, which categorizes verbs based on three parameters: dynamicity, duration, and telicity. Dynamicity refers to the presence or absence of change during the event; duration indicates whether the event has successive phases; and telicity denotes the presence or absence of a goal or natural endpoint. These three parameters distinguish four verb classes, which are summarised in Table 2:

1. **State verbs** (e.g., *be hungry*) are durative but lack dynamicity and telicity.
2. **Activity verbs** (e.g., *run*) are durative and dynamic but not telic.
3. **Accomplishments** (e.g., *eat*) denote events that are dynamic, durative, and telic.
4. **Achievements** (e.g., *arrive*) are dynamic and telic but lack duration (i.e., they are punctual events).

VERB CLASSES	DYNAMICITY	DURATION	TELICITY	EXAMPLES
State verbs	-	+	-	<i>own, remain</i>
Activity verbs	+	+	-	<i>walk, swim</i>
Accomplishment verbs	+	+	+	<i>fix, dine</i>
Achievement verbs	+	-	-	<i>find, arrive</i>

Table 2: Classification of verbs based on inherent temporal structure (adapted from Ježek 2016:122)

1.3. ValPaL and PaVeDa

The ValPaL project aimed to investigate cross-linguistic universals and variations concerning valency classes (Malchukov 2015: 75). It was inspired by Apresjan’s (1969) research on Russian and Levin’s (1993) work on English, which highlighted the connection between the semantic classification of verbs and their syntactic behaviour, especially regarding the possible alternations certain verbs exhibit. As a result, the project defines valency classes as groups of verbs that share similar coding patterns and argument structure alternations. Within the project, a valency alternation is defined as “a set of two different coding frames that are productively (or at least regularly) associated with both members of a set of verb pairs sharing the same verb stem” (Malchukov 2015: 91). The ValPaL online database features 80 core verb meanings, such as GO, LIVE, and EAT,³ which are considered representative of the entire lexicon. These core meanings are paired with their most suitable translational equivalents across the 36 languages included in the project. Additionally, language-specific verbal meanings have been incorporated, bringing the total number of meanings in the database to 162.⁴ For each verb meaning, its typical context, role frame, and microroles (i.e. verb-specific semantic roles) are given, as in (4):⁵

- (4) a. Verb meaning: HIT
 b. Typical context: The boy hit the snake with a stick.
 c. Role frame: A hits P (with I)
 d. Microroles: hitter, hittee, hitting instrument, hit causer, hit location

³ Small capitals are conventionally used to indicate meanings, which should not be confused with the corresponding verb form in PDE.

⁴ <https://valpal.info/parameters> (last accessed 25/11/2025).

⁵ <https://valpal.info/parameters/beat#1/29/135> (last accessed 25/11/2025).

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Additionally, for each translational equivalent of the meaning, the coding set associated with each microrole is stored in the database, along with the verb's basic valency pattern.⁶ This information is presented in the form of a sentence frame, together with alternations, generally accompanied by examples. Using the verb meaning in (4) BEAT (PDE *beat*), the following pieces of information are provided in the ValPaL database:

- (5) a. Coding frame: 1-nom > V.subj[1] > 2-acc (> with+3)
b. Microrole table:

#	Microrole	Coding set	Argument type
1	hitter	NP-nom V.subj	A
2	hittee	NP-acc	P
3	hitting instrument	with+NP	I

- c. Regular alternations: accidental reflexive; middle; accidental body-part; locus of personal contact; with/against alternation
d. Marginal alternations: conative

The (basic) coding frame in (5)-a. thus summarises the following coding properties:

- a. flagging, i.e. dependent role marking through case and/or adposition;
b. indexing, i.e. agreement or cross-referencing that marks the head;
c. word order, i.e. arrangement of case elements.⁷

This frame codes the number of arguments (1 and 2); the case marking (-nom and -acc);⁸ agreement (V.subj[1] means that the verb V agrees with the first argument) and word order (>).⁹ As word order does not always contribute to distinguishing argument types, information about it is not added in the coding patterns of every language in ValPaL (e.g. German). Although some regularities in the position of arguments may be found, Old and Middle English word order is not always consistent. For this reason, word order is not included in Old and Middle English valency patterns.

⁶ In the PaVeDa project “[i]n order to assess which coding frames are basic, we plan to give a greater weight to the frequencies of attested patterns and to implement this type of usage-based methodology for modern languages as well, linking the data on constructional patterns to existing corpora and to other machine-readable resources” (Zanchi et al. 2022: 101).

⁷ <https://valpal.info/values/stan1293-dress-1> (last accessed 25/11/2025)

⁸ In PDE, case marking refers to pronominal usage.

⁹

The more recent PaVeDa project (Zanchi et al. 2022; Luraghi et al. 2024) builds upon the ValPaL project, with the goal of expanding the database from both typological and diachronic perspectives. PaVeDa is an open-source relational database designed to investigate verb argument structure across languages. It is currently being developed at the University of Pavia and the University of Naples “Federico II”. Notably, PaVeDa includes additional features and languages compared to ValPaL. Specifically, it incorporates languages from families that are either not represented or underrepresented in the ValPaL database, as well as ancient and medieval varieties. The purpose of these additions is to create a database that facilitates the comparison of valency patterns and alternations among cognate languages. Additionally, including different stages of a language will enable diachronic generalizations. Specifically, the inclusion of Old and Middle English enables comparisons not only with other ancient Germanic languages, such as Gothic (Zanchi & Tarsi 2021), but also across the historical development of the English language. As Roma & Zanchi (2025) remind, PaVeDa’s goal is ambitious, “as it not only involves the addition of new data, but it also affects the very structure of the relational database aiming at cross-linguistic and diachronic comparison of verb frames”. Other than adding new historical and modern languages, the structure of the ValPaL database has been enhanced with a new analytical layer for alternations, categorizing each language-specific alternation into four types: “rearranging,” “decreasing,” “augmenting,” and “identifying” alternations (see also Malchukov 2015: 96). This layer represents an initial step toward the cross-linguistic comparison of alternations. Additionally, it is now possible to directly compare a verb meaning, its basic frames, and alternations in two given languages. The PaVeDa also allows users to visualize all attested alternations for a given meaning across all stored languages (e.g., there are 57 for HIT) or to select only the alternations belonging to one of the four categories mentioned above. In the future, an additional analytical layer for classifying alternations will be added. This new layer will operate at an intermediate level of granularity between language-specific alternations and the more generalized level.

However, when applying the ValPaL methodology to ancient languages, certain methodological adjustments are necessary. In the case of corpus languages like Old and Middle English, there are no native speakers available to evaluate the basicness of competing verbs chosen as potential translational counterparts for the ValPaL meanings. Therefore, the criteria first developed by Zanchi & Tarsi (2021: 36) for Gothic, with the addition of the ones elaborated by Giuliani & Zanchi (2024) on Latin, are being applied to all ancient languages in the PaVeDa project. These criteria are the following:

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1. the morphological criterion, which involves selecting the most morphologically simple verb;
2. the frequency criterion, where, if two verbs are equally simple morphologically, the most frequent verb is chosen;
3. the historical criterion, which entails selecting a verb whose diachronic evolution is of particular interest;
4. the polysemy criterion, which involves choosing the verb that is less polysemous and more closely aligns with the ValPaL/PaVeDa meaning.

Generally, the criteria are applied in the order listed above, starting with the morphological criterion and followed by the others. However, exceptions can occur, such as when the more complex verb is significantly more frequent than the simpler one. For example, for Old English, the verb chosen for the meaning COVER is *be-wreon* rather than *wreon*, as the latter is absent from my reference corpus (for other similar considerations, see sections 2.2 on Old English and 3.2 on Middle English).

1.4. Data retrieval

In order to collect the occurrences of the verbs selected as translational equivalents of the ValPaL/PaVeDa meanings, a lemmatized corpus would have made data retrieval easier and faster. However, the reference corpora of historical English are not lemmatized. For Old English, the only lemmatised resource available for Old English is the ParCorOev2 corpus (Martín Arista et al. 2021), which contained only 109,985 records at the time of data collection¹⁰ and which I had already used in my previous preliminary work (Giarda 2022). In order to expand the corpus sample for Old English, I decided to use the YCOE (Taylor et al. 2003) and YCOEP (Pintzuk & Plug 2002) corpora, i.e. two constituent treebanks belonging to the family of Penn-treebanks. They follow the same annotation schema of the Middle English treebanks, i.e. the PPCME2 (Kroch & Taylor 2000) and the PCMEP (Zimmermann 2014).

Concerning the prose corpora, the YCOE (Taylor et al. 2003) is a syntactically annotated corpus consisting of 1.5 million words.¹¹ Its substantial size and representativeness make it an invaluable

¹⁰ The current version, ParCorOev3 (Martín Arista et al. 2023), has been expanded to 303,342 records, but was unfortunately released when data collection for this project was already completed. (<https://www.nerthusproject.com/corpus-description>)

¹¹ <http://penn-historical-corpora.uni-mannheim.de/ycoe/YCOEHomepage.html> (last accessed 25/11/2025).

resource for studying Old English. However, the constituency format and the absence of certain information (such as lemmatization and some morphological features) may hinder data retrieval. The same can be said for the PPCME2 (Kroch & Taylor 2000), consisting of roughly 1.2 million words of running text in Middle English.¹² Given the size of these corpora and the high number of verbs to be investigated (i.e. the whole PaVeDa starting list of 80 meanings), it would have not been possible to manually analyse all the occurrences retrieved in the corpora. For this reason, I decide to create two sub-corpora of roughly 475.000 words each. Sampling choices are discussed in section 2.1.2 for Old English and in section 0 for Middle English. Concerning poetry, the YCOEP (Pintzuk & Plug 2002) contains only part of the Old English poetic corpus, for a total of 71.490 words, divided into 14 text-files, some of which contain a single text (e.g., *cobeowul.psd* contains only *Beowulf*), whereas others contain samples of different texts, e.g., *conorthu.psd* contains *Cædmon's Hymn*, *Bede's Death Song*, *The Leiden Riddle*, *The Dream of the Rood*, and *The Ruthwell Cross*.¹³ On the other hand, the treebank of Middle English poetry, the PCMEP (Zimmermann 2014), is bigger, including 56 Middle English poems with a total of 233.833 words.¹⁴ In order to balance Old and Middle English sub-corpora, a sub-set of the PCMEP (discussed in section 4.1.2) has been taken as reference corpus. However, it must be noted that in case a verb was not attested in the selected sub-corpora (or less than ten occurrences were found), the search has been expanded to the whole corpora. Moreover, in case dictionaries attested for some patterns or alternations which were not found in the corpora, these were added to the PaVeDa database as well.

As mentioned in the beginning of this paragraph, none of these corpora is lemmatised; however, some external lemmatisers have been developed. For example, *The Classical Language Toolkit* (Johnson et al. 2021) contains pipelines for both Old and Middle English.¹⁵ Nonetheless, these could not be used on all Penn-treebanks, as they require plain text files (.txt) as input, which is distributed only for the PPCME2, i.e. the Middle English prose corpus. In order to use these pipelines, a (time-consuming) manual removal of the annotation would have been required. Anyways, when running the pipeline on some plain Old English text, results were not satisfying.¹⁶ Data for Old English was thus retrieved using regular expressions on a CoNLL-U version of the YCOE and YCOEP, derived from the conversion table in Brigada Villa & Giarda (2023). Regular expressions were constructed on the basis of the graphical variants attested in the *Dictionary of Old*

¹² <https://www.ling.upenn.edu/histcorpora/PPCME2-RELEASE-4/> (last accessed 25/11/2025).

¹³ <https://www-users.york.ac.uk/~lang18/ptext-list.html> (last accessed 25/11/2025).

¹⁴ <https://pcmep.net/> (last accessed 25/11/2025).

¹⁵ <https://docs.cltk.org/en/latest/languages.html#english>. (last accessed 25/11/2025).

¹⁶ I tested the lemmatiser on the well-known incipit of *Beowulf*, namely lines 1-2 and the proposed lemmas were simply the words repeated without any change in morphology.

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English (diPaolo et al. 2009; for the letters A-Le) and in the *Bosworth-Toller Anglo-Saxon Dictionary Online* (Toller et al. 2014). Of course, such method implies a manual filtering of the occurrences, eliminating false hits. Consider, example the verb, *geotan* ‘pour’, for which the regular expression is “\tg[eo|y|e|ea|u|o]t.*\tVERB\t”. This has retrieved every verb starting with the prefix *ge-* followed by a *t*, thus much manual work was still needed. Concerning Middle English, a better external lemmatiser is available, namely the *Middle English Lemmatizer* (Percillier 2016; 2018; Percillier & Trips 2020), which adds a lemma tag directly to the constituent treebanks, which can then be investigated normally through the usual tool *CorpusSearch2* (Randall 2004). However, the lemmatiser tends to work better on the prose than on the poetry treebank. As it may propose several lemmas for each verbal form, a manual filtering of occurrences was still necessary. For instance, the form *beð* in *Arze we beð to don god; to ivel al to priste* ‘We are slow to do good; to do evil, all too bold’ (PoemaMorale,21.220.19) receives the lemmas *boden*, *bidden*, *beien*, *beten(x2)*, *beden*, *binden*, *ben*, only the latter being the correct one, as visible in Figure 2.

```
( (IP-MAT (LB |)) (ADJP (ADJP (ADJ Ar+ge) (IP-INF *ICH*-1)) (CONJP *ICH*-2))
(NP-SBJ (PRO we)) (VBP be+d@l=boden@m=5372@e=nonfrench@l=bidden@m=4381@e=nonfrench@l=beien@m=3945@e=nonfrench@l=beten@m=4268@e=nonfrench@l=beten@m=4269@e=nonfrench@l=beden@m=3881@e=nonfrench@l=binden@m=4667@e=nonfrench@l=ben@m=4048@e=nonfrench@w=stemming@)
(IP-INF-1 (TO to) (DO don) (NP-OB1 (ADJ god)))
(CONJP-2 (ADJP (ADVR to) (ADJ jue1) (QP (Q al)))
(IP-INF (TO to) (VB +triste@l=thresten@m=45474@e=nonfrench@w=substitution@)))
(LB |))
(ID PoemaMorale,21.220.19))
```

Figure 2: Example of lemmatisation in the PCMEP corpus

Chapter 2. Old English

2.1. Old English

2.1.1. Old English: Genealogical affiliation; time span; dialectal differences

Old English is an ancient Germanic language, belonging to the subbranch of West-Germanic, in particular to the group of the so-called Ingvaemonic languages,¹ together with Old Saxon and Old Frisian. The arrival of Germanic settlers, mainly Angles, Saxons, Jutes and Frisian, in Britain in the middle of the V century, lead to the independent development of Old English as a separate branch of West-Germanic (von Mengden 2017a: 32-33). If the geographic area in which Old English was spoken is quite easy to determine, the same is not true for chronological delimitation. Conventionally, the Early English period in the history of England is comprised between 449 CE (following Bede's *Historia ecclesiastica*, Book I, Ch. 15, cf. e.g. Bede 1997: 51) and 1066, date of the Norman Conquest of England. However, archaeological studies suggest that the Germanic settlements in Britain may have begun at least half a century earlier (Mitchell & Robinson 2012: 111), thus coinciding with the departure of Romans from Britain (409 CE). Regardless of the actual begin of the Pre-Conquest period in England, written production in Old English starts flourishing in the VIII century CE.² The Germanic tribes settled into seven independent kingdoms (the so-called Heptarchy, shown in Figure 3), which came into conflict with each other, while expanding westwards at the expense of the Celtic tribes already present on the island. These seven kingdoms were Northumbria in the North of England, Mercia in the West, East-Anglia in the East, Wessex in the South-West, Kent in the South-East and, lastly, Essex east of London (Sauer & Waxenberger 2017). However, the diachronic transmission of Old English dialects reveals marked asymmetries in attestation: Late West Saxon is the most extensively preserved variety, represented in a wide array of manuscripts and textual witnesses. In contrast, Kentish is sparsely attested, with limited surviving material. Furthermore, a significant portion of texts originally composed in Anglian dialects are extant only through their later transmission in the Late West Saxon written standard, reflecting the dialect's dominance in the manuscript tradition. (e.g. the bulk of poetry, Sauer & Waxenberger 2017:168; see also Appendix n.

¹ Note that already Maurer (1952: 42) discussed how problematic this label is. Also, Ramat (1980: 28) underlined that the term Ingvaemonic does not indicate a branch of the genealogic tree, but a later convergence process, more like a sort of *Sprachbund*.

² The earlier attestations are only brief runic inscriptions, comprehensible only to a limited extent (Francovich-Onesti 2002: 92).

2. Old English

The study of Old English dialects has mainly focused on specific problems; moreover, phonology and morphology are generally treated separately from vocabulary. As Sauer & Waxenberger (2017: 164-166) point out, some problems hinder research on Old English dialects. Firstly, there are gaps in the chronological and in the geographical distribution of attestations. Most of the texts that reached us are written in West-Saxon, however this production does not start before the IX century, with King Alfred's kingdom. In fact, the political supremacy of the different kingdoms throughout the Early English period influenced the literary production. In the VIII century, for example, the political and cultural supremacy was held by the kingdom of Northumbria, thus we find more Northumbrian texts from the earlier Old English period. A further problem is dialectal adaptation by scribes, who tended to copy texts in their own dialect, usually from Anglian originals to (later) West Saxon copies. Moreover, many texts are mixed from a dialect point of view, showing features of several dialects, which could also be due to poets' and scribes' mobility.

Old English literature constitutes one of the most substantial and culturally significant corpora among the early Germanic traditions. Broadly, it encompasses two principal strands: one deriving from the oral traditions of the Germanic tribes prior to their migration to Britain, and the other shaped by the Christian intellectual revival following the reintroduction of Christianity to southern England in the late sixth century. The resulting literary corpus shows a complex interweaving of pagan and Christian elements, which are seldom entirely disentangled. Texts of ostensibly pagan origin are frequently reframed through a Christian lens, while even overtly Christian compositions often retain vestiges of pre-Christian cosmology and ethical paradigms, revealing the enduring influence of earlier Germanic worldviews (Baugh & Cable 2013: 65).

Scholars typically identify four overlapping phases in the history of pre-Conquest England (and Old English literature), each marked by distinct developments. While this periodization is widely accepted, it remains heuristic and open to alternative interpretations (Magennis 2011: 16). Hugh Magennis (2011: 16-29) presents the following four periods:

1. Migration and after: spanning from the mid-fifth to the late seventh century, this period predates both Christianity and written Old English literature. While literary activity existed in Britain during this time, it was primarily Celtic in origin. Although no written Old English texts survive from the era, later-recorded poetic works may reflect oral traditions already in circulation.

2. The early centuries of Christian Anglo-Saxon England: the period from 597³ to the late eighth century marks the Christianization of Anglo-Saxon England. Northumbrian monasteries emerged as key intellectual centres, producing not only distinguished literary works but also exceptional artistic achievements, such as the Ruthwell Cross and the Lindisfarne Gospels. Poetically, the period appears to have been rich, though few vernacular compositions can be securely dated to it. The seventh century, associated with Cædmon, may have produced some of the extant Old English poems. Among the earliest surviving prose texts are laws, whose written recording marks a significant cultural shift from oral to textual transmission.⁴

3. Vikings and the emergence of Wessex: throughout much of the ninth century and beyond, England was preoccupied with the persistent threat and impact of Viking incursions. Only King Alfred of Wessex successfully resisted their advance, ultimately preserving his kingdom by conceding to the establishment of the Danelaw—a vast region in the north and east governed under Danish legal and administrative systems. Old English and Old Norse are believed to have been mutually intelligible (Townend 2002), allowing for a period of linguistic coexistence before Scandinavian settlers gradually adopted English. In doing so, they left a lasting imprint on the language. While this influence is only marginally reflected in Old English texts—due to the conservatism of literary conventions—it becomes markedly evident in Middle English and remains visible in Present-Day English. Despite the turbulence of the period, the later ninth century stands out as one of the most productive in the history of Old English literature, marked by the emergence and proliferation of vernacular literary prose. This development is closely associated with King Alfred, whose promotion of English as a medium for learned discourse reflected not only his commitment to education but also a deliberate valorisation of the vernacular and its role in articulating a sense of national identity. Most literary production during Alfred’s reign consisted of translations into Old English prose. A notable exception is the *Anglo-Saxon Chronicle*, an original composition whose earliest section presents a year-by-year account of Anglo-Saxon history up to 891. Maintained in multiple versions, the Chronicle continued to be updated well into the post-Conquest period, serving as a foundational work of English historiography.

³ The year 597 was when the Roman missionary Augustine and his followers first landed in Kent, sent by Pope Gregory the Great, to convert the people; Irish missionaries would arrive in Northumbria a few decades later, led by Aidan.

⁴ Notably, this shift toward textualization coincides with the Christianization of secular authority following 597; the earliest extant written laws, dating to circa 614 in Kent, exemplify this transformation.

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4. Later Anglo-Saxon England: the later tenth and eleventh centuries: the final phase of Anglo-Saxon history was remarkably productive in literary terms, particularly in the vernacular. The vast majority of surviving Old English poetry—most preserved in unique manuscript witnesses—dates from the late tenth to early eleventh century, underscoring the period’s significance for the transmission of the poetic corpus.⁵ The second half of the tenth century and beyond witnessed a notable flourishing of religious literature in Old English. This period, often referred to as the “Benedictine Reform” saw the emergence of major vernacular authors such as Ælfric—the most prolific Old English writer—and Wulfstan, archbishop of York, known for his homiletic and political writings. Alongside these prominent figures, numerous anonymous authors contributed to a vibrant and diverse literary culture.

2.1.2. Prose and poetry: Choice of corpus sample

In order to select the reference corpus, some sampling choices needed to be made. In the selection of texts, I attempted to balance date, dialectal differences, genre and theme (these latter above all compared to the Middle English sample, cf. section 4.1.2). The Old English texts selected as reference corpus are shown in Table 3. Texts used in my previous work (Giarda 2022) have not been added to this sample in order to maximise the scope of the analysis and add more data to the database. The sole exception is Boethius’ *De Consolatione Philosophiae*, which was not contained in its entirety in the corpus I used (ParCorOEv2, Martín Arista et al. 2021). However, when necessary, data from texts different from those in Table 3 have been added to the PaVeDa database. More detailed information on the date and dialect of the texts included in the sample are given in Appendix n. 1: Old English prose texts (date, dialect and genre). and Appendix 2: Old English poetry texts (date, dialect and genre)..⁶

Old English prose	Old English poetry
<ul style="list-style-type: none"> • Ælfric’s <i>Catholic Homilies I</i> <ul style="list-style-type: none"> ◦ Ælfric’s “Preface” to <i>Catholic Homilies I</i> (Word count: 1.035) 	<ul style="list-style-type: none"> • coandrea.psd. <i>Andreas</i>. (Word count: 4860)

⁵ These include the four major books containing most of Old English poetry: the Vercelli Book (Vercelli, Biblioteca Capitolare CXVII), the Exeter Book (Exeter, Cathedral Library 3501), the Junius Manuscript (Oxford, Bodleian Library, Junius 11); the “*Beowulf* Manuscript” (London, British Library, Cotton Vitellius A. xvi) (Magennis 2011: 70).

⁶ Note that texts dated before 850 are a minority of the Old English corpus (e.g. they make up only 0,5% in the Helsinki Corpus). In the YCOE only Charters and Wills can be labelled as OE1 (i.e. pre-850) texts. Despite their importance in attesting dialects other than West-Saxon, they have been excluded from the analysed corpus because of their formulaic nature.

<ul style="list-style-type: none"> ○ <i>Ælfric's Catholic Homilies I</i> (Word count: 106.173) • <i>Alcuin's De Virtutibus et Vitiis</i> (Word count: 5.549) • <i>Alexander's Letter to Aristotle</i> (Word count: 7.271) • <i>Anglo-Saxon Chronicle</i> <ul style="list-style-type: none"> ○ <i>Ms. A (Parker Chronicle)</i> (Word count: 14.583) • <i>Apollonius of Tyre</i> (Word count: 6.545) • <i>Bede's History of the English Church</i> (Word count: 80.767) • <i>Benedictine Rule</i> (Word count: 20.104) • <i>Boethius' Consolation of Philosophy</i> (Word count: 48.443) • <i>Byrhtferth's Manual</i> (Word count: 10.243) • <i>Distichs of Cato</i> (Word count: 2.180) • <i>Heptateuch</i> <ul style="list-style-type: none"> ○ <i>Genesis, Exodus, Leviticus, Numbers, Deuteronomy, Joshua, Judges</i> (Word count: 59.524) • <i>Marvels of the East</i> (Word count: 1.891) • <i>Other Saints' Lives</i> <ul style="list-style-type: none"> ○ <i>Invention of the Cross</i> (History of the Holy Rood-Tree) (Word count: 6.920) ○ <i>Saint Chad</i> (Word count: 2.659) ○ <i>Saint Christopher</i> (Word count: 1.426) 	<ul style="list-style-type: none"> • <i>cobeowul.psd. Beowulf.</i> (Word count: 17.310) • <i>cobrunan.psd. The Battle of Brunanburh.</i> (Word count: 370) • <i>cochrist.psd. Christ I-II-III.</i> (Word count: 6.130) • <i>cocynnew.psd. (1) Fates of the Apostles; (2) Elene; (3) Juliana</i> (Word count: 670 + 7310 + 4130 = 12.110). • <i>codream.psd. The Dream of the Rood.</i> (Word count: 1.100). • <i>coexeter.psd. (1) The Wanderer (2) The Seafarer; (3) Widsith; (4) Fortunes of Men; (5) Maxims I; (6) The Riming Poem; (7) The Panther; (8) The Whale; (9) The Partridge; (10) Deor (11) Wulf and Eadwacer; (12) The Wife's Lament.</i> (Word count: 690 + 770 + 850 + 550 + 1440 + 500 + 390 + 470 + 90 + 230 + 120 + 320 = 6.420) • <i>coexodus.psd. Exodus.</i> (Word count: 2980) • <i>cogenesi.psd. Genesis (A)</i>⁷. (Word count: 4.840) • <i>cokentis.psd. (1) The Kentish Hymn; (2) The Kentish Psalm.</i> (Word count: 230 + 840 = 1070) • <i>cometboe.psd. The Meters of Boethius.</i> (Word count: 5.270) • <i>conorthu.psd. (1) Cædmon's Hymn</i>⁸; (2) <i>Bede's Death Song</i>⁹; (3) <i>The Leiden Riddle</i>; (4)
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⁷ Up to line 2759

⁸ Northumbrian version

⁹ Northumbrian version

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<ul style="list-style-type: none"> ○ <i>Saint Euphrosyne</i> (Word count: 3.658) ○ <i>Saint Eustace and his Companions</i> (Word count: 5.271) ○ <i>James the Greater</i> (Word count: 1.659) ○ <i>Saint Margaret</i> <ul style="list-style-type: none"> ▪ CCCC 303 (Word count: 4.196) ○ <i>Saint Mary of Egypt</i> (Word count: 8.181) ○ <i>Saint Neot</i> (Word count: 2.003) ○ <i>Saint Vincent</i> (Bodley 343) (Word count: 728) ○ <i>Seven Sleepers</i> (Word count: 9.143) • <i>West-Saxon Gospels</i> (Word count: 71.104) 	<ul style="list-style-type: none"> <i>The Ruthwell Cross</i>. (Word count: 40 + 30 + 90 + 70 = 230) • cophoeni.psd. <i>The Phoenix</i>. (Word count: 3.710) • coriddle.psd. <i>Riddles</i> (Word count: 5.090)
Total Word Count: 476.389	Total Word Count: 71.490

Table 3: Old English texts sample

Differently from my MA dissertation (Giarda 2022), I also included poetry texts, in order to have a more comprehensive view. Concerning the selection of poetic texts, given the already reduced dimensions of the poetry corpus, all the texts samples included in the YCOEP (Pintzuk & Plug 2002) have been included in my reference corpus. The apparent unbalance between prose and poetry is actually representative of the entire corpus of Old English: as Treharne & Pulsiano (2001: 3) state, poetry forms only 10% of the whole Old English corpus.

While Old English poetic style is quite systematised throughout the Old English period, i.e. using the Germanic alliterative long line, Old English prose changes in time; thus, for example, Alfredian prose has its own style (cf. e.g. Faulkner & Leneghan 2024) and differs from other works, e.g. from Ælfric's alliterative prose writings, which themselves can differ in style and language (cf.

e.g. Godden 1980; Corona 2008, Gretsche 2009).¹⁰ Mitchell & Robinson (2012: 135-136) divide the Old English prose production into seven categories:

1. The *Anglo-Saxon Chronicle*;
2. Alfredian Prose;¹¹
3. Homiletic Writings;
4. Other Religious Prose;
5. Prose Fiction;
6. Scientific and Medical Writings;
7. Laws, Charters, and Wills.

Except for the seventh category, “Laws, Charters, and Wills”¹², all the others are represented by at least one text in my reference corpus. The first category is represented by manuscript A of the *Anglo-Saxon Chronicle*, whereas texts such as the translations of Boethius’ *De Consolatione Philosophiae* and Bede’s *Historia Ecclesiastica Gentis Anglorum* belong to the second group. Among homiletic writings, i.e. group three, I selected Ælfric’s *Catholic Homilies I*, together with their *Preface*, and those *Lives of Saints* which are probably not to ascribe to Ælfric himself, e.g. *Saint Mary of Egypt* or *Saint Eustace and his Companions*. Concerning other religious prose, the reference corpus contains the *Old English Heptateuch*, the *West-Saxon Gospels* and the *Benedictine Rule*. Finally, prose fiction is represented by *Apollonius of Tyre*, *Alexander’s Letter to Aristotle*, and *Marvels of the East*; whereas *Byrthferth’s Manual* belongs to the group of scientific writing.

Other than the metrical pattern, prose differs from poetry also in vocabulary: this is relevant to verb selection, discussed in section 2.2, as some verbs may not be very frequent in poetry (thus not found in the poetry part of the corpus), whereas some others may be found mainly (if not only) in poetry, thus not belonging to the basic lexicon.

2.1.3. Old English morphosyntax: Basic sentence structure

¹⁰ On the influence of Alfredian prose on Ælfric, cf. also Godden (2009).

¹¹ On the active role of King Alfred as translator, see Godden’s “Did King Alfred Write Anything?” (Godden 2007).

¹² The choice of excluding legal documents from the corpus derives from the fact that no similar texts are present in the Middle English corpus (PPCME2, Kroch et al. 2000). Thus, for the sake of comparison, I decided not to consider this genre.

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As other Indo-European languages, Old English is a fusional language with inflectional word classes. Case and number are marked by inflection, generally on every element of the noun phrase, i.e. both on the head and on the modifiers. In many cases, only case marking on the modifiers can unambiguously indicate the case/number of the entire noun phrase, as the noun declensions are the least distinctive, due to case syncretism. (von Mengden 2017b: 73-74) Of the eight original Indo-European cases, only four survived: nominative, accusative, dative and genitive. Some traces of a fifth case, the instrumental, are also present, but remain residual and are distinguished from the dative only in some adjectival and pronominal forms. When encoded, the instrumental marks the semantic role of Instrument (von Mengden 2017b: 74). Cases can serve both syntactic and semantic functions; the latter being usually coded also by prepositional phrases. The nominative, the accusative and the dative generally mark grammatical relations.

The nominative marks what, in traditional Indo-European studies, is called ‘subject’, i.e. the first argument of both intransitive and transitive verbs. In typological research, these two kinds of subject are distinguished between ‘A’, agent of transitive verbs and ‘S’, subject of intransitive verbs (Dixon 1994: 6). However, both A and S trigger agreement with the verb. This aspect and the coincidence of formal coding result in the so-called nominative-accusative alignment. However, in less prototypical transitive constructions, the syntactic subject is neither an A nor an S, but for instance a stimulus (e.g. with the verb SMELL *stincan*). Also, the Indo-European vocative has merged into the nominative.

The accusative, whose forms often – but not always – coincide with the nominative ones, marks the direct object, i.e. the second argument of two-place verbs. In prototypical transitive constructions it takes the role of patient ‘P’, i.e. the entity affected by the action or state denoted by the verb (Croft 1991). However, the accusative can be found in some “impersonal” constructions (cf. section 2.3.2.2), in which it does not take a P-role (rather the role of experiencer). Additionally, the accusative can carry out other functions, unrelated to grammar relations, e.g. being used adverbially in expressions of time and space extent or in a PP with allative meaning, thus implying movement or destination in space or time. (Mitchell & Robinson 2012: 99).

The dative generally marks the indirect object, i.e. the third argument of some three-place verbs, such as GIVE *sellan*, taking the role of recipient ‘R’. Besides that, it encompasses a variety of additional functions, such as indicate possession (in the construction with the so-called *dativus sympatheticus*, i.e. external possessor constructions) or be used adverbially. The same adpositions used with the accusative with an allative meaning may be used with the dative when the situation is static, even

though this case alternation is not always consistent (Quirk & Wrenn 1960: 61). Modelled on the Latin absolute ablative, an “absolute dative” is used, pointing to the merging into the dative of the ancient IE dative, ablative, locative and instrumental (Manganella 1960: 60). The latter is still used at times to express means or manner, accompaniment, or time, but even when there are special instrumental forms, they can be substituted with the dative ones (Mitchell & Robinson 2012: 100).

The genitive usually marks the modifier of a noun phrase, but it can also take some adverbial functions. In the former case, it is frequent to find in the literature difference between subjective (or active) and objective (or passive) genitive, depending on the role of the head-noun (e.g. Quirk & Wrenn 1960: 62 or Mitchell & Robinson 2012: 99). When used subjectively, it indicates possession, origin or instrument, whereas, in its object usage, it describes or define the head-noun. To this latter group belong, for instance, the genitive of measure and the partitive genitive.

Old English had two number values for nouns, singular and plural; however, a third number values can be found in the pronominal paradigm (von Mengden 2017b: 74). The three Indo-European genders, i.e. masculine, feminine, and neuter, are maintained in Old English: gender is inherent in the nouns, whereas it is inflectional, thus morphologically encoded, in pronouns, determiners and adjectives. As in other Indo-European languages, there is no strict correspondence to natural gender: for example, nouns denoting female entities as *wifman* or *wif* ‘woman’ are, respectively, masculine and neuter. On the other hand, nouns referring to inanimate referents are not necessarily neuter. Only some expressions, e.g. nouns referring to occupations, distinguish between male and female members of the class through morphological marking, e.g. *munuc* ‘monk’ and *mynecen* ‘nun’ (von Mengden 2017b: 74). Depending on their original Proto-Germanic (ultimately Proto-Indo-European) stem, nouns are divided in three inflectional classes; i) vowel or strong declension (classes 1 to 4); ii) consonant or weak declension (classes 5, 6 and 7) and iii) radical stem declension (class 8). (Manganella 1976: 61, von Mengden 2017b: 74).

Concerning the verbal system, Old English verbs encode two tense values, i.e. present and past, and three mood values, i.e. indicative, subjunctive, and imperative. The indicative is the default values, whereas the subjunctive is generally used to refer to the wish of the speaker, rather than to reality; for this reason, it is also called ‘optative’. The imperative does not distinguish between tense. (von Mengden 2017b: 90). Remarkably, the primary opposition is temporal: all Indo-European aspectual oppositions disappear (already in Proto-Germanic), being substituted by morphosyntactic or co-textual strategies (Saibene & Buzzoni 2006: 269-271). The present generally refers to present

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situations, habitual actions, general states, and the future; on the other hand, the preterit refers to past states and events, for which a historical present is not used (Molencki 2017: 111). As in all Germanic languages, Old English had two main conjugational systems, which do not differ in the inflectional categories they encode, but they are distinguished by the morphological strategy used to encode these values. Strong verbs, divided into seven classes, form the alternation between present and past stem through apophony, whereas weak verbs, with three classes, form the past with the addition of a dental stem, this being a common Germanic innovation. (von Mengden 2017b: 90). Some peculiar verbs, the so-called “preterite-present verbs”, were originally strong verbs, but their past forms developed a present-meaning, which made the former present forms disappear. A new past form was thus constructed through the addition of the weak verb dental suffix (Mitchell & Robinson 2012: 52). These verbs are the antecedent of the Modern English modal auxiliaries, e.g. *sculan* ‘have to’ (ing. *should*). However, some of them have disappeared, e.g. *witan* ‘know’ (cf. lat. *videre*) or changed their meaning, e.g. *motan* ‘may, to be allowed’, whose past form *moste* resulted in the Modern English *must*. (for further explanation of the meaning of the different modal auxiliaries in Old English see Mitchell & Robinson 2012: 107-109). However, these verbs all show different paradigms, some of which are incomplete. Moreover, there are some other “irregular” verbs, which are not preterite-present verbs, and whose past tense root differs from the present. The roots of these verbs can differ either through morphophonemic changes, e.g. *don* ‘do’ – *dyd-e* ‘did’, or they can show suppletivism, e.g. *gan* ‘go’ – *eod-e* ‘went’ (von Mengden 2017b: 98). Finally, the paradigm of the copula consists of three different roots, as shown in Table 4.

		PERSON	PRES. IND.	IMP.	PRES. SUBJ.	PAST IND.	PAST SUBJ.
FINITE	SG	1	<i>eom/beo</i>	-	<i>sie/beo</i>	<i>wæs</i>	<i>wære</i>
		2	<i>eart/bist</i>	<i>wes</i>	<i>sie/beo</i>	<i>wære</i>	<i>wære</i>
		3	<i>is/biþ</i>	-	<i>sie/beo</i>	<i>wæs</i>	<i>wære</i>
	PL	<i>sind(on)/ beoþ</i>		-	<i>sien/beon</i>	<i>wæron</i>	<i>wæron</i>
NON-FINITE	INFINITIVE		PRES. PARTICIPLE		PAST PARTICIPLE		
	UNINFLECTED	INFLECTED					
	<i>wesan/beon</i>	<i>wesann-/beonn-</i>	<i>wesende/beonde</i>		<i>gebeon</i>		

Table 4: The Old English copula (adapted from von Mengden 2017b: 99)

Finite Old English verbs agree with the subject in number and person. Number values are singular and plural, the latter being used also in the case of dual pronominal subjects, whereas person is

distinguished only in the indicative singular. The forms of the plural in all moods and tenses, as the first and third person in the subjunctive show syncretism. However, the degree of verbal syncretism is much smaller than in the nominal inflection. Concerning non-finite forms, Old English had two infinitive forms (inflected and non-inflected), a present and a past participle, all of which could be inflected also for case, number and gender, when used adjectivally (von Mengden 2017b: 90).

Analytic constructions formed of the auxiliaries *beon/wesan* ‘be’, *weorþan* ‘become’ and *habban* ‘have’ and participles are attested, though they seem to be used less systematically than in PDE. Both *habban* ‘have’ and *beon/wesan* ‘be’ form together with the past participle the perfect and plusperfect, the former with transitive verbs, the latter with intransitives. The verb *beon/wesan* ‘to be’ is also found with the present participle, as the ancestor of the PDE continuous tense. In both cases, however, the participle was originally adjectival, rather than verbal (Mitchell & Robinson 2012: 104). Old English verbs have only one value for voice, the active, except for the verb *hatan* ‘call, order’, which has a synthetic passive form *hatte* ‘is/was called’. Otherwise, the passive was formed with an analytic construction with *beon/wesan* ‘be’ or *weorþan* ‘become’ as auxiliaries and the past participle (cf. section 2.4.3.3). The participle could be either inflected or not: for this reason, it seems to be more adjectival rather than verbal (Mitchell & Robinson 2012: 104-105). The difference between the use of *beon/wesan* ‘be’ or *weorþan* ‘become’ as auxiliaries is not clear yet: some scholars argue for an aspectual difference, even though sometimes the two auxiliaries seem to be used interchangeably (Vezzosi 1998: 55; Mitchell & Robinson 2012: 105). Passive meaning could also be conveyed by the active construction with *man* ‘one’.

Concerning word order, Old English was characterized by a flexible order, influenced by pragmatic factors, e.g. old vs. new information, topicalization, or the “heaviness” of an element (Molencki 2017: 101). Some scholars (e.g. van Kemenade 1987; Colman 1988) argue for an underlying (S)OV order, whereas others (such as Allen 1980; Pintzuk 1996) claim that Old English was characterized by a competition between (S)OV and (S)VO word orders, in which the former prevailed over the latter as being the basic order, possibly via an intermediate obligatory V2 stage (Molencki 2017: 101). The latter hypothesis would be confirmed by the great variation found in both main and subordinate clauses, though statistically subordinate clauses tend to show a (S)OV order, while most common, pragmatically unmarked main clauses often feature a (S)VO pattern. Moreover, poetry allows much more freedom than prose (Mitchell & Robinson 2012: 63). As other Germanic languages, Old English also exhibits V2, i.e. the tendency of the verb to follow the first constituent, regardless of the type of constituent, i.e. whether it is a subject, object, PP, adverb, etc. (Van

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Kemenade 2012: 823). V2 inversion is generally triggered by the presence of an adverbial at the beginning of the sentence, by topics at the beginning of a main clause and in negative and interrogative clauses. Concerning the order of other constituents, nouns are generally preceded by modifiers (e.g. demonstratives or adjectives) and by genitive complements, but the latter can follow the noun if this is preceded by another modifier. In PPs, adpositions tend to precede a noun but generally follow a pronoun and, even more frequently, a verb form.

Subjectless and impersonal constructions, which are not allowed in PDE anymore, are still present in Old English, especially with reference to natural phenomena (cf. section 2.3.1). However, Old English also developed the use of empty pronominal subjects (*hit* and *þær*), which are neither anaphoric nor cataphoric (Molencki 2017: 104). “Impersonal” constructions are also found with some experiential verbs, discussed later in section 2.3.2.2. Concerning referential null subjects, scholars’ opinions are contrasting. Based on a corpus-based study, Walkden (2013: 167) suggests that Old English dialects may have lost the Indo-European possibility to omit a referential subject, except for Anglian dialects, which seem to be pro-drop. He also points out that third-person pronominal subjects are much more likely to be null than first- or second-person pronominal subjects. However, a few years later, Rusten (2019), with his extensive quantitative study of the reference treebanks for Old English (YCOE and YCOEP) shows that, though displaying different rates in the single texts, the overall rate of referential null subjects in Old English is close to 1%, and that the difference between Anglian and West-Saxon texts is not significant. The only statistically significant factor is genre, i.e. poetic texts show higher rates of referential null subjects. Clauses are negated with the particle *ne*, added immediately before the finite verb. The negated verb is often fronted, and multiple negation (“negative concord”) is allowed and interpreted as a single logical negation. The negative particle *ne* can also be cliticized to some frequent verbs, such as *Nesan* ‘not to be’ from *wesan* ‘to be’, *nabban* ‘not to have’ from *habban* ‘to have’, *agan* ‘not to have, not to be allowed’ from *agan* ‘to own’, *nitan* ‘not to know’ from *witan* ‘to know’ or *nillan* ‘not to want’ from *willan* ‘to want’.

In the original Old English texts parataxis is much more frequent than hypotaxis. In fact, as in other European languages, Latin syntax was the model on which Old English developed more complex sentences, which were, however, less hierarchical than PDE. The most common conjunction was the coordinating *and*, whereas sequences of events were marked by the word *þa* ‘then, when’. Nonetheless, the borderline between paratactic and hypotactic structures was rather vague in Old

English. Moreover, punctuation is no help at all, as it is usually added by modern editors because medieval scribes used a completely different system of punctuation. (Molencki 2017: 117).

2.2. Old English verb selection

The selection of verbal counterparts for the PaVeDa meaning follows the criteria presented above (in Section 1.3). The complete list containing PaVeDa meanings, and their Old English translation equivalents, together with the frequency of occurrence in the prose and poetry reference corpora is shown in Table 5.¹³

PaVeDa Meaning ¹⁴	Old English Verb	Frequency in the reference corpus ¹⁵	
		Prose	Poetry
ASK FOR	axian	222	2
BE A HUNTER	hunta beon	5 **	0
BEAT	beatan	24	5
BE DRY	a-drugian ¹⁶	12	0
BE HUNGRY	hyngnan	30	0
BE SAD	unrotsian	24	0
BOIL	weallan	23	11
BOIL (tr) ¹⁷	wyllan	64 *	0
BREAK	brecan	22	15
BRING	bringan	351	54
BUILD	timbran	4	0
BURN	byrnan	65	21
BURN (tr)	bærnan	26	7

¹³ Vowel length can be a matter of debated (cf. also different practices in the DOE and BT dictionaries) and it is not marked in the reference corpora I used to extract data. As disambiguation of homographs has been conducted manually, I choose to never signal vowel length in my work.

¹⁴ Meanings marked by [+] do not belong to the original ValPaL list, but have been added as semantic proxies.

¹⁵ The YCOE and YCOEP subsets are described in sections 2.3. and 3.1.2. The verbs marked with * and ** were found out of the reference corpora, because no other alternative, present in the reference corpora, was judged acceptable. * indicates that these occurrences are taken from the entire YCOE, whereas ** indicates that the occurrences are from the DOEC.

¹⁶ Actually, *a-drugian* generally means ‘become dry’, rather than ‘be dry’. However, this is the closest verbal counterpart I found.

¹⁷ Homophones in the paradigms of *weallan*, *wyllan*, and *byrnan*, *baernan* have been assigned to one verb or the other based on the contextual meaning.

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CARRY	beran	234	77
CLIMB	stigan	22	23
COOK	brædan	5	0
COUGH	hwosan	1	0
COVER	be-wreon	7	6
CUT (1)	ceorfan	2	2
CUT (2)	snipan	4	1
DIE (1)	cwelan	1	0
DIE (2)	sweltan	119	16
DIG	delfan	19	3
DRESS	scrydan	53	0
EAT	etan	264	6
FEAR	forhtian	40	2
FEEL COLD	calan	2	0
FEEL PAIN	acan	12 [*]	0
FILL	fyllan	86	15
FOLLOW	folgian	67	10
FRIGHTEN (1)	egesian	5	1
FRIGHTEN (2)	fyrhtan	6	0
GIVE	gyfan	71	25
GO	gan	886	36
GRIND	grindan	4	1
HEAR	hyran	766	94
HELP	helpan	38	7
HIDE	hydan	15	13
HIT	slean	82	10
HUG	clyppan	7	3
HUNT (FOR) [+]	huntian	4	0
JUMP	hleapan	6	2
KILL	cwellan	13	5
KNOW (1)	cnawan	35	7
KNOW (2)	cunnan	227	85
LAUGH	hlyhhan	14	3

LEAVE	læfan	28	7
LIKE	lician	104	6
LIVE	lifian	216	70
LOAD	hladan	8	10
LOOK AT	locian	62	5
MEET	metan	262	29
NAME	namnian	206	20
PEEL	be-rendan	5	0
PLAY	plegan	9	3
POUR	geotan	27	6
PUSH	scufan	7	5
PUT	settan	343	12
RAIN	rignan	6	0
ROLL (tr)	a-wyltan	7	0
RUN	yrnan	99	3
SAY	secgan	1391	155
SCREAM	hropan	0	5
SEARCH FOR	secan	269	175
SEE	seon	1261	114
SEND	sendan	446	32
SHAVE (1)	sciran	13	0
SHAVE (2)	be-sciran	3	0
SHOUT AT	clipian	203	11
SHOW (1)	tæcan	116 (30) ¹⁸	9 (6)
SHOW (2)	eowan	16	19
SHOW (3)	æt-eowan	256	5
SING	singan	160	37
SINK	sincan	1	0
SINK (tr)	sencan	3 *	0
SIT DOWN	sittan	364	49
SMELL	stincan	10	1
STEAL	stelan	11	0

¹⁸ The number between brackets indicates the number of occurrences, in which *tæcan* unambiguously means 'to show'.

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TAKE	niman	653	49
TALK	sprecan	566	60
TEACH (1)	læran	333	26
TEACH (2)	tæcan	116 (70) ¹⁹	9 (2)
TEAR (1)	teran	7	2
TEAR (2)	slitan	11	9
TELL	tellan	20	0
THINK	þencan	186	36
THROW	weorpan	78	9
TIE (1)	tigan	15	0
TIE (2)	bindan	112	26
TOUCH	hrinan	28	15
WASH (1)	wascan	9	1
WASH (2)	þwean	41	0
WINK (1) [+]	wincian	2 **	0
WINK (2) [+]	be-priwan	1 **	0
WIPE	wipian	1	0
TOTAL		12115	1599

Table 5: Old English translational equivalents and their frequencies

When competing alternatives were available, I chose the most diachronically significant one, i.e. possibly the verb related to the PDE form, except when frequencies were extremely disfavoured the diachronic choice. An example of this is the meaning DRESS for which at least two alternatives are possible: *scrydan* and *clapian*, the latter corresponding to PDE *clothe*. However, the DOE (Cameron et al. 2024) mentions only two occurrences of *clapian*, in the Lindisfarne glosses, whereas *scrydan* shows 53 occurrences only in the prose subset. Other than this, the “continuity of attestation” criterion has often prevailed on the “frequency criterion” for the sake of diachronic comparison.

Concerning the “morphological criterion”, only the prefix *ge-* was systematically included in the regular expressions used to retrieve data, since it is often used, among other functions, to form the past participle (cf. among others Martín Arista 2012 or Klein 2022). Possible prefixed variants of

¹⁹ The number between brackets indicates the number of occurrences, in which *tæcan* unambiguously means ‘to teach’.

the verbs have not been selected, unless the prefix contributed to better define the meaning of the verb, or the prefixed form was more frequently used than the simplex. In the case of BE DRY *a-drugian* and ROLL *a-wyltan*, the prefixed variant was more frequent than the simplex form.²⁰ In the case of PEEL *be-rendan* and SHAVE *be-sciran*, the prefix *be-* changes and/or specifies the meaning of the simplex verb: *rendan* means ‘rend, tear, cut’,²¹ whereas *sciran* generally means ‘cut, shear’,²² though some occurrences (above all in past participles) may mean ‘shave’. For this reason and because of its higher frequency, I included both the simplex form *sciran* and the prefixed variant *be-sciran*, the latter only means ‘shear, shave’, and has thus been selected according to the “polysemy criterion”.²³ The same prefix is found with COVER *be-wreon* ‘to cover, protect, clothe’,²⁴ restricting the meaning of *wreon* ‘to cover’, but also ‘to conceal, to hide’. Given the higher adherence to the PaVeDa meaning of *be-wreon* and the absence of the simplex form *wreon* in the reference corpus, the prefixed verb was preferred. Another pair of verbs, which could fit into the meaning COVER, would have been *þeccan* and *be-þeccan* ‘to cover’. However, the former only has one occurrence in the reference corpus, and the latter is defined by the DOE as “disproportionally frequent in poetry”, thus less plausible to be part of the basic lexicon. Finally, the meaning SHOW has three different counterparts: *tæcan*, which I will discuss later in this section, *eowan* and *æt-eowan*. The latter, other than being more frequent than the simplex form,²⁵ is also cognate with Gothic *at-augjan* (Zanchi & Tarsi 2021: 39). A particular case to consider is the verb *gan*, the translational equivalent of GO. First, following the “morphological criterion”, the contracted form *gan* has been preferred to the reduplicated *gangan*. Secondly, the verb *gan* is often found in prefixed forms, such as *in-gan*, *æfter-gan*, etc, in which the prefix is homograph with the adverbs generally indicating the direction of the movement. However, there is hardly any systematicity in the spelling of these verbs, i.e. the prefix can be written either together or separately. This, together with the fact that Old English did not have a strict word order, creates some problems when retrieving the occurrences of this verb. Considering the fact that, even when the prefix/adverb follows the verb, it changes the meaning, i.e. *in-gan* (or *gan in*) would mean ‘to enter’ rather than ‘to go’, these occurrences have not been included in the analysis.

Other cases in which more than one translational equivalent has been chosen are the meanings CUT, DIE, FRIGHTEN, KNOW, TEACH, TEAR, TIE, WASH and WINK. Concerning CUT, no substantial difference

²⁰ As an example, the DOE mentions 11 occurrences of *drugian* and ca. 100 occurrences of *a-drugian*

²¹ <https://bosworthtoller.com/25686>

²² <https://bosworthtoller.com/026734>

²³ <https://bosworthtoller.com/3910>

²⁴ <https://bosworthtoller.com/4185>

²⁵ the DOE mentions ca. 100 occurrences of *eowan* and ca. 1150 occurrences of *æt-eowan*.

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in frequency, morphological simplicity nor continuity of attestation could be found between *ceorfan* and *snīþan*. Concerning DIE *sweltan* seems to be the most frequent form, but *cwelan* is related to the verb *cwellan*, the corresponding verb to KILL.²⁶ The other verb pairs usually consist of a more frequent, but unrelated to PDE, form and a less frequent, though related to PDE one. This is the case for FRIGHTEN, instantiated by *egesian* and *fyrþan* (> PDE *frighten*), TEAR instantiated by *slitan* and *teran* (> PDE *tear*), TIE, whose corresponding verbs are *bindan* and *tigan* (> PDE *tie*) and WASH, whose translational equivalents are *þwean* and *wascan* (> PDE *wash*). Considering WINK, both *be-priwan* and *wincian* have so few attestations that it was impossible to choose the most basic verb, though *wincian* continues into PDE *wink*. The meaning KNOW is instantiated by *cunnan* and *cnawan*, however none of these verbs actually corresponds exactly to the modern meaning: *cnawan* (which continues into PDE *know*) did mean ‘know’ but also – and more frequently – ‘to perceive, to recognise’. This verb has been selected following the “continuity of attestation” criterion, but only the occurrences actually meaning ‘to know’ are part of the analysis. On the other hand, *cunnan* continues into the PDE modal verb *can*, and meant not only ‘to know’, but also ‘can, to know how to do something’, as its modern counterpart. Another possible verbal counterpart of KNOW would have been *witan*, which is connected to the idea of wisdom.²⁷ However, this verb does not continue into PDE, except for some dialectal and/or idiomatic forms (OED: “Scottish and northern dialect”; “archaic except in legal use”): for this reason, it has not been included into the analysis. Lastly, the verbs corresponding to the meaning TEACH are *læran* and *tæcan*. The former has a Germanic origin and cognates with German *lehren* (Haspelmath & Baumann 2013), Gothic *laisjan* (Zanchi & Tarsi 2021: 39), whereas the latter continues into PDE *teach*, but formerly meant ‘to show’ (cf. German *zeigen*).²⁸ The semantic shift from “show” to “teach” seems to take place during the Old English period:²⁹ for this reason, the verb *tæcan* has been chosen as translational equivalent of both SHOW and TEACH.

²⁶ Remarkably, the DOE registers *cwelan* ‘die’ and *cwellan* ‘kill’ as two different lemmas. However, *cwellan* ‘kill’ is also used in non-causal contexts, meaning ‘die’ (cf section 3.4.3.2). Since the causal vs. non-causal alternation is more often expressed through verb pairs differing for thematic vowel (a relic of the old Germanic *-ja* suffix), and graphical variants are frequent in Old English, it may be argued that *cwelan* and *cwellan* are not different verbs, but rather different spellings of the same verb, which would show lability.

²⁷ Cf. OED *wit* (n.) II.i.6.a. “Wisdom, good judgement, discretion, prudence: = sense n. II.11. Obsolete except in phrases like to have the wit to, which combines the notions of intelligence and good sense.”

²⁸ “A formation **taikjan-* created to the geminated root **taikk-* as found in **taikna-* and the iterative **taik/gōn-*. Perhaps, the formation can be analyzed as continuing a medial causative, quasi-PIE **doik'-nH-éie-* “to make oneself point out” (“*taikjan-*” in: Etymological Dictionary of Proto-Germanic Online, edited by: Guus Kroonen, Ph.D. (2009). Consulted online on 25/11/2025 <https://dictionaries.brillonline.com/search#dictionary=proto_germanic&id=pg2316> First published online: October 2010.)

²⁹ Cf. Oxford English Dictionary: https://www.oed.com/dictionary/teach_v?tab=meaning_and_use#19063354.

It has to be noted that verbs generally have more than one meaning, some of which are more abstract than the PaVeDa meaning itself, while some others may be considered “derived meanings”. For example, the verb *fyllan* ‘to fill’, chosen as the counterpart of FILL, can also mean ‘to satisfy’ or ‘to fulfil, to be completed’. The verb *gan* ‘to go’ can also mean ‘to walk’; *settan* ‘to set, to put’ can also mean ‘being in a given position’ or ‘to establish’ and the verb *tellan* ‘to tell’ often means ‘to consider’ but also ‘to count’. All these derived or, more abstract meanings do not correspond to the PaVeDa meanings, thus - for the sake of comparison among the different languages of the project – occurrences of the kind are not taken into account in the analysis.

2.3. Old English valency patterns

The aim of this section is to provide an overview of Old English valency patterns. The different valency classes are based on the criteria used in the ValPaL and PaVeDa projects (cf. section 1.3) and are described in order of increasing argument slots, starting with the zerovalent verbs, and ending with three-place verbs. In order to classify verbs into valency classes, case marking, agreement, and passivisation were considered. Moreover, the analysis considers the *Aktionsart* (Vendler 1967) of the different verbs,³⁰ as summarised in Table 6.

<i>Aktionsart</i>	Valency				Total
	Zero-valent	One-place	Two-place	Three-place	
Accomplishment		1	22	4	26
Achievement		7	10	4	21
Activity	1	9	20	5	36
State		7	5		12
Total	1	24	57	13	95

Table 6: Old English verbs classified for valency class and *Aktionsart*.

2.3.1. Zero-valent verbs

This class includes only one verb from the PaVeDa list, i.e. the weather verb RAIN *rignan*. Despite the fact that other verbs are found in a so-called “impersonal” frame (mainly experiential verbs discussed in section 2.3.3.2), weather verbs are the only verbs that can actually be considered zero-valent in Old English. Indeed, in his *Historical Syntax of the English Language*, Visser (1963: 4)

³⁰ *Aktionsart* labels have been assigned based on the basic coding frame selected for each verb.

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mentions weather verbs among the verbs with no subject, though claiming that the absence of a non-referential personal pronoun is extremely rare. As a matter of fact, already in very early Old English, verbs denoting meteorological conditions appear more often with the pronoun *hit*, obviously without reference to any agent (Visser 1963: 36; Allen 1995: 59-64; Miura 2015: 6). This is consistent with Middeke’s (2022: 270) findings, as she found only two occurrences of weather verbs without the expletive *hit*.³¹

However, examples (6) and (7), from the DOEC, feature the verb *þunrian* ‘to thunder’, which does not belong to the PaVeDa meanings, but allows to show that Old English did allow both constructions, the first with an expletive subject pronoun, though marginally, and the second without it:

- (6) *Gif hit þunrað on tide æfen*
 if 3SG.NOM.N thunder.IND.PRS.3SG in time(F).DAT.SG evening(M).ACC.SG
 “If it thunders at eventide, [it indicates the birth of something great].”
 (ProgGl 7 (Först) C16.7)³²

- (7) *Gif on tide seofodan þunrað of*
 If in time(F).DAT.SG seventh.DAT.SG.F thunder.IND.PRS.3SG from
gewylcum dæle heofonas
 some.DAT.SG.M part(M).DAT.SG.M sky(M).GEN.PL
 “If it thunders at the seventh hour from some part of the sky, [it indicates fruit and great future abundance].” (ProgGl 7 (Först) C16.7)³³

My data further confirm the rarity of the omission of the expletive *hit*: all occurrences of the basic pattern (three out of a total of six) show a non-referential subject, as in (8). However, though marginally, examples without the non-referential *hit* are also attested in the whole Old English corpus. As far as the verb RAIN *rignan* is concerned though, every example I found without *hit* in the DOEC appears with a further argument, i.e. the substance rained, as in (9) below.

- (8) & *hit rine* & *sniwe* &

³¹ Middeke (2023: 270) mentions *genihtode* ‘it was becoming night’ from the Vercelli Homilies and *sniwde* ‘it was snowing’ from Alexander’s Letter to Aristotle.

³² Gloss to Latin “*Si tonitruauerit hora uespertina significat natiuitatem cuiusdam magni*”.

³³ Gloss to Latin “*Si hora VII tonitruauerit de quacumque parte celi fructum & ubertatem magnam futuram significant*”.

and 3SG.NOM.N rain.SBJV.PRS.3SG and snow.SBJV.PRS.3SG and
styrme ute
 storm.SBJV.PRS.3SG outside

“[...] and it rained and snowed and stormed outside.” (cobede,Bede_2:10.134.23.1301)

The fact that Old English weather verbs allowed (if not almost required) this non-referential subject differentiate them from other “impersonal” verbs, such as BE HUNGRY *hyngran*, which later developed nominative-experiencer constructions but were never used with non-referential subjects (as Butler 1980 reminds). This argues against a common discussion of weather verbs and other impersonal verbs, differently from, for instance, Middeke (2022: 250-297).

Note that the term “impersonal” has been used to indicate different kind of constructions, depending on the perspective assumed. From a communicative-functional perspective, impersonals are seen as a strategy to defocus the agent; on the other hand, from a more structure-based point of view, impersonality is associated with the lack of a referential subject (Malchukov & Siewierska 2011: 2). The term “impersonal sentence” is used in English historical grammar to refer indiscriminately to two sets of essentially different syntactic structures: “real” impersonal, i.e. weather verbs, which are actually zero-valent in their basic frame, and “nominative-less constructions”, which express nonetheless actions and states linked to a person and therefore have been called “quasi-impersonals” (Pocheptsov 1997: 470). Visser, too, (1963: 20) considers the term “impersonal” a “misnomer” when it indicates this second type of construction. As mentioned, the verb *rignan* allows the insertion of an object-like argument in the accusative, expressing the substance rained, as in (9):

(9) *hyt rinde fyr & swefl*
 3SG.NOM.N rain.IND.PRET.3SG fire(N).ACC.SG and sulfur(M).ACC.SG
of heofone
 of heaven(M)DAT.SG

“[Truly the day Lot left Sodom,] fire and sulfur rained down from heaven”

(cowsgosp,Lk_[WSCp]:17.29.5078)³⁴

³⁴ Note that the same verse is found with the dative in Gothic: *rignida swibla.DAT jah funin.DAT us himina* (case glosses added). Zanchi & Tarsi (2021: 43) argue that these arguments are better understood as instruments that are made to fall by an omitted agent, i.e. God. However, this interpretation does not seem applicable to Old English accusative. An accusative form is also found in Old High German *regenota fiur.ACC inti sueual.ACC fon himile* (case glosses added), but in this case the verb *reganon* is usually used in causal constructions, thus confirming the hypothesis of an omitted agent.

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Note that the same verse is found with the dative in Gothic: *rignida swibla.DAT jah funin. DAT us himina* (case glosses added). Zanchi & Tarsi (2021: 43) argue that these arguments are better understood as instruments that are made to fall by an omitted agent, i.e. God. However, this interpretation does not seem applicable to Old English accusative. An accusative form is also found in Old High German *regenota fiur.ACC inti sueual.ACC fon himile* (case glosses added), but in this case the verb *reganon* is usually used in causal constructions, thus confirming the hypothesis of an omitted agent. It has to be noted that the syncretism between nominative and accusative of *fyr* ‘fire’ and *swefl* ‘brimstone’ may lead to interpret these forms as the subject of *rinde* ‘rained’. However, if these forms were to be interpreted as the subject, the non-referential pronoun *hit* would have been redundant. Unfortunately, even expanding the search to the DOEC, I have not found any clear example of an accusative form in such context. However, I found an example with a dative argument ((10)), which could be interpreted as instrument, as in the Gothic example.

- (10) & *hit* *rineð* *blode* &
 and 3SG.NOM.N rain.IND.PRS.3SG blood(N).DAT.SG and
fyre *ofer ealle* *eorðan.*
 fire(N).DAT.SG over all.ACC.SG.F earth(F).ACC.SG
 “and it rains blood and fire all over the earth” (HomU 12.1 (Först))

Moreover, when an intentional agent is added to the frame, it is generally done through a marked causal alternation, with the auxiliary *lætan* ‘let’. This is found both with and without the expression of the substance rained, as in (11) and (12), confirming the object-like status of this argument. Though not found in my reference corpus, the BT Dictionary mentions an unmarked causal, shown in (13), which however seems marginal. Indeed, this seems to happen only in the glosses to the Psalms, and the different versions of the glosses to these Psalms can show a masculine pronoun (*he*), the non-referential *hit* or no pronoun at all. For this reason, this alternation has not been added to the PaVeDa database.

- (11) *he* *læt* *rinan* *ofer þa* *rihtwisan*
 3SG.NOM.M let.IND.PRET.3SG rain.INF over DEM.ACC.PL just.ACC.PL
 & *ofer þa* *unrihtwisan*
 and over DEM.ACC.PL unjust.ACC.PL
 “He made rain on the righteous and the unrighteous” (cowsgosp,Mt_[WSCp]:5.45.283)

- (12) *Drihten* *let* *rinan* *hagol*
 Lord(M).NOM.SG let.IND.PRET.3SG rain.INF hail(N).ACC.SG
wið *fyr* *gemenged*
 with fire(N).ACC.SG mix.PTCP.PST
 “The Lord made rain hail with fire” (cootest,Exod:9.24.2722)

- (13) *He* *rynde* *ofer* *synfullan* *grin*
 3SG.NOM.M rain.IND.PRET.3SG over sinful.GEN.PL snare(F).ACC.SG
 “He made rain [lit. he rained] over a sinners’ snare” (Ps. Spl. 10, 7.)

2.3.2. One place verbs

2.3.2.1. Nominative subjects

The single argument of one-place verbs generally bears the syntactic function of subject and is canonically marked by the nominative,³⁵ i.e. instantiates the nominative subject [NOM-SUBJ] construction. Example (14) shows the agreement between the activity verb RUN *yrnan* and the personal pronoun *he*, in the nominative, which bears the syntactic function of subject:

- (14) *and* *he* *forðy* *arn* *geornlice*
 and 3SG.NOM.M therefore run.IND.PRET.3SG zealously
 “and therefore he ran very quickly” (comary,LS_23_[MaryofEgypt]:180.117)

One-place verbs in my sample are a total of 24, 22 of which feature a [NOM-SUBJ] construction. Among state verbs there are BE A HUNTER *hunta beon*, BE SAD *unrotsian* and FEEL PAIN *acan*, whereas accomplishments featuring this construction are represented by SINK *sincan* (intransitive) and BE(COME) DRY *a-drugian*. The majority of one-place verbs is either an achievement (7/22) or an activity (10/22): achievement verbs are COUGH *hwosan*, DIE (1) *cwelan* and DIE (2) *sweltan*, SIT DOWN *sittan*,³⁶ STEAL *stelan* and WINK (1) *wincian* and WINK (2) *be-priwan*. Old English activity

³⁵ Middeke (2022: 304) claims that Old English nominative seems to be virtually unrestricted semantically, as it can encode not only agents and natural forces, but also experiencers, recipients, and state and process carriers.

³⁶ However, *sittan* is used to express both the action of sitting down and the state of being sitting.

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verbs featuring the [NOM-SUBJ] construction are BOIL *weallan* (intransitive), BURN *byrnan* (intransitive), LAUGH *hlyhhan*, LIVE *lifian*, PLAY *plegan*, RUN *yrnan*, SCREAM *hropan*, SHOUT AT *clipian*, SING *singan*, and SPEAK *sprecan*.

Semantically, the sole argument of one-place verbs is generally an agent, however in the case of the two experiential verbs BE SAD *unrotsian* and FEEL PAIN *acan*, it respectively takes the role of experiencer and stimulus, as shown in (15) and (16). In Old English, experiencers tend to be encoded as the agents of prototypical transitives, i.e. in the nominative. However, some exceptions include the so-called “impersonal verbs” (cf. section 2.3.2.2).

- (15) *and he ne geunrotsige*
 and 3SG.NOM.M NEG be_sad.SBJV.PRS.3SG
 “and he shall not be sad” (cobenrul,BenR:34.57.19.710)

- (16) *Gif þin heorte ace,*
 if POSS.2SG.NOM.F heart(F).NOM.SG ache.SBJV.PRS.3SG
nim ribban
 take.IMP.2SG houndstongue(F).ACC.SG
 “If your heart aches, take houndstongue” (colacnu,Med_3_[Grattan-Singer]:92.1.494)

Concerning FEEL PAIN *acan*, it is often constructed in an intransitive pattern, in which, as mentioned, the syntactic subject is the body part aching, i.e. the stimulus, and the experiencer is encoded with a possessive determiner, which depends on the noun indicating the stimulus. However, some occurrences of “external possessor” are found (cf. section 2.4.2.2), and even one impersonal occurrence, shown in (17), is present in the reference corpus, in which the stimulus is encoded in the dative, leaving the sentence without a nominative subject.

- (17) *Gif mannes midrife ace*
 If man(M).GEN.SG midriff(N).DAT.SG ache.SBJV.PRS.3SG
genime fifleafan seaw
 take.SBJV.3SG fiveleaf(F).GEN.SG juice(N).ACC.SG
 “If a man’s midriff ache, he shall take the juice of fiveleaf”
 (coherbar,Lch_I_[Herb]:3.6.249)

Except when allowing the insertion of cognate/kindred objects, one-place verbs are intransitive in Old English. Visser (1963: 97) calls them “verbs without complement” and divides them into four categories: i) self-sufficient intransitives, which are never found with any kind of object (direct, indirect, prepositional or “causative”, i.e. in the genitive); ii) intransitive verbs with an etymological related transitive homonym, i.e. labile verbs (e.g. SINK *sincan*, BOIL *weallan* and BURN *byrnan* cf. section 2.4.3.2); iii) intransitive verbs, in their absolute use, which are usually construed with an indirect or “causative” (in the genitive) object; iv) transitive verbs used “absolutely”, i.e. suppressing the direct object whenever it is clear from the context or the utterance is intelligible without it (respectively, referential null objects and object omission, cf. section 2.4.2.4). However, the latter two groups cannot be considered among one-place verbs, since their basic pattern is bivalent.

Some of the above-mentioned verbs also allow for further optional prepositional complements variously encoded. Motion verbs as RUN *yrnan*, SINK *sincan* and SIT DOWN *sittan* allow the expression of spatial arguments, e.g. direction, through different PPs or spatial adverbs, as for instance in (18), (19) and (20). Remarkably, when encoding direction, the same PPs can encode both inanimate and animate goals: compare for instance examples (18) and (19).

- (18) *and* *arn* *to* *wuda*
 and run.IND.PRET.3SG to wood(M).DAT.SG
 “[suddenly there came from the wood a lion, and gripped me,] and ran to the wood”
 (coeust,LS_8_[Eust]:329.361)

- (19) *Aaron* *ða* *ardlice* *arn* *to*
 Aaron then quickly run.IND.PRET.3SG to DEM.DAT.SG.N
ðam *folce*
 DEM.DAT.SG.N folk(N).DAT.SG
 “Then, Aaron immediately ran to the folk.” (cootest,Num:16.47.4235)

- (20) *sæt* *se* *ærcebiscop* *Agustinus*
 sit.IND.PRET.3SG DEM.NOM.SG.M archbishop(M).NOM.SG Augustine
on setle
 on seat(N).DAT.SG
 “archbishop Augustine was sitting in his chair” (cobede,Bede_2:2.102.4.956)

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Other one-place verbs which allow the insertion of an optional prepositional complement are LIVE *lifian* and LAUGH *hlyhhan*. Concerning LIVE *lifian*, can be found in monovalent frames where a temporal complement is often found, e.g. in (21), or with the spatial PP *in/on*+dat. (thus changing its *Aktionsart* from state verb to activity verb), as in (22).

- (21) *ðeah* *þu* *lytle* *hwile* *lifge*
 though 2SG.NOM little while live.SBJV.PRS.2SG

“though you live but a short time” (coalex,Alex:40.9.519)

- (22) *his* *magas* *þagit* *on* *þære* *byrig*
 POSS.3SG.M relative(M).NOM.PL still in DET.DAT.SG.F city(F).DAT.SG
leofodon
 live.IND.PRET.PL

“[it suddenly occurred to his thoughts that he had very great confidence that] his relatives still lived in the city” (cosevens1,LS_34_[SevenSleepers]:574.449)

Concerning LAUGH *hlyhhan*, the DOEC mentions two possible frames to encode what Goddard (2013) calls “Directed Nonverbal Expression” for PDE³⁷: one found with the PP *to*+dat. meaning, the other encoding the person laughed at in the genitive³⁸. However, no examples of the two patterns have been found in my reference corpus.

The verb TALK *sprecan* poses some challenges in establishing its basic pattern: based on frequency, none of the frame (one-, two-, or three-place) seems to be substantially more frequent than the others. The insertion of an addressee (with a PP headed by *to/wið/mid*) is found 214 times out of 626 total occurrences, of which 65 in a three-place frame, whereas the theme seems part of the basic frame. *Sprecan* is found 252 (65 of which in a three-place frame) times with a second argument, indicating the topic about it is spoken, either coded in the accusative or with a PP. If one wanted to add this second argument to the basic frame, it would be necessary to choose between a second argument in the accusative (131 occurrences) or a prepositional argument (112 occurrences). However, when found with a direct object in the accusative, *sprecan* seems to mean rather ‘to say’,

³⁷ “A verb depicting a non-verbal expressive act takes an additional argument designating the “target” of the expressive act, e.g. She smiled/frowned/laughed at him.” (<https://paveda.unipv.it/alternations/3434180796>)

³⁸ “4. to laugh in a friendly or affectionate manner toward, look pleasantly on, smile upon (someone *to* and *dat.*)” and “5. to laugh over, make light of; scoff at, deride, mock (something *gen.*)”

than ‘to talk’ (cf. also section 2.4.3.1 on applicatives); on the other hand, the prepositional second argument can be interpreted as an instance of the “topic-about” alternation (cf. section 2.4.1.6). Finally, it is found 160 times in a monovalent frame.

Remarkably, Goddard (2013) considers both T and R as optional³⁹ for the verb *talk*, which has however a different etymology. The same is found in Italian (Cennamo & Fabrizio 2013). The closest counterpart in the original ValPaL is German *sprechen* (Haspelmath & Baumann 2013), whose basic frame has an obligatory R-like argument⁴⁰. Consistently also with the Goossens (1985: 160), who claims that “sprecan is basically a one place predicate [...] yet it allows some message focus”, I chose to consider it as one-place, with optional T and R-like argument insertions. Consider examples (23)-(26), showing increasing valency patterns, from one-place to three-place:

- (23) *Hit* *byð* *dysig* *þæt* *man* *speca*⁴¹
 3SG.NOM.N be.IND.PRS.3SG foolish that INDF speak.SBJV.PRS.3SG
æf *þone* *he* *þænca*.
 before DET.ACC.SG.M 3SG.NOM.M think.SBJV.PRS.3SG
 “It is foolish that a man speaks before he thinks.” (codicts,Prov_1_[Cox]:2.2.81)

- (24) *Ðas* *word* *he* *spæc*
 DEM.ACC.PL.N word(N).ACC.PL 3SG.NOM.M speak.IND.PRET.3SG
æt *cepsceamule*
 at toll-booth(M).DAT.SG
 “He spoke these words at the toll-booth” (cowsgosp,Jn_[WSCp]:8.20.6407)

- (25) *Forðam* *ic* *spece* *to* *him*
 Therefore 1SG.NOM speak.IND.PRS.1SG to 3PL.DAT
mid *bigspellum*
 with parable(N).DAT.PL
 “Therefore I talk to them with parables” (cowsgosp,Mt_[WSCp]:13.13.822)

³⁹In the database, the basic frame of *talk* is 1-nom > V.subj[1] (> to+2) (> about+3) (<https://paveda.unipv.it/values/stan1293-talk-1>)

⁴⁰In the database, the basic frame of *sprechen* is 1-nom V.subj[1] mit+2-dat (<https://paveda.unipv.it/values/stan1295-talk-1>)

⁴¹Note that *sprecan* and *specan* are considered the same verb.

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(26)	<i>Spec</i>		<i>to</i>	<i>Pharaone,</i>	<i>Egypta</i>		<i>cyninge,</i>
	speak.IMP.SG		to	Pharao(M).DAT.SG	Egyptian.GEN.PL		king(M).DAT.SG
	<i>ealle</i>		<i>ða</i>	<i>þing</i>		<i>þe</i>	<i>ic</i>
	all.ACC.PL.N		DET.ACC.PL.N	thing.ACC.PL.N		REL	1SG.NOM
	<i>þe</i>	<i>spece.</i>					<i>to</i>
	2SG.DAT	speak.IND.PRS.1SG					to

“Say to the Pharaoh everything I tell you” (cootest,Exod:6.28.2554)

In (23) the verb *sprecan* appears in its basic monovalent pattern; whereas in (24) and (25), respectively, a P-like and an R-like argument are added. The second argument *word* ‘words’ in (24) could be argued to be a kindred object (cf. section 2.4.2.3), however example (26), which adds both a P-like (*þing* ‘things’) and an R-like argument (*to Pharaone* ‘to the Pharaoh’ and *to þe* ‘to you’), shows that *sprecan* allowed also the insertion of non-cognate/kindred objects. However, what differentiates this verb from other three-place speech verbs (e.g. ASK FOR *axian* or SAY *secgan*; cf. section 2.3.4) is that, whereas the second P-like argument can be expressed by some PPs (cf. topic-about alternation in section 2.4.1.6), the third R-like argument can never be expressed by the simple dative, as it happens with the other verbs instead.

2.3.2.2. Oblique subjects

As already reminded in section 2.3.1, these verbs have often been accounted for under the label of “impersonals”, which already Visser (1963: 20) considered a misnomer. Paradoxically, Old English “impersonal” verbs are mainly experiential verbs, i.e. they denote actions affecting a particular person. The choice of naming this section “oblique subjects” stems not only from this consideration, but also and mostly from the now widely accepted idea that oblique arguments can share some syntactic properties with nominative subjects. The subject status of these non-nominative experiencers in different old Germanic languages has also been proven by Barðdal & Eythórsson (2003). As Allen (1995: 3) puts it, the label “subject” is a purely syntactic one, therefore it has to be defined through syntactic criteria, which however can differ from language to language (Middeke 2022: 298). As far as Old English is concerned, Allen (1995: 50) argues that the best diagnostic for subjecthood is *controlled subject deletion* (also known as *conjunction reduction*), i.e. in coordinated clauses, if the subject of one clause can be omitted on the basis of co-reference with another constituent in the other conjunct clause, the omitted constituent is a subject as well. This is shown, for example, in (27), adapted from Allen (1995: 114), where the *controlled subject deletion* is

controlled by the experiencer of the verb LIKE *licode* (cf. section 2.3.3.3 for a more in-depth analysis of this verb).

- (27) *ac gode ne licode na heora*
 but God(M).DAT.SG NEG like.IND.PRET.3SG NEG POSS.3PL
geleafleast, ne heora ceorung ac
 faithlessness(F).NOM.SG NEG POSS.3PL grumbling(F).NOM.SG but
asende him to fyr
 send.IND.PRET.3SG 3PL.DAT to fire(N).ACC.SG
 “but God did not like their unbelief or their grumbling, but sent fire to them”
 ((COE) ÆHom 21 68)

As mentioned in section 2.3.2.1, two of the one-place verbs in my sample occur with non-nominative subjects: these are BE HUNGRY *hyngnan* and FEEL COLD *calan* and can occur with both accusative and dative experiencers, as shown in examples (28)-(29).

- (28) *hwæt dyde Daid þa hine hingrode*
 what do.IND.PRET.3SG David when 3SG.ACC.M be_hungry.IND.PRET.3SG
 “[Have you never read] what David did when he [and his companions] were hungry [and in need?]” (cowsgosp,Mk_[WSCp]:2.25.2326)

- (29) *ac syþðan him hingrode.*
 But afterwards 3SG.DAT.M be_hungry.IND.PRET.3SG
 “but he was hungry aftetwards” (cocathom1,ÆCHom_I,_11:266.9.1984)

Even though they are marginal, my corpus shows two occurrences in which the experiencer is encoded in the nominative,⁴² triggering agreement on the verb, as shown in (30), where the nominative plural pronoun *ge* ‘you’ triggers agreement on the verb *hingriað* ‘are hungry’.

- (30) *forþam þe ge hingriað*
 because that 2PL.NOM be_hungry.IND.PRS.PL
 “[Woe to you who are satisfied now,] for you will be hungry.”

⁴² This is generalisation of the transitive pattern is a common shift found in all Germanic languages, except for Icelandic, as already Bossong (1998: 14) pointed out.

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(cowsgosp,Lk_[WSCp]:6.25.4026)

Considering that example (30) comes from the West-Saxon Gospels, a translation from Latin, one may suppose that the Latin source may have had an influence. However, many other occurrences from the biblical texts, equally having Latin sources, show an oblique subject (even in the same Gospels, cf. example (28)).

Moreover, the same verse of example (28) is found with a nominative subject in the glosses of the *Lindisfarne Gospels* (*hyngerde he.NOM*, Li-Mk 2.25), which however are not included in my reference sample. One could probably rule out that this choice was influenced by dialect, since the same *Lindisfarne Gospels* show also non-nominative subjects, as in Li-Mt 25.35, where *esurivi* is glossed as *mec.ACC gehyncgerde*. This shows how the process of syntactic change that led English to lose oblique subjects already started in the Old English period (though oblique subjects are still present in Middle English, cf. section 3.3.2.2), possibly also due to case syncretism of many nominative and accusative forms.

According to Donohue (2008: 54), oblique subjects would be instances of the same explicitly semantic case marking found in semantically aligned languages, also known as *split-* or *fluid-S languages*. In this view, the single participant in an intransitive event (i.e. the traditional “subject”) is split into two categories, depending on their active or inactive meaning. Middeke (2022: 253-254) reminds that the distinction between volitional activities and non-volitional states is relevant to Germanic and that, if we consider all single arguments of intransitive verbs as Dixon’s “S”, we could see a triple split of this category in Old English. Thus, Old English “S” could be encoded as the subject or the object of transitive constructions, i.e. as agent or patient (Mildeke’s S_A and S_B), or as the recipient of a ditransitive construction (S_R). These three categories would select a different case marking: nominative for agents (but also states/process carriers), accusative for patients and dative for recipients. Middeke (2022: 255ff.) argues that the choice of non-nominative case marking on single arguments is not random but follows the same semantic principle behind other constructions where the absence of a nominative implies the defocussing of a participant’s causation, volition and control. It would only be sensible, then, to understand oblique subjects of experiential verbs as a strategy to mark the lower degree of control and volition by the single participant. Therefore, as Möhlig-Falke (2012: 41) puts it, even if “the choice of a particular combination of nominal cases for the arguments of a given verb was certainly already highly conventionalized in Old English [...] nominal cases were meaningful categories that allowed

different interpretations between the participants”. Consistently with this, the verbs in my sample that feature such oblique subjects are emotion verbs, such as BE HUNGRY *hyngnan* and FEEL COLD *calan*, whereas other experiential verbs denoting perceptions rather than emotions, such as HEAR *hyran* or SEE *seon* do not allow oblique subjects. Middeke (2022: 255-256) thus claims that, if there was a difference in meaning between competing nominative and dative subjects, this should correspond to the difference between active (i.e. volitional) and inactive meaning, as shown in examples (31) and (32), adapted from her work:

- (31) *Ic* *ðæs* *næfre* *ne* *sceamige*
 1SG.NOM DET.GEN.SG never NEG shame.SBJV.PRS.1SG
 “I will never be ashamed of that.” (Psalms, Thorpe 1835: 24, BT s.v. *sceamian*)
 Translation from Latin Psalm 24.1: *Ad te, Domine, levavi animam meam; Deus meus, in te confido, non erubescam.*

- (32) *him* *ðæs* *ne* *sceamode*
 3PL.DAT DET.GEN.SG NEG shame.IND.PRET.PL
 “they were not ashamed (of that)” (Heptateuch, cootest, Gen:2.25.119)
 Translation from Latin Genesis 2.15: *erant autem uterque nudi Adam scilicet et uxor eius et non erubescabant.*

However, it is not clear how this same principle could be applied to verbs such as BE HUNGRY *hyngnan* or FEEL COLD *calan*, for which the experiencer does not have any control on their state (and if they had, they would probably not choose to be hungry or cold). Thus, it is difficult to find a difference between an occurrence of *hyngnan* with a nominative experiencer as in (30), reported again in (33), and for instance, example (34):

- (33) *forþam* *þe* *ge* *hingriað*
 because that 2PL.NOM be_hungry. IND.PRS.PL
 “[Woe to you who are satisfied now,] for you will be hungry.”
 (cowsgosp, Lk_[WSCp]:6.25.4026)

- (34) *Hwi* *hingriað* *ðe*
 Why be_hungry. IND.PRS.3SG 2SG.DAT
 “Why do you hunger? [If you are the Son of God, turn these stones to loaves, and eat.]”

(cocathom1,ÆCHom_I, 11:267.46.2023)

Remarkably, if one wanted to find any higher degree of intentionality, one could probably argue that example (34) – with a dative experiencer – shows a more intentional action, i.e. staying hungry and not doing anything to stop the hunger, i.e. turning the stones to loaves. For this reason, I do not think that the (marginal) competition between nominative and accusative/dative experiencers with this verb is ascribable to a different degree of intentionality.

As shown in examples (28) and (29), the competition between accusative and dative is well attested, also considering that the first and second person personal pronouns do not show formal distinction between accusative and dative, except in Anglian texts (von Mengden 2017b: 88-89). Though recognising that Old English cases were meaningful categories, agreeing with Möhlig-Falke's (2012) view that the use of these cases must have been lexicalised with specific verbs, Middeke (2022: 264-265) claims that it is difficult to find a difference between accusative and dative experiencer, and it seems likely that the two constructions were at least partially synonymous in Old English.

2.3.3. Two-place verbs

Two-place verbs are the most frequent class in my sample: 57 verbs out of a total of 95. They most frequently feature the [NOM,ACC] construction, i.e. taking the first A-like argument in the nominative and the second P-like argument in the accusative. These verbs show great variability both in the inherent semantic properties of their arguments (e.g. animacy) and their aspectual characteristics states (e.g. KNOW *cunnan*), activities (e.g. BOIL *wyllan*), accomplishments (e.g. EAT *etan*) and achievements (e.g. CUT *ceorfan*) are all found in my corpus featuring this construction. In the following sections, I will first discuss prototypically transitive verbs (i.e. verbs denoting events in which an agent intentionally causes a change of state or position upon a non-intentional patient). Then I will focus on non-prototypically transitive verbs featuring progressively less-affected P-like (section 2.3.3.2) and on verbs with less-affected A-like participants, i.e., in other words, experiential verbs (section 2.3.3.3).

2.3.3.1. Prototypically transitive verbs

The transitive class universally constitutes the core of bivalent verbs (Tsunoda 1985; Næss 2007). The traditional notion of “transitive verb” refers to a dichotomy: on the one hand a transitive verb requires two arguments to form a grammatical clause, on the contrary, intransitive verbs only require one argument. However, there are many languages in which this dichotomy does not cover adequately all the different possibilities. Actually, the notion of transitivity can be conceptualised as a prototype (Næss 2007: 12), which can be defined cross-linguistically by a set of semantic properties taken to represent its core meaning. This set of properties was best defined by Hopper & Thompson (1980), who divide these properties between “high” and “low” transitive value, as shown in (35).

(35) “Component parts of the Transitivity notion” (Hopper & Thompson 1980: 252)

	HIGH	LOW
A. PARTICIPANTS	2 or more participants, A and O	1 participant
B. KINESIS	Action	non-action
C. ASPECT	Telic	Atelic
D. PUNCTUALITY	Punctual	non-punctual
E. VOLITIONALITY	Volitional	non-volitional
F. AFFIRMATION	Affirmative	Negative
G. MODE	Realis	Irrealis
H. AGENCY	A high in potency	A low in potency
I. AFFECTEDNESS OF O	O totally affected	O not affected
J. INDIVIDUATION OF O	O highly individuated	O non-individuated

Building on Hopper & Thompson’s (1980) work Tsunoda (1985: 387) defined prototypical transitive verbs as “those verbs which describe an action that not only impinges on the patient but necessarily creates a change in it”. Thus, for example, *kill* is at the core of the Transitivity prototype, whereas *hit* is not. For this reason, we take the frame of *kill* as the model for the transitive frame. As in many other IE languages (e.g. Latin, Giuliani 2021: 39; or Gothic, Zanchi & Tarsi 2021:45), Old English transitive verbs, including KILL *cwellan* as in (36), instantiate the [NOM,ACC] construction, i.e. with an agent in the nominative (being the syntactic subject) and a patient in the accusative (being the syntactic direct object):

(36)	<i>ne</i>	<i>wolde</i>	<i>he</i>	<i>hi</i>	<i>cwellan</i>
	NEG	want.IND.PRET.3SG	3SG.NOM.M	3PL.ACC	kill.INF

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“he did not want to kill them” (comarvel,Marv:30.2.150)

It has to be noted that “kill” is among what Tsunoda (1981: 395) calls “direct effect” verbs in his verb-type hierarchy, which can be viewed – also in light of Hopper & Thompson’s list in (35) – as a “Transitivity Hierarchy”, shown in Table 7.

Type	1		2		3	4	5	6
Meaning	direct effect		perception		pursuit	knowledge	feeling	possession
Subtype	1a	1b	2a	2b				
Examples	kill, break	hit, shoot	see	look	search, wait	know, understand, remember, forget	love, like, want, need	possess

Table 7: Transitivity Hierarchy (adapted from Tsunoda 1981: 395)

This hierarchy has been taken as starting point for Malchukov’s (2005) work, in which he argues that it should be split into two sub-hierarchies, both starting from the transitive prototype and, respectively, deviating from it by decreasing patienthood or decreasing agenthood, the former instantiated by contact, pursuit and motion verbs, whereas the latter by experiential verbs, as shown in Figure 5. These hierarchies have then been confirmed by Haspelmath’s (2015b) work on transitivity prominence among ValPaL languages and verbs.

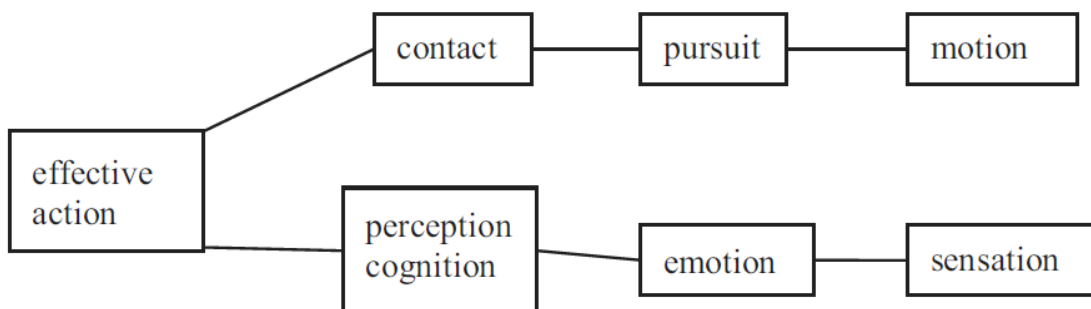


Figure 5: Split transitivity hierarchies (Malchukov 2005: 81)

The verbs featuring the [NOM,ACC] construction in my sample are shown in Table 8. These belong to different groups: i) prototypically transitive verbs, such as KILL *cwellan*, as in (36) above; ii) non-prototypically transitive verbs, i.e. denoting events in which no change of state or affectedness of

the patient is present, e.g. LEAVE *læfan*, as in (37) below; iii) experiential verbs of bodily sensations, cognition or emotion, in which the experiencer is encoded in the nominative and the stimulus in the accusative, such as SEE *seon*, as in (38):

- (37) *Se wælhreowa fæder Herodes*
 DET.NOM.SG.M cruel.NOM.SG.M father(M).NOM.SG Herode(M).NOM.SG
læfde fif suna
 leave.IND.PRET.3SG five son(M).ACC.PL
 “The cruel father, Herod, left five sons” (cocathom1,ÆCHom_I,_32:452.39.6381)

- (38) *We gesawon soðlice his steorran*
 1PL.NOM see.IND.PRET.PL truly POSS.3SG.M star(M).ACC.SG
on eastdæle
 on east_part(M).DAT.SG
 “Truly, we saw his star in the East” (cocathom1,ÆCHom_I,_5:217.12.895)

PaVeDa meaning	Old English verb	Basic coding frame
BEAT	beatan	1-nom V.subj[1] 2-acc (mid 3-dat)
BOIL (tr)	wyllan (tr.)	1-nom V.subj[1] 2-acc
BREAK	brecan	1-nom V.subj[1] 2-acc
BUILD	timbran	1-nom V.subj[1] 2-acc
BURN (tr)	bærnan (tr.)	1-nom V.subj[1] 2-acc
COOK	brædan	1-nom V.subj[1] 2-acc
COVER	bewreon	1-nom V.subj[1] 2-acc (mid 3-dat)
CUT (1)	ceorfan	1-nom V.subj[1] 2-acc
CUT (2)	snipan	1-nom V.subj[1] 2-acc
DIG	delfan	1-nom V.subj[1] 2-acc
DRESS	scrydan	1-nom V.subj[1] 2-acc (mid 3-dat)
EAT	etan	1-nom V.subj[1] 2-acc
FILL	fyllan	1-nom V.subj[1] 2-acc (mid 3-dat)
FRIGHTEN (1)	egesian	1-nom V.subj[1] 2-acc
FRIGHTEN (2)	fyrhtan	1-nom V.subj[1] 2-acc

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GRIND	grindan	1-nom V.subj[1] 2-acc
HEAR	hyran	1-nom V.subj[1] 2-acc
HIDE	hydan	1-nom V.subj[1] 2-acc
HIT	slean	1-nom V.subj[1] 2-acc (mid 3-dat)
HUG	clyppan	1-nom V.subj[1] 2-acc
HUNT (FOR)	huntian	1-nom V.subj[1] 2-acc
KILL	cwellan	1-nom V.subj[1] 2-acc
KNOW (1)	cnawan	1-nom V.subj[1] 2-acc
KNOW (2)	cunnan	1-nom V.subj[1] 2-acc
LEAVE	læfan	1-nom V.subj[1] 2-acc
LOAD	hladan	1-nom V.subj[1] 2-acc (mid 3-dat)
MEET	metan	1-nom V.subj[1] 2-acc
PEEL	be-rendan	1-nom V.subj[1] 2-acc
PUSH	scufan	1-nom V.subj[1] 2-acc (on 3-dat)
ROLL (tr)	a-wyltan	1-nom V.subj[1] 2-acc
SEARCH FOR	secan	1-nom V.subj[1] 2-acc
SEE	seon	1-nom V.subj[1] 2-acc (3-dat)
SHAVE (1)	sciran	1-nom V.subj[1] 2-acc
SHAVE (2)	be-sciran	1-nom V.subj[1] 2-acc
SINK (tr)	sencan (tr.)	1-nom V.subj[1] 2-acc
SMELL	stincan	1-nom V.subj[1] 2-acc
TAKE	niman	1-nom V.subj[1] 2-acc
TEAR (1)	teran	1-nom V.subj[1] 2-acc (mid 3-dat)
TEAR (2)	slitan	1-nom V.subj[1] 2-acc (mid 3-dat)
TELL	tellan	1-nom V.subj[1] 2-acc
THINK	þencan	1-nom V.subj[1] 2-acc
TIE (1)	tigan	1-nom V.subj[1] 2-acc
TIE (2)	bindan	1-nom V.subj[1] 2-acc
WASH (1)	wascan	1-nom V.subj[1] 2-acc
WASH (2)	þwean	1-nom V.subj[1] 2-acc

WINK (2)	be-priwan	1-nom V.subj[1] 2-acc
WIPE	wipian	1-nom V.subj[1] 2-acc (mid 3-dat)

Table 8: Old English verbs featuring the [NOM,ACC] construction in their basic pattern.

If compared with Aldai & Wichmann (2018: 269) hierarchy for transitive coding, the first 20 meanings on their scale, highlighted in bold in Table 8, are all encoded with the transitive frame, i.e. [NOM,ACC] construction, in Old English. Consistently with their lower position on the Aldai & Wichmann’s ranking (under position 20), verbs such as HELP *helpan*, FOLLOW *folgian*, LIKE *lician*, LOOK *locian*, FEAR *forhtian* and TOUCH *hrinan* do not feature (at least consistently) a basic transitive frame. On the other hand, despite their lower rank, verbs such as SMELL *stincan*, SEARCH FOR *secan*, MEET *metan*, THINK *þincan* and LEAVE *læfan* feature the transitive coding, i.e. the [NOM,ACC] construction.

Following Haspelmath (2015b), we can calculate how “transitivity prominent” a language is. Transitivity prominence is defined as “the extent to which they make use of transitive encoding” (Haspelmath 2015b: 131, 139), i.e. the number of transitive entries divided by the total number of entries in the dataset. A pattern is considered transitive if its two arguments are coded like the two arguments of break, i.e. the “breaker” and the “broken thing” micro-roles (Haspelmath 2015b: 136), thus the [NOM,ACC] construction in the case of Old English. As shown in Table 8, the Old English verbs featuring the [NOM,ACC] construction are 47 out of a total of 96. This means that the transitivity prominence of Old English is 0.49, which is slightly lower than PDE rank (0.58; cf. Table 3 in Haspelmath 2015b: 139). This makes sense considering case loss: the verbs featuring, for instance, a dative or genitive second argument in Old English came to feature a [NOM,ACC]⁴³ construction in PDE. Moreover, as it will be further discussed in section 3.3.3, English will generalise the transitive pattern also with those experiential verbs featuring a non-nominative subject in Old and Middle English.

2.3.3.2. Verbs with less affected P-like participants

As mentioned in section 2.3.3.1, among non-prototypically transitive verbs with less-affected P-like arguments are contact verbs, e.g. BEAT *beatan* or HIT *slean*, and pursuit verbs, e.g. FOLLOW *folgian*. However, if the former group consistently features the [NOM,ACC] construction, as shown in (39),

⁴³ It would probably be better to call it [NOM,OBL] construction, in which OBL stands for “oblique case”.

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folgian features both the [NOM,ACC] and the [NOM,DAT] construction, as shown, respectively, in (40) and (41); the latter with a P-like argument encoded in the dative being actually the most frequent.

(39) & *beoton* *hyne* *mid* *heora* *fystum*
 and beat.IND.PRET.PL 3SG.ACC.M with POSS.3PL fist(F).DAT.PL
 “and they beat him with their fists” (cowsgosp,Mt_[WSCp]:26.67.1969)

(40) *he* *fædera* *weg* *wæs*
 3SG.NOM.M father(M).GEN.PL way(N).ACC.SG be.IND.PRET.3SG
fylgende
 follow.PTCP.PRS
 “He was following the fathers’ way” (cobede,Bede_2:16.152.1.1453)

(41) *fylgað* *ge* *him*
 follow.IMP.PL 2 PL.NOM 3SG.DAT.M
 “[if he is God’s man,] follow him” (cobede,Bede_2:2.100.23.944)

Remarkably, this case alternation is found in the same text, i.e. Bede’s *Historia ecclesiastica* in this case, thus textual or dialectal factors can be ruled out. In fact, Middeke (2022: 205-206) does not mention any occurrence of *folgian* with an accusative second argument and she claims that the dative can be traced back historically to a “dative of interest”, i.e. originally expressing a beneficiary, thus the association between the dative and verbs like *folgian* “must have emerged when the semantic aspect of doing something by way of service to another was still salient”. The [NOM,DAT] construction is featured by the verb HELP *helpan* as well, which however shows also instances of a second argument encoded in the genitive ([NOM,GEN] construction), as in (42) and (43).

(42) *help* *nu* *þinum* *earmum* *moncynne*
 help.IND.SG now POSS.2SG.DAT.N poor.DAT.SG.N mankind(N).DAT.SG
 “help now your poor people!” (coboeth,Bo:4.10.15.126)

(43) *þonne* *hie* *naþer ne* *magon* *ne* *þin* *gehelpan,*
 when 3PL.NOM neither NEG can.PRS.PL NEG 2SG.GEN help.INF
ne heora selfra?

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“[He went to the sea] and climbed on the ship” (cocathom1,ÆCHom_I_18:317.17.3394)

- (45) *Gað nu to ðam huse*
 go.IMP.PL now to DET.DAT.SG.N house(N).DAT.SG

“Go now into the house” (cootest,Josh:6.22.5304)

- (46) *swa þæt ic on morgen hleop on
 min hors*
 so that 1SG.NOM on morning(M).ACC.SG jump.IND.PRET.3SG on
 POSS.1SG horse(N).ACC.SG

“[I recovered health and strength,] so that next morning I sprang upon my horse”
 (cobede,Bede_5:6.404.3.4073)

Some verbs of transfer can often occur with further additional R-like (possibly prepositional) arguments, indicating either a recipient or the direction of the transfer/movement. This is the case of CARRY *beran*, POUR *geotan* and PUSH *scufan*. In the case of *beran*, it is often a dative argument, possibly to be interpreted as a beneficiary, as visible in (47). However, prepositional third arguments are well-attested too, indicating direction of movement as in (48). In the case of POUR *geotan*, the third argument is most often the surface on which some liquid is poured, encoded with the PP *uppan*+3-acc as in (49); on the other hand, PUSH *scufan* is often found with directional prepositional arguments, as in (50).

- (47) *swa hwylc man swa þissum onlicnyssum
 so any.NOM.SG.M man(M).NOM.SG so DEM.DAT.PL image(F).DAT.PL
 & deofolgyldum ansægdnysse bereð
 and idol(N).DAT.PL oblation(F).ACC.SG bear.IND.PRS.3SG*

“whoever brings oblations to these images and idols” (cobede,Bede_1:7.36.27.304)

- (48) *& hine geber into ðam temple
 and 3SG.ACC.M bear.IND.PRET.3SG into DET.DAT.SG.N temple(N).DAT.SG*

“[He took him in his arms with great feeling,] and bare him into the temple”
 (cocathom1,ÆCHom_I_9:250.31.1593)

- (49) *& þu gytst þæt blod*

and 2SG.NOM pour.IND.PRS.2SG DEM.ACC.SG.N blood(N).ACC.SG
uppan *ðæt* *weofod* & *ymbe* *utan*.
 upon DEM.ACC.SG.N altar(N).ACC.SG and around out
 “and pour the blood upon the altar and around it.” (cootest,Exod:29.20.3387)

(50) & *het* *sceofan* *me* & *þæra*
 and command.IND.PRET.3SG push.INF 1SG.ACC and DEM.GEN.PL
bæcistra *ealdor* *on* *cweartern*.
 baker.GEN.PL chief(M).ACC.SG on prison(N).ACC.SG
 “and [the Pharaoh] ordered to send [lit. push] me and the chief baker in prison”
 (cootest,Gen:41.9.1655)

It is difficult to establish, based on frequency, if the verbs CARRY *beran*, and POUR *geotan* should be considered two- or three-place verbs. For this reason, the third argument is given in brackets as optional in their basic frame, but they are not considered to calculate the transitivity prominence.

2.3.3.3. Verbs with less affected A-like participants

In this section I will focus on verbs that are non-prototypically transitive verbs, since they are characterized by less-affected A-like participants, i.e. experiencer (an animate participant able to experience a situation) and stimulus (a participant that triggers and causes an experiential situation). The main property of experiencer participants is animacy (Luraghi 2020a: 36), whereas stimuli do not display any special feature that can be generalized over all types of experiential situations, as is animacy for experiencers (Luraghi 2020a: 38). As shown by Luraghi (2020a: 41), the diverse nature of experiential situations explains why they are encoded so heterogeneously, both cross-linguistically and within the same language, often alternating the occurrence of nominative vs. so called non-canonical subjects. In Old English, experiencers tend to be encoded as the agents of prototypical transitives, i.e. in the nominative. However, there are some exceptions, e.g. the verb LIKE *lician*.

In my corpus, two-place experiential verbs are i) cognition verbs: KNOW *cunnan* and *cnawan*, and THINK *þencan*; ii) perception verbs: HEAR *hyran*, LOOK AT *locian*, SEE *seon*, SMELL *stincan* and TOUCH *hrinan*; iii) emotions verb: FEAR *forhtian*, FRIGHTEN *egesian* and *fyrhtan*, and LIKE *lician*.

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Cognition verbs are the most consistent, as they almost always feature a basic [NOM,ACC] construction, i.e. the experiencer encoded in the nominative and the stimulus in the accusative, as in (51). Marginally, the verb KNOW *cunnan* and THINK *þencan* feature a genitive stimulus ((52)), i.e. a [NOM,GEN] construction, without any clear difference in meaning from the [NOM,ACC] construction. Accordingly, Middeke (2022: 125) argues that, despite semantically motivated differences can be found across different verbs, this difference in argument structure does not necessarily correspond to a different meaning.

- (51) *ne gecnawe we his nan þincg,*
 NEG know.SBJV.PRS.PL 1PL.NOM 3SG.GEN.M none.ACC.SG.N thing(N).ACC.SG.N
 “This is some foreign man of some other country; we know nothing of him”
 (cosevensl,LS_34_[SevenSleepers]:564.442)

- (52) *Drihten geþenc min þonne ðu to*
 Lord(M).NOM.SG think.IMP.SG 1SG.GEN when 2SG.NOM to
þinum rice becymst.
 POSS.2SG.DAT.SG.N kingdom(N).DAT.SG come.IND.PRES.2SG
 “Lord, think of me when you come to your kingdom”
 (cocathom1,ÆCHom_I,_37:506.270.7527)

The category of perception verbs shows more variability: of these five verbs, only SEE *seon* is always found in a basic [NOM,ACC] construction, as in (53). On the other hand, LOOK AT *locian*, is always found with prepositional second arguments, generally expressed by the PPs *on*+2-acc, *be*+2-dat or *to*+2-dat, the former shown in (54).

- (53) *þa gesawon we westan þone*
 then see.IND.PRET.PL 1PL.NOM westwards DET.ACC.SG.M
leoman sunnan
 light(M).ACC.SG.M sun(M).GEN.SG
 “Then we saw, in the West, the Sun’s light” (coalex,Alex:36.17.463)

- (54) *forðæm hi eall lociað mid bæm*
 because 3PL.NOM all.NOM.PL look.IND.PRS.PL with both.DAT.PL
eagum on þas eorðlican ðincg

eye(N).DAT.PL on DEM.ACC.PL.N earthly.ACC.PL.N thing(N).ACC.PL
 “because they all look with both eyes at earthly things” (coboeth,Bo:38.121.25.2424)

Remarkably, all three prepositions may have spatial meanings and be used to refer to both animate and inanimate participants in the semantic role of direction/goal or recipient. This is common to other ancient and modern IE languages, e.g. PDE, Gothic (Zanchi & Tarsi 2021: 48) or Latin (Giuliani 2021: 49). The coding of the stimulus as goal/direction can be interpreted as a similarity between verbs of seeing/looking and motion verbs, in the sense that sight can be directed towards or away from the stimulus. Moreover, as Zanchi & Tarsi point out (2021: 48) the use of PPs, which usually marks direction arguments, probably reflects the lower degree of affectedness of the stimulus participant, which does not undergo any change of state or position, unlike P-like participants.

Concerning HEAR *hyran* it features a [NOM,ACC] construction when it means ‘to hear’, thus with a second argument taking the semantic role of stimulus. On the other hand, when it means ‘to listen to, to obey’, it is found in the [NOM,DAT] construction, probably because the second argument is better interpreted as an addressee, usually encoded in the dative. Compare the examples (55) and (56), showing both constructions:

(55) *cwæð* *to* *þam* *biscope,* *siðþan*
 say.IND.PRET.3SG to DET.DAT.SG.M bishop(M).DAT.SG after
he *his* *word* *gehyrde*
 3SG.NOM.M POSS.3SG.M word(N).ACC.PL hear.IND.PRET.3SG
 “he said to the bishop, after he heard his words: [...]” (cobede,Bede_3:3.164.2.1572)

(56) *forþon* *ic* *him* *geornlic-or* *þeodde*
 because 1SG.NOM 3PL.DAT zealously-more serve.IND.PRET.3SG
 & *hyrde*
 and hear.IND.PRET.3SG
 “[Well, I am sure if our gods had any power, they would help me more,] for I more zealously served and obeyed them.” (cobede,Bede_2:10.134.18.1296)

Despite allowing the [NOM,DAT] construction in the above-mentioned contexts, the verb HEAR *hyran* behaves very similarly to SEE *seon*. The similarity between these two verbs has already been highlighted by Klein (1998: 172ff.), who claims that both HEAR *hyran* and SEE *seon* are often paired

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with the verb *ongytan* ‘perceive’, but this does not happen with the other perception verb TOUCH *hrinan*, which – on the other hand – allows for accusative, dative and genitive stimuli, respectively in (57), (58) and (59).

(57) & *he* *eorre* *þone* *cyning*
 and 3SG.NOM.M angry.NOM.SG.M DET.ACC.SG.M king(M).ACC.SG
liggende *gehran* *mid* *þære* *gyrde*
 lay.PTCP.PRS.ACC.SG.M touch.IND.PRET.3SG with DET.DAT.SG.F rod(F).DAT.SG
 “and he, angry, touch the laying king with the rod” (cobede,Bede_3:16.228.18.2345)

(58) & *se* *leoma* *gehran* *þæm*
 and DET.NOM.SG.M light(M).NOM.SG touch.IND.PRET.3SG DET.DAT.PL.N
treowum *ufonweardum.*
 tree(N).DAT.PL top.DAT.PL.N
 “and the [Sun’s] ray touched the tops of the trees.” (coalex,Alex:36.17.464)

(59) & *beheald* *þæt* *þes* *læcedom* *ne*
 and behold.IMP.SG that DEM.NOM.SG.M leechdom(M).NOM.SG NEG
hrine *ne* *wæteres* *ne* *eorðan.*
 touch.SBJV.PRS.3SG NEG water(N).GEN.SG NEG earth(F).GEN.SG
 “[And have a care that] this leechdom touch neither water nor earth.”
 (coquadru,Med_1.1_[de_Vriend]:2.1.62)

Remarkably, in example (59), the negation is present, which is significant because some European languages feature the so-called “partitive of negation” (Miestamo 2014). However, the Bosworth/Toller Dictionary shows a non-negated example of *hrinan* featuring a genitive second argument (*Ðu his hrinan meah* ‘you may touch it’), thus discarding the hypothesis for a connection between negation and genitive. The genitive in (59) can be better explained with what Middeke (2022: 106ff) calls “unboundedness construction”, i.e. here the genitive is used to express that the action expressed by the verb is incomplete. Though *hrinan* strongly prefers the [NOM,ACC] construction, the “unboundedness construction” is often found with compounds of *hrinan* (e.g. *æthrinan* or *onhrinan*) and may mean that though the participant is touched, it does not undergo any change of state of the kind usually implied by the accusative (Middede 2022: 108). However, the [NOM,GEN] construction is not unique of Old English, but it is found also with other IE languages’

perception verbs, e.g. in Homeric Greek, as shown by Silvia Luraghi (2020a: 115ff.). Indeed, she shows that verbs referring to touch consistently feature the [NOM,GEN] construction, differently from sight verbs, consistently featuring the [NOM,ACC] construction, and hearing verbs often found with construction variation.

The verb SMELL *stincan* is worth of particular attention since it features both intransitive and transitive frames, none of which seems more “basic” than the other. Klein (1998: 65) claims that *stincan* is the only perception verb in Old English that can describe actions in three different ways: i) the descriptive use, in evaluative or comparative expressions like “it smells nice” or “it smells like seaweed” (Klein 1998: 65-66); ii) the experiential use, in which animate perceivers (usually humans) are involved. However, this usage is always marked by the prefix *ge-* (Klein 1998: 72); iii) the deliberative use, in which a willed and dynamic action is required (Klein 1998: 76).⁴⁶ Examples of the descriptive and the experiential use are, respectively, shown in (60) and (61).

(60) *þeah* *ðe* *heo* *on* *gewunelicum* *synnum*
 though that 3SG.NOM.F on ordinary.DAT.PL.F sin(F).DAT.PL
fule *stince*
 foully smell.SBJV.PRS.3SG
 “though it foully stinks in habitual sins” (cocathom1,ÆCHom_I,_33:462.103.6638)

(61) *sona* *swa* *hi* *ðæs* *landes* *lyft*
 soon as 3PL.NOM DET.GEN.SG.N land(N).GEN.SG air(N).ACC.SG
gestuncan *swa* *swulton* *hi*.
 smell.IND.PRET.PL so die.IND.PRET.PL 3PL.NOM
 “but they died as soon as they smelt the air of the land” (cobede,Bede_1:1.30.1.224)

Most of the occurrences of *stincan* in my reference corpus are present participles used adjectivally, thus pointing to a basic monovalent pattern, with a “causal” alternation (Klein’s experiential use). However, one occurrence of object omission, shown in (62), suggests an interpretation of the bivalent pattern as basic, with a “non-causal” alternation (Klein’s descriptive use). This latter is the interpretation chosen and stored into the PaVeDa database.

⁴⁶ Klein claims that there is only one clear example of the deliberative use of *stincan*, from the *Monasterialia indicia* (Klein 1998: 76)

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- (62) *sume magon geheran, sume gefredan, sume gestincan.*
 some may.IND.PRS.PL hear.INF some feel.INF some smell.INF
 “Some can hear, some feel, some smell” (coboeth,Bo:41.146.3.2910)

Lastly, I will discuss the emotion verbs FEAR *forhtian*, FRIGHTEN *egesian* and *fyrhtan*, and LIKE *lician*. Whereas FRIGHTEN *egesian* and *fyrhtan* consistently features the [NOM,ACC], FEAR *forhtian* is found in a basic frame with the experiencer in the nominative and a prepositional stimulus, usually encoded with the PP *for*+2-dat, as in (63), though some marginal occurrences of the [NOM,ACC] as well. Since the [NOM,ACC] construction is the one featured by prototypical transitive event, in which an agent volitionally affects a patient, it can be argued that occurrences of *forhtian* with the [NOM,ACC] construction imply a higher volitionality of the experiencer, as confirmed by example (64), in which the people are encouraged to (voluntarily) avoid to be afraid.

- (63) *Ic [...] ne forhtige for þinum*
 1SG.NOM [...] NEG fear.IND.PRS.1SG for POSS.2SG.DAT.PL.N
tintregum
 torment(N).DAT.PL
 “I, [in the name of my Lord, in no wise] fear your torments,”
 (cocathom1,ÆCHom_I,_29:423.152.5757)

- (64) *ne nan ðingc ne forhtiað.*
 NEG none.ACC.SG.N thing(N).ACC.SG NEG fear.IMP.PL
 “Do not fear anything” (cootest,Deut:1.20.4469)

On the other hand, the verb LIKE *lician* features the [DAT,NOM] construction,⁴⁷ i.e. the experiencer is encoded in the dative, as in (65), whereas the stimulus is in the nominative, as in German *gefallen* or Gothic *leikan* and *ga-leikan* (Zanchi & Tarsi 2021: 46).

- (65) *þa licode him seo arfæste*
 then like.IND.PRET.3SG 3SG.DAT.M DET.NOM.F honourable.NOM.SG.F
dæd þæs cyninges.
 deed(F).NOM.SG DET.GEN.SG.M king(M).GEN.SG

⁴⁷ This “inverted frame” is most frequently found in verbs meaning LIKE in the languages of the world, as shown by Aldai & Wichmann (2018: 273)

“Then he liked the honourable deed of the king” (cobede, Bede_3:4.166.8.1593)

Concerning the position of the experiencers, Allen (1995: 104-111) shows that they are generally found in preverbal position. However, this is not entirely true for what she calls “Type I”⁴⁸ constructions, in which the preverbal position seems to be linked to the situation in which case marking was “not likely to be unclear”. She also suggests that, with the other two types (“Type N”⁴⁹ and “Type S”⁵⁰ constructions), the preverbal position of the Experiencer can be linked to the subject status of these Experiencer, despite not being encoded in the nominative.

Unlike BE HUNGRY *hyngnan*, which already shows at least three occurrences with a nominative experiencer already in Old English (as shown in section 2.3.3.2), LIKE *lician* consistently features the [DAT,NOM] construction. The only occurrence hinting to a nominative experiencer is shown in (66), where, however, the stimulus is not encoded in the accusative (as expected by the PDE pattern), but with the PP *on+2-acc*.

(66) *on þe ic gelicode.*
 on 2.SG.ACC 1SG.NOM like.IND.PRET.3SG
 [“You are my Son, whom I love;] with you I am well pleased”
 (cowsgosp, Mk_[WSCp]:1.11.2203)

This section has shown how experiential verbs show a greater variability in argument coding, which is consistent with their variation in the “dimension of agentivity of proto-agents” (Aldai & Wichmann 2018: 275).

2.3.4. Three-place verbs

Three-place verbs are verbs that can take three different arguments. They can be divided into i) verbs featuring three referential arguments, and ii) verbs with two distinct referential arguments and a third predicative complement. Examples for both types occur in my corpus, namely ASK FOR *axian*, BRING *bringan*, GIVE *gyfan*, as in (67), PUT *settan*, SAY *secgan*, SHOW *tæcan*, *eowan*, *æt-eowan*, TEACH *læran*,

⁴⁸ In “Type I”, the Experiencer is in the dative, and the Theme is in the nominative. (Allen 1995: 73)

⁴⁹ In “Type N”, the Experiencer is in either the dative or the accusative case, and the Theme is encoded in the genitive or by a PP. The verb is always in the third person singular form, whatever the number or person of the Experiencer or Theme. (Allen 1995: 70). “Type II” differs from “Type N” only in that the Experiencer is in the nominative. (Allen 1995: 72).

⁵⁰ “Type S” constructions have non-nominative Experiencers, but no formal subject (Allen 1995: 86).

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tæcan, and THROW *weorpan* belonging to group i), whereas NAME *namnian*, shown in (68), to group ii).

(67) *gif* *me* *nu* *mettas* *and* *win*
give.IMP.SG 1SG.DAT now food(M).ACC.PL and wine(N).ACC.SG
“Give me now food and wine” (coeust,LS_8_[Eust]:259.270)

(68) *aðle* [...], *þe* *Grecas* *nemnað* *paralysis*
illness(F).ACC.SG [...] REL Greek(M).NOM.PL name.IND.PRS.PL *paralysis*
“[he felt his body from the head to the foot half smitten with the infirmity,] which the
Greeks call paralysis,” (cobede,Bede_4:32.378.22.3784)

Verbs in (i) are many and not homogeneous in their syntactic encoding of arguments. In the literature, much attention has been paid to the so-called “ditransitive construction”, which can be defined as a (ditransitive) verb, with an agent argument (A), a recipient-like argument (R) and a theme argument (T) (Malchukov et al. 2010: 2). In Old English the A-argument is systematically coded in the nominative, the T-argument in the accusative, whereas the coding of R-like arguments shows higher variability. It can be marked by a second accusative, by a dative or by a PP, the latter two often used interchangeably. However, the so-called “dative alternation” (cf. section 2.4.1.2) was not present in Old English as it is known in PDE: a clear link between the double object construction and the prepositional phrase headed by ‘to’ only emerged in Middle English (Zehentner 2019: 8-9)

Concerning the scope of the ditransitive construction, Vázquez-González & Barðdal (2019) have argued for a broader usage of it in all branches of Early Germanic, than it is in Modern languages. In particular, they show that beneficiaries and maleficiaries also play a considerably more important role (Vázquez-González & Barðdal 2019: 592). Consider Figure 6, representing the scope of the construction in Old English:

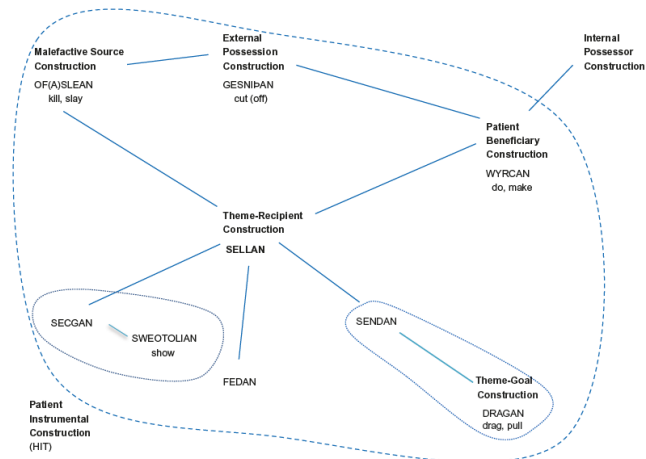


Figure 5: The typology of the ditransitive construction in Old English.

Figure 6: The scope of the ditransitive construction in Old English (Vázquez-González & Barðdal 2019: 592)

In their basic meaning, ditransitive constructions denote an event of transfer of the theme (T) from an agent (A) to a recipient (R). The transfer can be both possessive, physical and concrete (as in ‘give’) but also more abstract (as in ‘offer’). Nonetheless, the label ditransitive can also be applied to verbs of ‘cognitive transfer’ (as ‘teach’), whose third argument cannot be described as an R-argument in the narrow sense, but rather as a R-like argument.

The most frequent ditransitive construction in the early Germanic languages is the [NOM,ACC,DAT] (Vázquez-González & Barðdal 2019: 597), i.e. the A participant is encoded in the nominative, the T argument in the accusative, and the R-like argument in the dative (sometimes alternating with or substituted by the PP *to* + 3-dat, cf. the so-called “dative-alternation” in section 2.4.1.2). That means that T is treated like the monotransitive P, but R is treated in a special way. This is called “indirect alignment” by Haspelmath (2015a: 22). Some semantic restrictions characterise the participants of prototypical transfer verbs: both the A and R arguments have to be animate, whereas the T argument should be inanimate. Nonetheless, verbs like BRING *bringan* or SEND *sendan* regularly occur with inanimate recipients (taking the semantic role of direction/goal) and animate themes. In this case, the R argument is expressed by the PP *to* + dative, which regularly expresses direction/goal. Compare example (69), featuring a prototypical transfer event, and example (70), in which *sendan* appears with an animate theme and an inanimate recipient:

- | | | | | |
|------|----------------|--------------|----------------|----------------------|
| (69) | <i>Ðæt he</i> | <i>se</i> | <i>papa</i> | <i>Æðelbyrhte</i> |
| | that 3SG.NOM.M | DET.NOM.SG.M | Pope(M).NOM.SG | Æthelberht(M).NOM.SG |

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þam *cyninge* *gewrit* & *gyfe*
 DET.DAT.SG.M king(M).DAT.SG letter(N).ACC.SG and gift(F).ACC.SG
sende
 send.SBJV.PRET.3SG
 “That the pope sent to king Æthelberht a letter and presents”
 (cobede,BedeHead:1.10.15.31)

(70) *And hi* *ða* *eft* *sendon* *ærendracan*
 and 3PL.NOM then again send.IND.PRET.PL messenger(M).ACC.PL
to Rome
 to Rome(F).DAT.SG
 “and they sent again messengers to Rome” (cobede,Bede_1:9.44.23.383)

The construction [NOM,ACC,ACC] is also represented: the communication verbs ASK FOR *ascian*, SHOW (and TEACH) *tæcan* and TEACH *læran* can feature both accusative and dative R, as shown in (71) and (72). When the R argument is encoded in the accusative, it is referred to as “neutral alignment” (Haspelmath 2015a: 22), as the T and R arguments are coded in the same way.

(71) & *hine* *godcunde* *lare* *lærde*.
 and 3SG.ACC.M divine.ACC.SG.F teaching(f).ACC.SG teach.IND.PRET.3SG
 “and taught him the divine doctrine” (cobede,Bede_3:5.168.30.1648)

(72) *se* *him* & *his*
 DET.NOM.SG.M REFL.3SG.DAT.M and POSS.3SG.M
hiwum *godcunde* *lare*
 member_of_houshold(M).DAT.PL divine.ACC.SG.F teaching(f).ACC.SG
lærde,
 teach.IND.PRET.3SG
 “he taught the divine doctrine to himself and his household,”
 (cobede,Bede_3:17.230.12.2358)

The verb FILL *fyllan* exhibits what Haspelmath calls “secundative alignment” (Haspelmath 2015a: 22), i.e. when the T is treated in a special way while the R is treated like the monotransitive P. In

these cases, the T argument, i.e. the substance which is put to fill a container (the R argument) is encoded in the genitive or by the PP *mid* + 3-dat, as shown respectively in (73) and (74).

(73)	&	<i>ælcas</i>		<i>godes</i>		<i>þeawas</i>		<i>he</i>
	and	each.GEN.SG.M		good.GEN.SG.M		custom(M).GEN.SG		3SG.NOM.M
		<i>gefyllð</i>		<i>þone</i>		<i>þe hine</i>		<i>lufað.</i>
		fill.IND.PRS.3SG		DET.ACC.SG.M		REL 3SG.ACC.M		love.IND.PRS.3SG

“and just, and it fills him who loves it with every good quality.” (coboeth,Bo:27.62.26.1165)

(74)	&	<i>hi</i>		<i>ða</i>		<i>gefyldon</i>		<i>twelf</i>	<i>wilian</i>
	and	3PL.NOM		then		fill.IND.PRET.PL		twelve	basket.ACC.PL
		<i>mid ðam</i>				<i>bricum.</i>			
		with DEM.DAT.PL.M				fragment(M).DAT.PL			

“and they filled twelve baskets with the fragments.”

(cocathom1,ÆCHom_I, 12:279.121.2293)

To conclude this section, I will briefly address the topic of three-place verbs with a predicative third argument, which is not referential, introduced in (ii). This group is represented in my corpus by the verb NAME *namnian*, shown in (68) above. It is generally found in a [NOM,ACC,NOM] pattern, in which the third non-referential argument, i.e. the name, is in the nominative. However, the BT dictionary mentions one occurrence in which the third predicative argument is in the accusative, as shown in (75). However, in my sample, this seems to happen only when the third argument is not a proper name, as in (76).⁵¹

(75)	<i>Hwi namode</i>		<i>Crist</i>		<i>Abel</i>
	why name.IND.PRET.3SG		Christ(M).NOM.SG		Abel(M).ACC.SG
	<i>rihtwisne?</i>				
	righteous.ACC.SG.M				

“Why did Christ call Abel righteous?” (BT, Boutr. Scrd. 18, 6)

(76)	<i>þe we</i>		<i>nemniað</i>		<i>halgan</i>		<i>dæg</i>
	REL 1PL.NOM		name.IND.PRS.PL		holy.ACC.SG.M		day(M).ACC.SG

⁵¹ As one of the reviewers of this thesis suggests, this might have to do with the fact that the proper noun lacks an accusative ending, hence accusative is identical to nominative.

“[On the Lord's day of the first fasting week], which we name Holy Day”
(comary,LS_23_[MaryofEgypt]:110.73)

2.4. Old English valency alternations

In the ValPaL/PaVeDa project, a valency alternation is characterised by two different coding frames which are productively (or regularly) featured by two verbs sharing the same stem (Malchukov 2015: 91). Alternations are divided into coded and uncoded alternations: the former are marked on the verb by means of affixes, clitics, or auxiliaries; whereas in the latter no morphological marking is present. A pattern can be recognised as a valency alternation if it satisfies the following criteria: i) it involves arguments and not adjuncts; ii) it has to concern the same lexeme, i.e. avoiding periphrasis; iii) it should involve referential and not clausal arguments⁵²; iv) it should manifest itself in a different coding⁵³; v) it should not depend on properties of the arguments, such as animacy (Malchukov 2015: 91-95). For the sake of clarity, in this thesis, I further divided the uncoded alternations between “direct case vs PP alternations” and other uncoded alternations.

In this section, I will first discuss alternations involving the use of a prepositional phrase to substitute an argument expressed in a prepositionless case (section 2.4.1). I will then deal with uncoded alternations, i.e. benefactive and malefactive (2.4.2.1), alternations related to body parts (2.4.2.2), cognate/kindred argument insertions (2.4.2.3), object omissions and insertions (2.4.2.4) and finally reflexive and reciprocal (2.4.2.5), this latter discussed among uncoded alternations – differently from other languages, e.g. Gothic (Zanchi & Tarsi 2021), because of the absence of an actual reflexive pronoun (cf. among others Van Gelderen, 2000; Sinar, 2006; Pielecha, 2014). The chapter ends with the discussion of coded alternations, mainly the applicative alternation (2.4.3.1), the causal vs non-causal alternation (2.4.3.2), the passive (2.4.3.3) and the “Man-alternation” (2.4.3.4).

2.4.1. Direct case vs PP alternations

In these alternations, a prepositionless case (usually, but not exclusively, the accusative) is substituted by a prepositional phrase. Except for the “to-resultative” alternation, these are all valency rearranging

⁵² However, in the database of Present-Day English some clausal alternations are present: e.g. among others “Direct Quotation”, “That-complement”, “Wh-complement”. (<https://paveda.unipv.it/contributions/stan1293#talternations>)

⁵³ However, some alternations do share the same coding frame (cf. e.g. Old English passive and non-causal passive).

strategies, i.e. they do not change the number of the arguments, but they modify their encoding. For the sake of comparison, above all within the history of English, when possible⁵⁴, I used the same names of the alternations chosen by Goddard (2013) for his PDE database. This section is organised alphabetically and will begin with the conative alternation (2.4.1.1), then I will discuss the well-known dative alternation (2.4.1.2). Section 2.4.1.3 deals with instrumental subjects and objects, whereas section 2.4.1.4 is about the partitive. Finally, I will discuss the to-resultative - the sole valency augmenting alternation of this group (2.4.1.5) and the topic-about alternation (2.4.1.6)

2.4.1.1. Conative

In her work on PDE, Levin (1993) defines the conative alternation as follows:

“a transitivity alternation in which the object of the verb in the transitive variant turns up in the intransitive conative variant as the object of the preposition in a prepositional phrase [...] [it] describes an “attempted” action without specifying whether the action was actually carried out. The conative alternation seems to be found with verbs whose meaning include notions of both contact and motion.” (Levin 1993: 43)

However, if Levin’s conative alternation is found only with the preposition *at* (OE *æt*), Old English shows this alternation also with other adpositions, such as *on*, *ongean* or *after*. In the PaVeDa database of Old English I defined the conative alternation as “A canonically transitive verb implying physical affect, via motion and contact, appears without a direct object, but the expected direct object appears in a PP.”⁵⁵

Consistently with Levin’s data on “verbs of contact by impact”, Old English HIT *slean* seems to allow the conative alternation, as in the sole occurrence of the kind found in my prose reference corpus, shown in (77):

(77)	<i>And þam</i>	<i>þe</i>	<i>slihþ</i>	<i>on</i>	<i>þin</i>
	and DEM.DAT.SG.M	REL	hit.IND.PRS.3SG	in	POSS.2SG.ACC.SG.N
	<i>gewenge</i>	<i>wend</i>	<i>oðer</i>	<i>agen.</i>	
	cheek(N).ACC.SG	turn.IMP.SG	other.ACC.SG.N	again	

“And give to the one who hits on your cheek the other [cheek]”

⁵⁴ The “instrument to object” alternation is not present in the PDE database, whereas the “to-resultative” alternation is a variant of the PDE “Into-resultative”.

⁵⁵ <https://paveda.unipv.it/contributions/olde1238#alternations>

2. Old English

(cowsgosp,Lk_[WSCp]:6.29.4034_ID)

A similar, more frequent frame is the “locus of personal contact”, in which the PP expressing the hit body part is always found with the possessor in the dative (cf. section 2.4.2.2 on alternations related to body-part alternations), which however cannot be accounted for as conative. Indeed, the passage in the Latin Vulgate corresponding to (77) shows an external possessor (*qui te percutit in maxillam* ‘who hits you in the cheek’, Lk, 6: 29), pointing to a possible Latin influence, if one analyses *pe* as accusative/dative form of the second person singular personal pronoun and not as the invariable relative particle. Though not very frequent (only four occurrences in the whole corpus I analysed), an external possessor can be found with a possessive, as in (77), but also in (78). However, I chose to follow YCOE annotation and consider *pe* in (77) as relative particle, also because it is frequent to find the dative pronoun *pam* followed by *pe*, when it is a relative pronoun. Also, a further example of conative alternation with *slean* is found outside of my reference corpus (cf. Giarda 2022: 40), as shown by example (79) from the *Old English Martirology*. Moreover, the same alternation is found also in the Gothic cognate *slahan* (Zanchi & Tarsi 2021: 54).⁵⁶

(78)	<i>Sume</i>	<i>hyne</i>	<i>slogon</i>	<i>on</i>	<i>his</i>
	some.NOM.PL	3SG.ACC.M	hit.IND.PRET.PL	on	POSS.3SG.M
	<i>ansyne</i>	<i>mid hyra</i>	<i>bradum</i>		<i>handum</i>
	face(F).ACC.SG	with POSS.3PL	broad.DAT.PL.F		hand(F).DAT.PL

“Some hit him in the face with their open hands” (cowsgosp,Mt_[WSCp]:26.67.1970)

(79)	<i>ond he</i>	<i>sloh</i>	<i>ðriwa</i>	<i>mid his</i>
	and 3SG.NOM.M	hit.IND.PRET.3SG	three-times	with POSS.3SG.M
	<i>cricce</i>	<i>on ða</i>	<i>eorðan</i>	
	crutch(F).DAT.SG	on DEM.ACC.SG.F	earth(F).ACC.SG	

“And he struck the earth three times with his crutch.”
(comart3,Mart_5_[Kotzor]:Ap5,A.12.529)

⁵⁶ However, the verb *slahan* is not used in the same passage, where also Gothic shows an external possessor (*þamma stautandin þuk.ACC.SG bi kinnu*; Lk 6:29). An example of the conative alternation with Gothic *slahan* can be found at <https://paveda.unipv.it/alternationvalues/128817>.

Remarkably, the notion of “attempted action” postulated by Levin (1993: 43) seems unsuitable to example (77), but it fits better with a second occurrence found in poetry, from *Beowulf*, shown in (80), in which the periphrasis *goda þæt he me ongean slea* indicates the art of war:

(80)	<i>Nat</i>		<i>he</i>		<i>þara</i>		<i>goda</i>
	not_know.IND.PRET.3SG		3SG.NOM.M		DET.GEN.PL.N		good(N).GEN.PL
	<i>þæt he</i>		<i>me</i>		<i>ongean</i>		<i>slea</i>
	that 3SG.NOM.M		1SG.ACC/DAT		towards		hit.SBJV.PRS.3SG

“He does not know the arts, how to hit at [lit. towards] me” (cobeowul,22.681.574)

Differently from Levin’s study, the conative alternation is also found with the verb TOUCH *hrinan*. If the example from Levin (1993: 43) ***Terry touched at the cat* is considered ungrammatical, the expression of the second argument with the PP *æt+dat* is allowed in one occurrence from my corpus, once again from *Beowulf*, as in (81).

(81)	<i>oððæt</i>		<i>deaðes</i>		<i>wylm</i>		<i>hran</i>
	until		death(M).GEN.SG		flux((M).NOM.SG		touch.IND.PRET.3SG
	<i>æt heortan.</i>						
	at		heart(F).DAT.SG				

“until the flux of death reached [lit. touched at] his heart.” (cobeowul,70.2267.1847)

A verb which does not involve contact in its meaning, but nonetheless allows a conative alternation is FOLLOW *folgian* (as in as it happens in Gothic, Zanchi & Tarsi 2021: 80), which can be found with a second argument expressed with the PP *æfter+dat*, as in (82).

(82)	<i>Æfter</i>		<i>him</i>		<i>fylgde</i>		<i>in</i>		<i>þone</i>
	after		3SG.DAT.M		follow.IND.PRET.3SG		in		DEM.ACC.SG.M
	<i>biscophad</i>				<i>Fiinan</i>				
	episcopate.ACC.SG.M				Finan(M).NOM.SG				

“Finan followed him in the episcopate” (cobede,Bede_3:14.204.10.2074)

2.4.1.2. Dative alternation

This alternation is defined by Goddard (2013) as follows:

2. Old English

“With verb of transfer of possession, in the basic pattern, the thing transferred is direct object with the recipient (or intended recipient) in a PP headed by preposition *to*; in the nonbasic pattern, the recipient appears as direct object in postverbal position with the thing transferred following as an unmarked second object.” (Goddard, 2013).⁵⁷

This is based on Levin’s (1993: 47-48) definition as “an alternation between the propositional frame ‘NP1 V NP2 *to* NP3’ and the double object frame ‘NP1 V Np3 NP2’”. Thus, in PDE, what alternates in these constructions is the position and the syntactic encoding of the recipient (Zehentner 2019: 1). This is not systematic in Old English, where the alternation as it is in PDE, as Zehenter (2019: 8) reminds, “was not yet present at all”. Indeed, the most prototypical transfer verb GIVE *gyfan* is never found in my corpus with a prepositional R argument. However, consistently with Mitchell’s *Old English Syntax* (1985: 512) and De Cuypere’s (2015) corpus-based study, caused-motion and communication verbs do allow the expression of the R argument both with the simple dative and the PP *to*+3-dat, though the latter is more frequent. Thus, the definition of the dative alternation in the PaVeDa database of Old English is the following:

“With verb of communication and transfer of possession, the recipient argument could be expressed either as a simple dative or as a PP headed by the preposition *to*. It is not possible to determine a common basic frame for all verbs, since some have higher frequencies for the dative recipient and others prefer the PP.”⁵⁸

Since different verbs show different frequencies for the two alternatives, I labelled as “dative alternation” either of the two options which was less frequent.⁵⁹ Thus, for CARRY *beran*, BRING *bringan*, and SAY *secgan*, in which the most frequent frame (i.e. the basic frame) showed an R argument encoded in the simple dative, the dative alternation is represented by the frame “1-nom V.subj[1] 2-acc to 3-dat”, as shown in (83) and (84).

(83) BRING *bringan*, basic frame: 1-nom V.subj[1] 2-acc 3-dat

<i>þisan</i>	<i>Gode</i>	<i>we</i>	<i>offrunga</i>
DEM.DAT.SG.M	God(M).DAT.SG	1PL.NOM	offering(F).ACC.PL

⁵⁷ <https://paveda.unipv.it/alternations/3472397016>

⁵⁸ <https://paveda.unipv.it/contributions/olde1238#alternations>

⁵⁹ BRING *bringan* simple dative 105, to+dat 90 (total occurrences: 405); CARRY *beran*: simple dative 23, to+dat 6 (total occurrences: 311); SAY *secgan* simple dative 818, to+dat 5 (total occurrences: 1547); SEND *sendan* simple dative 51, to+dat 138 (total occurrences: 478).

gelome bringað

often bring.IND.PRS.PL

“we frequently bring offerings to this God” (cosevensl,LS_34_[SevenSleepers]:153.110)

- (84) BRING *bringan*, dative alternation: 1-nom V.subj[1] 2-acc to 3-dat

þonne ne mæg ic nan

then NEG may.IND.PRS.1SG 1SG.NOM none.ACC.SG.N

gewis bringan to minum geferum.

certain(N).ACC.SG bring.INF to POSS.1SG.DAT.PL.M companion(M).DAT.PL

“then I can bring no certain news to my companions”

(cosevensl,LS_34_[SevenSleepers]:527.405)

On the other hand, since the R argument of send *sendan* was more frequently encoded with the PP *to+dat*, the dative alternation has a simple dative third argument, as in (85) and (86).

- (85) SEND *sendan*, basic frame: 1-nom V.subj[1] 2-acc to 3-dat

Ðæt Lucius Brytta cyning sende

that Lucius(M).NOM.SG Briton(M).GEN.PL king(M).NOM.SG send.IND.PRET.3SG

gewritu to Eleutherio þam papam

letter(N).ACC.PL to Eleutherius(M).DAT.SG DEM.DAT.SG.M Pope(M).DAT.SG

“About the fact that Lucius, king of Britons, sent letters to Pope Eleutherius”

(cobede,BedeHead:1.6.12.5)

- (86) SEND *sendan*, dative alternation: 1-nom V.subj[1] 2-acc 3-dat

Ðæt he se papa Æðelbyrhte

that 3SG.NOM.M DEM.NOM.SG.M Pope(M).NOM.SG Æthelberht(M).DAT.SG

þam cyninge gewrit &

DEM.DAT.SG.M king(M).DAT.SG letter(N).ACC.SG and

gyfe sende:

gift(F).ACC.PL send.IND.PRET.3SG

“About the fact that the Pope sent king Æthelberht a letter and gifts”

(cobede,BedeHead:1.10.15.31)

2. Old English

Levin (1993: 47-48) claims that there seems to be an animacy restriction on the “double object construction”. Indeed, I have not found in my corpus any example in which the simple dative encodes an inanimate entity. However, as shown by examples (83)-(86) above, there is no univocal correspondence between inanimate entities and the *to*+dat pattern, which was used to encode animate recipients as well.

As mentioned in section 2.3.2.1, the basic frame of the verb TALK *sprecan* is not immediately recognisable. As I chose to consider it a one-place verb, with optional second and third arguments, the latter does not appear in the basic frame. However, since it is most frequently found expressed by a PP (usually headed by *to*, but also by *mid/wið*),⁶⁰ the dative alternation has a simple dative third argument, as shown in (87) and (88). Remarkably, the third R argument is encoded in the simple dative only when a second argument is also added, confirming the link of the dative alternation with ditransitive verbs (cf. Zehentner 2019).

- (87) & *wæs* *ðus* *sprecende* *to* *Accan*
 and be.IND.PRET.3SG thus talk.PTCP.PRS to Acca(M).DAT.SG
þam *preoste*
 DEM.DAT.SG.M priest(M).DAT.SG
 “and thus talked to the priest Acca” (cobede,Bede_5:17.462.16.4654)

- (88) & *ge* *gehyrað* *hwæt* *ic*
 and 2PL.NOM hear.IND.PRS.PL what(N).ACC.SG 1SG.NOM
eow *sprece*.
 2PL.DAT talk.PRS.1SG
 “and you hear what I say to you” (cootest,Gen:45.12.1943)

Zehentner (2019: 6) also reminds us that the nature of the two arguments of ditransitive verbs can be linked to passivisation: in PDE’s “double object construction”, i.e. the one with the simple dative, it is acceptable to passivise the recipient, whereas the theme cannot be the subject of a passive clause. On the other hand, when the recipient is introduced by *to*, it is perfectly grammatical to passivise

⁶⁰ The verb TALK *sprecan* is found 48 times with *mid/wið*+3, 138 times with *to*+3 and only 8 times with a simple dative recipient (total occurrences: 626).

the theme. The same cannot be said for Old English, since none of the above-mentioned verbs seem to allow the passivisation of R arguments.⁶¹

Finally, it must be noted that it is not always easy to distinguish between a “dative alternation” and a “benefactive alternation” (Broccias & Torre 2020: 170-171, cf. section 2.4.2.1), since the “double object construction”, i.e. the dative R argument, was used to code indirect affectedness, i.e. both recipient and benefactive scenarios (Broccias & Torre 2020: 185).

2.4.1.3. Instrument to subject and to object alternation

This section deals with two rearranging alternations, in which the instrument (usually a frequent adjunct) is promoted to subject or to object of the verb, thus being encoded respectively in the nominative and in the accusative, instead of the PP *mid*+dat or – less frequently – a simple dative. When the instrument is promoted to subject, I named the alternation “instrumental subject” also following Goddard’s (2013) database of PDE. It must be mentioned, however, that the same alternation has been called differently in other languages of the project: for instance, the Italian (Cennamo & Fabrizio 2013) “Oblique Subject”⁶² corresponds to English “Instrumental Subject”. The PDE database also mentions other similar alternations, the so-called “Quasi-agentive Instrumental Subject” and the “Middle”. The three are defined by Goddard (2013) as shown in (89)-(91):

(89) Instrumental Subject

“A transitive verb that normally takes an agent and an optional instrument, means or medium appears with the instrument or means as subject, e.g. The key opened the door, The hammer broke the window, Water filled the tub (Levin 1993: 80). Differs from a Middle with an instrument subject in that the former is confined to generic interpretations.”

(Goddard 2013)⁶³

⁶¹ The same happens with GIVE *gyfan*.

⁶² “An alternation occurring with verbs of different aspectual classes (achievements, accomplishments, activities), where the prepositional non-core argument (i.e., the adjunct) of the original transitive pattern occurs as subject and the original agent (A) is no longer expressed. It comprises different subtypes, such as the Instrument subject alternation (e.g., *la palla ruppe la finestra*, ‘the ball broke the window’), the Instrument subject alternation with object omission, where the predicate refers to the activity itself as carried out by an Instrument, and confined to modal or negative polarity contexts (e.g., *il coltello non taglia bene*, ‘the knife does not cut well’), the Locatum subject alternation (e.g., *i quadri riempivano la casa*, ‘the pictures filled the house’), the Possessor subject (e.g., *la magrezza di Mario spaventa*, ‘Mario’s skinniness frightens’) (Levin 1993: 76-77; 79-83, Lo Duca 2000 for Italian).” (Cennamo & Fabrizio 2013)

<https://paveda.unipv.it/alternations/3132504011>.

⁶³ <https://paveda.unipv.it/alternations/3426975931>.

2. Old English

(90) Quasi-agentive Instrumental Subject

“The subject NP designates an inanimate object which is not an instrument in the normal sense. For example, consider a sentence like *The glass cut her hand*. It implies that a “cutting” effect was produced when a sharp part of the subject came into contact with the patient.” (Goddard 2013)⁶⁴

(91) Middle

“A verb that normally takes a patient object (if transitive) or undergoer subject (if intransitive) is used intransitively with an evaluative manner adverb and a generic interpretation, e.g. *The thesis reads/read well*. I have included instrument-subject, e.g. *This knife cuts well* under this heading, rather than under Instrument Subject alternation, because the latter can be used to depict an individual event.” (Goddard 2013)⁶⁵

Since these three definitions do not seem to differ much from one another and since all three imply the promotion of an instrument to a subject, these have all been considered under the label “instrumental subject” in Old English.

Verbs allowing this alternation, although marginally (one or two occurrences), are BURN (tr) *bærnan*, where the subject is usually *fyr* ‘fire’ or other synonyms, GRIND *grindan*, found with the subject *cweorn* ‘mill’,⁶⁶ HEAR *hyran*, where the subject is *earan* ‘ears’, HIT *slean*, in which the two examples have, respectively, *hagol* ‘hail’ and *hand* ‘hand’, the former resembling more to Goddard’s Middle, and finally CUT *snipan*, although found only in poetry, whose subject is *seaxses ecg* ‘the edge of a knife’. The sole verb more regularly found with an instrumental subject is SEE *seon* (7 occurrences), in which the subject is always *eagan* ‘eyes’. Comparing the examples below, it is possible to see the instrumental PP *mid his eagan* ‘with his eyes’ in (92), and the subject *mine eagan* ‘my eyes’ in (93).

(92)	<i>þe</i>	<i>se</i>		<i>man</i>		<i>þe</i>	<i>hi</i>		<i>næfre</i>	<i>ne</i>
	REL	DET.NOM.SG.M		man(M).NOM.SG		REL	3SG.ACC.F		never	NEG
	<i>geseah</i>		<i>mid</i>	<i>his</i>		<i>eagan</i> .				
	see.IND.PRET.3SG		with	POSS.3SG.M		eye(N).DAT.PL				

⁶⁴ <https://paveda.unipv.it/alternations/3426903660>.

⁶⁵ <https://paveda.unipv.it/contributions/stan1293#alternations>.

⁶⁶ However, this example was found outside of my reference corpora (cf. DOE *grindan* 2.b. of a mill)

“[and he could recognise no part of the city, any more than] the man who had never seen it with his eyes.” (cosevensl,LS_34_[SevenSleepers]:461.349)

- (93) *forþon* *þe* *mine* *eagan* *gesawon*
 because that POSS.1SG.NOM.PL eye(N).NOM.PL see.IND.PRET.PL
þine *hælo*.
 POSS.2SG.ACC.SG.F salvation(F).ACC.SG

“because my eyes saw your salvation” (comary,LS_23_[MaryofEgypt]:701.465)

The second alternation discussed in this paragraph is the “instrumental object”. The ValPaL database of PDE defines it as follows, associating it only with the verb *tie*:

“A transitive verb that implies a certain kind of material instrument/means, e.g. tie, wrap, can take the "instrument" as direct object, with the erstwhile direct object appearing in an obligatory locational PP. Example: tie X with a rope ~ tie a rope around/onto X, wrap X with paper ~ wrap paper around X. This resembles the Locative alternation.” (Goddard 2013)⁶⁷

I have not found any occurrence of the kind for the two verbs meaning TIE, i.e. *tigan* and *bindan*. However, similar occurrences are found with the verb DRESS *scrydan*, in which the garment usually expressed by the instrumental PP *mid*+dat, as in (94), is encoded in the accusative, i.e. the typical encoding of direct objects. Thus, the PaVeDa definition of the instrumental object alternation in Old English is the following:

“Two-place verbs taking optional instruments, generally expressed by the PP *mid*+dat, such as *scrydan*, allow for an alternative construction in which the instrument receives accusative encoding.”⁶⁸

However, this is a marginal alternation, since only two occurrences are present in my reference corpus, shown in (95)-(96), though the latter seems to have a more metaphorical meaning.

- (94) & *scryddon* *hine* *mid* *his* *reafum*
 and dress.IND.PRET.PL 3SG.ACC.M with POSS.3SG.M garment(N).DAT.PL

⁶⁷ <https://paveda.unipv.it/alternations/3556695486>.

⁶⁸ <https://paveda.unipv.it/alternations/13542966256>.

2. Old English

“and they dressed him with his clothes” (cowsgosp,Mk_[WSCp]:15.20.3464)

(95)	<i>ne beo</i>	<i>ge</i>	<i>ymbehydige</i>	[...]
	NEG be.SBJV.PRS.PL	2PL.NOM	anxious.NOM.PL	[...]
	<i>hwæt</i>	<i>ge</i>	<i>scrydun.</i>	
	what.ACC.SG.N	2PL.NOM	dress.SBJV.PRS.PL	

“[Then Jesus said to his disciples: “Therefore I tell you,] do not worry about your life, [what you will eat; or about your body,] what you will wear.”

(cowsgosp,Lk_[WSCp]:12.22.4678)

(96)	<i>and þe</i>	<i>gescryddest</i>	<i>þone</i>
	and 2SG.ACC.REFL	dress.IND.PRET.3SG	DEM.ACC.SG.M
	<i>unbrosnigendlican</i>		
	incorruptible.ACC.SG.M		

“[and now you hast divested yourself of the corruptible man,] and have vested yourself with the incorruptible” (coeust,LS_8_[Eust]:111.119)

As visible from these examples, the role of the prefix *ge-* can be ruled out in these circumstances, since *ge-* is not present in one of the two occurrences. Finally, it must be mentioned that the same alternation is found with the verb dress *wasjan* (cf. ing. *wear*) also in Gothic (Zanchi & Tarsi 2021: 53).⁶⁹

2.4.1.4. Partitive

From a semantic point of view, partitives can be defined as follows: “[a] true-partitive relation obtains when there is a subset-superset relationship between two sets (with mass nouns: two portions) of the same kind.” (Seržant 2021: 885). In order to have a true partitive meaning, the superset must be specific and not indefinite-generic, as it is the case for example of the expression *a cup of tea*. This is consistent with Middeke’s (2022: 105) claim that “partitive genitives can be directly linked to the concept of PROVENANCE FROM A SOURCE” in Old English.

⁶⁹ <https://paveda.unipv.it/alternations/13542966208>.

In Old English, the second argument of transitive verbs could be in the genitive (97) or in a PP headed by the preposition *of* (98) to express partitive meaning. However, there could be some ambiguities in interpretation, since the PP *of* + dat could also express a source (99) (cf. Ogura 2008: 518), e.g. example (100) could mean both “and eat (a part) of my hunt” and “and eat from my hunt”.

- (97) *het* *þæt* *þu* *þisses*
 command.IND.PRET.3SG that 2SG.NOM DEM.GEN.SG.N
ofættes *æte*
 fruit(N).GEN.SG eat.SBJV.PRET.2SG
 “[he] commanded that you should eat of this fruit” (GenB 500a)

- (98) *Witodlice* *þa* *hwelpas* *etað*
 truly DEM.NOM.PL.M whelp(M).NOM.PL eat.IND.PRS.PL
of þam *crumum*
 of DEM.DAT.PL.M crumb(M).DAT.PL
 “Even the dogs eat [some of] the crumbs [that fall from their master’s table.]”
 (cowsgosp,Mt_[WSCp]:15.27.1038)

- (99) *gif* *ge* *of* *ðam* *treowe* *geetað*
 if 2PL.NOM of DEM.DAT.SG.N tree(N).DAT.SG eat.IND.PRS.PL
 “[but God knows full well,] if you eat from that tree”
 (cocathom1,ÆCHom_I,_1:183.133.130)

- (100) & *ett* *of* *minum* *huntnoðe*
 and eat.IMP.SG of POSS.1SG.DAT.SG.M hunt(M).DAT.SG
 “and eat of my hunt” (cootest,Gen:27.19.1076)

In my sample, the partitive alternation is featured by the consumption verb EAT *etan*, shown in examples (97)-(100), the verb of taking TAKE *niman* (consistently with Middeke 2022: 88) and the verbs of caused-motion BRING *bringan*, SEND *sendan* and PUT *settan*. Of these verbs, none has been found in my corpus with a partitive genitive, but only with the PP *of*+dat, as for example in (101)-(102).

- (101) *Ealle* *sendon* *of þam* *þe* *hi*

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all.NOM.PL send.IND.PRET.PL of DEM.DAT.SG.N REL 3PL.NOM

genoh *hæfdon*,

enough have.IND.PRET.PL

“They all gave out [lit. sent] [something] of what they had enough”

(cowsgosp,Mk_[WSCp]:12.44.3195)

(102) *Nime* *þonne* *of* *þæs*

take.SBJV.PRS.3SG then of DEM.GEN.SG.N

cealfes *blode*

calf(N).GEN.SG blood(N).DAT.SG

“[Then the anointed priest] shall take some of the bull’s blood” (cootest,Lev:4.5.3675)

Though, in my corpus, the partitive genitive is not found, it is well attested with other Old English verbs (cf. Middeke 2022: 58, Table 4.1 and §4.3.3). Middeke (2022:105) claims that, when referring to a proper patient, the genitive alternates with the accusative “apparently irrespective of contextual meaning”. She also notes that, though partitive usages must have originally motivated the genitive with verbs of transfer or ingestion, there are examples in which a partitive meaning is precluded by context, thus the two constructions [NOM,ACC] and [NOM,GEN] could have been synonymous at least for some speakers (Mildeke 2022: 93).

Concerning *etan*, the DOE mentions only two occurrences of the genitive, to which Ogura (2008: 520)⁷⁰ adds a third one, all of which from the poem Genesis B (one of which reported in (97)). Visser (1963: 380-382) reminds that other Old Saxon taste verbs, i.e. *brukan*, *drinkan* and *neotan* (cognates of OE *brucan* ‘to use, to eat’, *drincan* ‘to drink’, and *neotan* ‘to use, to eat’) also take the genitive. Since the sole occurrences of *etan* used with a partitive genitive are found in the Genesis B, and after the discovery of MS Vatican Library, *Palatinus Latinus* 1447 (1894, cf. Doane 1991: ix) and thus the confirmation of Sievers’ (1875) claim of a link between the Old English Genesis B and Old Saxon poetry (namely the *Heliand*), one cannot avoid wondering whether the use of the [NOM,GEN] construction in these contexts could derive from an Old Saxon influence. However, when performing

⁷⁰ Actually Ogura (2008: 519-521) mentions two prose occurrences of the [NOM,GEN] construction, from two MSS containing the *Exodus* in Old English. The occurrence is the following: *Ne ne eton ge of ðam nan ðing hreawes* ‘Do not eat the meat raw or boiled in water’ (Exodus, 12.9). This, however, cannot be considered a partitive genitive, since the second argument of *etan* is *nan ðing* ‘nothing’, in the accusative with a genitive modifier (cf also Mildeke 2022: 90).

a quick search for lemma in the Old Saxon *Heliand* (HeliPaD, Walkden 2016), the only two occurrences of Old Saxon *etan* ‘eat’ are used nominally,⁷¹ thus no conclusions can be drawn.

2.4.1.5. To-resultative

This is the only valency augmenting alternation in this section. It is defined, in the PaVeDa database of Old English, as “[a] transitive verb (with the exception of a-drūgian) appears with a to-phrase describing the product or outcome.”⁷², and is allowed by the verbs BE DRY *a-drūgian*, CUT (1) *ceorfan*, CUT (2) *snīpan*, GRIND *grindan*, HIT *slean*, SHAVE (2) *be-sciran*, and TAKE *niman*. Differently from Goddard’s (2013) definition for PDE,⁷³ the presence of the instrument coded as the direct object is not compulsory, as in (103) and (104). However, even Goddard (2013) mentions an example with the verb *cut*, “she cut the meat into pieces”⁷⁴ in which the instrument is not present.

(103) <i>þone</i>	<i>ram</i>	<i>þu</i>	<i>snīpst</i>
DEM.ACC.SG.M	ram(M).ACC.SG	2SG.NOM	cut.IND.PRS.2SG
to	<i>sticcon</i> ;		
to	piece(M).DAT.PL		
“you cut the ram into pieces” (cootest,Exod:29.17.3379_ID)			

(104) <i>grind</i>	to	<i>duste</i>	<i>þa</i>	<i>wyrta</i>	<i>swiþe</i>
grind.IMP.SG	to	dust(N).DAT.SG	DET.ACC.PL.F	herb(F).ACC.PL	much
“grind the herbs into dust” (colaece,Lch_II_[2]:52.1.27.3235)					

The outcome of the action can also be more abstract, as with the verb SHAVE (2) *be-sciran* in (105), in which the to-resultative alternation is always found in situations where the monks are shaved to become priests. The same can be said for the verb HIT *slean*, in (106), where the result of the hitting is the death of the patient.

⁷¹ 1) *huat gi eft an morgan sculin etan eftha drincan* ‘how on the morrow / you may find eat and drink,’ (OSHeliandC.879.1663-1665); 2) *gibu ik iu hier bethiu samad / etan endi drincan* ‘I give both to you / to eat and to drink.’ (OSHeliandC.2700.4639-4640).

⁷² <https://paveda.unipv.it/alternations/13542966236>

⁷³ “A transitive verb implying a material instrument/means appears with the instrument/means as direct object and an into-phrase describing the product or outcome, e.g. He tied the ribbon into a bow. This could perhaps be seen as an instance of the Instrumental Object alternation, with an into-resultative phrase in place of a locative (compare: He tied the ribbon around the parcel).” <https://paveda.unipv.it/alternations/3556751189>.

⁷⁴ <https://paveda.unipv.it/alternationvalues/42255>.

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(105) *þæt he to preoste bescoren*
 that 3SG.NOM.M to priest(M).DAT.SG shave.PTCP.PST
beon meahte
 be.INF may.PRET.3SG

“[and waited four months till his hair grew,] so that he might receive priestly tonsure [lit. might be shaved to priest]” (cobede,Bede_4:1.254.30.2593)

(106) & *hine to deaðe gesloh.*
 And 3SG.ACC.M to death(M).DAT.SG hit.IND.PRET.3SG

“and [he] hit him to death.” (cocathom1,ÆCHom_I,_35:479.101.6984)

The occurrences of the to-resultative alternation with the verb TAKE *niman* are of a different nature, but they can still be considered as such. As example (107) illustrates, the PP *to wife* could be translated as “as his wife”. Thus, the PP *to+dat* can be said to express the outcome of the situation, in the sense that it expresses the changed status of the patient, in relation to the agent. Remarkably, this construction is also found with the addition of a further dative argument, to be interpreted as a beneficiary, as in (108). Note that the latter construction is found only with “external possessors” and not with internal genitive possessors (Middeke 2022: 203).

(107) *he nam Rebeccan to wife*
 3SG.NOM.M take.IND.PRET.3SG Rebekah(F).ACC.SG to wife(N).DAT.SG
 “[and Isaac was forty years old when] he married Rebekah [lit. took Rebekah as his wife]” (cootest,Gen:25.20.1019)

(108) & *hiene him to bisecep-suna nam*
 and 3SG.ACC.M 3SG.DAT.M to bishop-son(M).DAT.SG take.IND.PRET.3SG
 “and he took him as his spiritual son” (cochronA-1,ChronA_[Plummer]:853.6.719)

2.4.1.6. Topic-about

Finally, I will conclude this section with a discussion of the so-called “topic-about” alternation, which I defined in the PaVeDa database of Old English as follows: “[v]erbs of cognition and communication can sometimes add a “topic” argument marked by the genitive case or by different prepositions, such

as be, embe, of, etc.”.⁷⁵ In this alternation the T-argument of transitive and ditransitive verbs, encoded with the accusative in the basic pattern, is expressed either by a prepositional phrase, most frequently introduced by the preposition *be* ‘about’, or (more marginally) by the genitive. Though the preposition “about” (*abutan, onbutan*) is not used in Old English in the same contexts as in PDE, I decided to keep the name chosen by Goddard (2013) for the sake of comparison.

The verbs of my sample allowing this alternation are ASK FOR *axian*, KNOW *cunnan*, SAY *secgan*, SEARCH FOR *secan*, SING *singan*, TALK *sprecan*, TEACH (1) *læran*, TEACH (2) *tæcan*, THINK *þencan*. Examples are shown in (109) and (110) where the topics taught are expressed, respectively, by the PPs *be+dat* and *on+acc*.

- (109) *eallswa seo domboc be swilcum*
 like DET.NOM.SG.F doom_book(F).NOM.SG about such.DAT.PL.M
mannum tæcð
 man(M).DAT.PL teach.IND.PRS.3SG
 “just as the statute-book teaches concerning such men”
 (cosevensl,LS_34_[SevenSleepers]:655.512)

- (110) & *Scottas lærdon geonge &*
 and Scot(M).NOM.PL teach.IND.PRET.PL young.ACC.PL.M and
ealde on reogollicne þeodscipe
 old.ACC.PL.M in regular.ACC.SG.M instruction(M).ACC.SG
 “and Scots instructed young and old about monastic discipline.”
 (cobede,Bede_3:2.158.28.1535)

All verbs mentioned above have a second argument of “conveyed content”, except for SEARCH FOR *secan*. When found, though marginally (2 times in a total of 444 occurrences), in the topic-about alternation, *secan* means “seek information about somebody or something”, as visible in (111).

- (111) & *smealice sohton on hwon þæt*
 and carefully seek.IND.PRET.PL on which.INS.SG.N DEM.NOM.SG.N
gelang wære.

⁷⁵ <https://paveda.unipv.it/alternations/13542966231>.

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consequent.NOM.SG.N be.SBJV.PRET.3SG

“and searched carefully about the cause of this.” (cobede,Bede_3:8.182.2.1805).

2.4.2. Old English uncoded alternations

This section deals with uncoded alternations in Old English, i.e. those alternations that are not marked on the verb by means of affixes, clitics, or auxiliaries. I will start discussing the benefactive/malefactive alternation in section 2.4.2.1, then I will move to those alternations related to body parts in section 2.4.2.2. I will then continue with the insertion of cognate or kindred arguments (2.4.2.3) and with object omissions (2.4.2.4). Lastly, I will end this section discussing the reflexive and reciprocal alternations (2.4.2.5).

2.4.2.1. Benefactive/Malefactive

The aim of this paragraph is to discuss the “benefactive alternation” in Old English, even though it must be noted, as mentioned in section 2.4.1.2, that it is not always so distinguishable from a simple “dative alternation” (Broccias & Torre 2020: 170-171). I will first discuss what is meant in the ValPaL/PaVeDa project by “benefactive alternation” and provide some examples of it in Old English. I will then also discuss the opposite alternation, i.e. the “malefactive” alternation, and then I will end the section with an analysis of the so-called “quasi-benefactive-accompaniment mid” alternation. Goddard (2013) describes in the ValPaL database of PDE the benefactive alternation as “A transitive verb takes an additional post-verbal object designating a person when benefited from the action”,⁷⁶ similarly to what Haspelmath & Baumann (2013) write for German: “valency increasing operation, additional argument gets marked with dative”.⁷⁷ It can thus be summarised as a valency-increasing mechanism that inserts in the sentence frame a further participant, who takes advantage from the action expressed by the verb. In Old English this alternation can be defined as “Either a transitive or an intransitive verb takes an additional argument in the dative or in a PP headed by the prepositions for/to, designating a person when benefited from the action.”⁷⁸

In my sample, this alternation is featured by the verbs BUILD *timbran*, DIE *sweltan*, LIVE *lifian*, PUT *settan*, SING *singan*, TAKE *niman* and TALK *sprecan*. A simple dative beneficiary is shown in (112),

⁷⁶ <https://paveda.unipv.it/alternations/3546709092>.

⁷⁷ <https://paveda.unipv.it/alternations/3038169672>.

⁷⁸ <https://paveda.unipv.it/alternations/13542966246>.

featured by the verb BUILD *timbran*, whereas the PP *for*+dat is exemplified by the verb DIE *sweltan* in (113) and the PP *to*+dat in (114). Nonetheless, it must be noted that prepositional variants are not as frequent as simple dative beneficiaries and that the crystallisation of “for” as the prototypical prepositional variant of beneficiaries can be dated only after the Middle English (Zehentner & Traugott 2020: 170). The beneficiary can also be co-referential with the subject (the so-called “indirect reflexive”), but this will be accounted for in section 2.4.2.5, concerning the reflexive and reciprocal alternation.

- (112) *ne* *scypene* *his* *neatum*
 NEG stall(F).ACC.SG POSS.3SG.M cattle(N).DAT.PL
ne *timbreþ.*
 NEG build.IND.PRS.3SG
 “[No one there mows hay] or builds stalls for his cattle” (cobede,Bede_1:1.28.32.220_ID)

- (113) *he* *wolde* *for* *mancynne* *sweltan*
 3SG.NOM.M want.PRET.3SG for mankind(N).DAT.SG die.INF
 “he would die for mankind” (cocathom1,ÆCHom_I_17:316.80.3158)

- (114) *nime* *ælc* *man* *an*
 take.SBJV.PRS.3SG each(M).NOM.SG man(M).NOM.SG one(N).ACC.SG
lamb *to* *his* *hywraedene*
 lamb(N).ACC.SG to POSS.3SG.M family(F).DAT.SG
 “each man is to take a lamb for his family” (cootest,Exod:12.3.2826)

A similar, but semantically opposite alternation is the malefactive, which I defined in the Old English PaVeDa database as “[a] verb depicting an event which could be bad for someone (other than the subject) gains an argument in an on-phrase or in the dative designating another person who is negatively affected (cfr. PDE English, Goddard 2013)”.⁷⁹ However, this alternation is marginal, as it is found only with the verb TAKE *niman* (only twice) in my reference corpus. The two occurrences, both from poetry texts, are shown in (115) and (116), respectively showing a simple dative maleficiary and one encoded with the PP headed by *on*.

⁷⁹ <https://paveda.unipv.it/alternations/13542966268>.

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(115) *þær* *him* *hrefn* *nimeþ* *heafodsýne*
 there 3SG.DAT.M raven(M).NOM.SG take.IND.PRS.3SG eye(F).ACC.PL
 “there the raven will take his eyes” (coexeter,155.36.381)

(116) *nam* *on* *Ongeneow* *iren-byrnan*
 take.IND.PRET.3SG on Ongeneow(M).DAT.SG iron-byrnie(F).ACC.SG
heard *swyrd* *hilted* *ond* *his*
 hard.ACC.SG.N sword(N).ACC.SG hilted.ACC.SG.N and POSS.3SG.M
helm *somod*
 helm(M).ACC.SG together
 “[Then the warriors plundered the other,] took from Ongeneow his iron byrnie, his hard sword hilt and also his helmet” (cobeowul,92.2985.2411)

A further alternation involving a beneficiary-like argument is what Goddard (2013) calls “quasi-benefactive-accompaniment with” alternation, defined as follows in the ValPaL database of PDE:

“Verbs like carry, bring and take can add a plain, i.e. non-reflexive preposition co-referential with the subject in a with-phrase; e.g. I took my brother with me, He brought his racquet with him. The implication is that the subject *could benefit* from the presence of the person or thing, e.g. as company, as equipment. There is no standard name for this construction, cf. Levin (1993: 104).” (italics added)⁸⁰

Following this definition, the first participant of these verbs takes advantage from the participant referred to by the inserted argument. For this reason, it seems relevant to briefly present this construction together with the standard benefactive alternation. In Old English the same construction was expressed by the preposition *mid* ‘with’ followed by the dative, hence the change in the name of the alternation as “quasi benefactive accompaniment *mid*”, defined as follows:

“Verbs like *beran*, *bringan* and *niman* can add a plain, i.e. non-reflexive preposition co-referential with the subject in a mid-phrase. The implication is that the subject (or object in the case of *sendan*) could benefit from the presence of the person or thing, e.g. as company, as equipment. (cf. Goddard 2013 on Present Day English)”⁸¹

⁸⁰ <https://paveda.unipv.it/alternations/3781545521>.

⁸¹ <https://paveda.unipv.it/alternations/13542966242>.

As reported in the definition, this alternation is featured by the verbs BRING *bringan*, CARRY *beran*, SEND *sendan*, and TAKE *niman*. Except for SEND *sendan*, the added prepositional argument is co-referential with the subject, implying that the agent him/herself benefits from action of bringing/carrying/taking something, as in (117). On the other hand, with SEND *sendan*, the beneficiary is only expressed in the PP headed by *mid*, which is not co-referential with the sender, as in (118). However, I only found one example of this alternation with SEND *sendan* in my corpus, thus this is not included in the definition.

- (117) *Sum* *him* *mid* *bær* *þæs*
 some.NOM.SG 3SG.DAT.M with carry.IND.PRET.3SG DET.GEN.SG.M
lichaman *genihtsumnysse*
 body(M).GEN.SG sufficiency(F).ACC.SG
 “Some bare with themselves a sufficiency for the body”
 (comary,LS_23_[MaryofEgypt]:126.84)

- (118) *Sende* *se* *cyning* *eac* *mid*
 send.IND.PRET.3SG DET.NOM.SG.M king(M).NOM.SG also with
hine *his* *mæssepreost*
 3SG.ACC.M POSS.3SG.M priest(M).ACC.SG
 “The king also sent with him his priest [called Eadseth]”

Finally, it must be noted that it is not always immediate to distinguish between beneficiaries and recipients: for example, in the case of the verb LEAVE *læfan*, a third argument can be added, expressing the person to whom something is left. This person could benefit from the left thing (e.g. possibly in (119)), however this is not always the case, as probably in (120). For this reason, this verb is not among the verbs featuring the “benefactive” alternation, but among those allowing a “object insertion (R)”.⁸² However, this is consistent with Traugott’s (2020: 566) claim that the origin of the benefactive alternation is to be found in an “intended recipient”.

- (119) *Ic* *læfe* *eow* *sibbe*
 1SG.NOM leave.IND.PRS.1SG 2PL.DAT peace(F).ACC.SG

⁸² “A recipient-like argument is added to the valency of both transitive and intransitive verbs, either in the dative or in a PP headed by different adpositions (e.g. to, wið, mid).” <https://paveda.unipv.it/alternations/13542966264>.

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“I leave peace to you” (cowsgosp,Jn_[WSCp]:14.27.7002)

(120)	<i>læfde</i>	<i>hys</i>	<i>breþer</i>	<i>his</i>
	leave.IND.PRET.3SG	POSS.3SG.M	brother(M).DAT.SG	POSS.3SG.M
	<i>wif</i>	<i>butan</i>	<i>bearne</i>	
	wife(N).ACC.SG	without	child(N).DAT.SG	
	“[he] left his wife without children to his brother”			
	(cowsgosp,Mt_[WSCp]:22.26.1544)			

2.4.2.2. Body part alternations

This section will deal with those alternations involving a body part. After a brief introduction of canonical expression of inalienable possession, I will deal with three alternations involving body parts: the “external possessor”, the “locus of personal contact” and the “assisting body part”, alternation.

Inalienable possession in Old English is expressed by a genitive modifier, often a possessive adjective, which entertains a dependency relation with the body part possessed. This is visible, for example, in (121) where FEEL PAIN *acan* is found with a nominative stimulus, i.e. the body part hurting, and the experiencer coded with the possessive.

(121)	<i>Gif</i>	<i>þin</i>	<i>heorte</i>	<i>ace,</i>
	If	POSS.2SG.NOM.SG.f	heart(F).NOM.SG	ache.SBJV.PRS.3SG
	<i>nim</i>	<i>ribban</i>		
	take.IMP.SG	ribwort(F).ACC.SG		
	“If your heart hurts, take ribwort” (colacnu,Med_3_[Grattan-Singer]:92.1.494)			

Old English also allowed for constructions with the so-called *dativus sympatheticus* or dative external possessor, as reminded for instance in Mitchell & Robinson (2012: 99) among the functions of the dative: “2. it may express possession, e.g. *him on heafod* ‘on his head’.” In the PaVeDa database of Old English, I define the external possessor alternation as follows:

“It is defined as “constructions in which a semantic possessor-possessum relation is expressed by coding the possessor [...] as a core grammatical relation of the verb and in a constituent

separate from that which contains the possessum.” Payne & Barshi (1999: 3). In Old English, the genitive of possession could be replaced either by a possessor in the dative or in the accusative, often followed by a PP indicating a body part.”

As Luraghi (2020b: 176) points out, it is remarkable that Old English allowed this construction, which has gone lost in the later stages of the language. Allen (2019: 181-183) shows that dative external possessors were already infrequent in Early Middle English⁸³ and claims that “the decline of DEPs [dative external possessors] in English began in the OE period” (Allen 2019: 229). She suggests a Celtic influence for this loss, namely the fact that “Celtic speakers learning OE changed it by restricting the range of the DEP and rendering it an even more marked construction, beginning a decline that became greater as the OE period wore on” (Allen 2019: 223), though claiming that – despite plausible – the Celtic influence cannot be provable (Allen 2019: 234).

In my corpus, verbs found with an external possessor are BRING *bringan*, CARRY *beran*, GO *gan*, LOAD *hladan*, POUR *geotan*, PUT *settan*, SEND *sendan*, SIT *sittan*, and TAKE *niman*. Among these, BRING *bringan*, LOAD *hladan* and SEND *sendan* occur with external possessor only in my poetry sample. Consider example (122), with the verb GO *gan*, and example (123), with the verb CARRY *beran*, where the dative pronoun, indicating the possessor, is co-referential with the subject.

(122) *þonne hie eðedon þonne eode him*
 then 2PL.NOM breathe.IND.PRET.PL then go.IND.PRET.3SG 3PL.DAT
of þy muðe
 of DET.INS.SG.M mouth(M).DAT.SG

“and when they breathed, [their breath] came from their mouths” (coalex,Alex:18.9.209)

(123) *Bær him æxe &*
 carry.IND.PRET.3SG 3SG.DAT.M.REFL axe(F).ACC.SG and
adosan on honda
 adze(M).ACC.SG in hand(F).DAT.SG

“He carried in his hand an axe and an adze” (cobede,Bede_4:3.264.6.2685).

As mentioned in section 2.4.1.1, external possessor constructions also allow the presence of a possessive, thus apparently encoding twice the possessor, as in (124). Middeke (2022: 195) argues

⁸³ She shows a complete loss of DEPs by the M2 period (1250–1350)

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that the existence of this kind of clause suggests that the dative found in external possessor constructions “does not express possession as such, but is primarily a BENEFICIARY”.⁸⁴ Indeed, she claims that the “holistic affectedness of the possessor is assumed to be a prerequisite for the acceptability of EPCs [external possessor constructions]” (Middeke 2022: 197).

- (124) *Gif men his leoðu acen [...]*
 if man(M).DAT.SG POSS.3SG.M limb(N).NOM.PL hurt.SBJV.PRS.PL
 “if a man’s limbs hurt [...]” (coherbar,Lch_I_[Herb]:3.1.227)

The so-called “locus of personal contact” alternation can be defined as a “specialised” external possessor construction, in that it is found only with contact verbs. In the PaVeDa database of Old English, and consistently with Goddard’s (2013) database of PDE, it is defined as follows:

“A transitive verb implying affect caused by physical contact with a body-part takes an NP designating a person as its direct object, and the locus of contact with that person's body appears in a prepositional phrase with the adpositions on or in, e.g. & beoton hine on þæt heafod mid hreode ‘and they beated him on the head with a staff’. Levin (1993) termed this Body-Part Possessor Ascension. It generally implies a “feel” component, either on behalf of the affected person or as part of the agent's intention.”⁸⁵

Despite their similarity, differently from the dative external possessor discussed above, this alternation implies an accusative external possessor, as shown in (125). Verbs featuring these alternations are BEAT *beatan*, HIT *slean*, TAKE *niman*, TEAR *teran*, TIE (1) *tigan*, and TIE (2) *bindan*, the latter three found, respectively, with the PP *be+dat* and the simple dative to encode the body part being taken, tied or bound, as in (126), (127) and (128).

- (125) & *beoton hine on þæt heafod*
 and beat.IND.PRET.PL 3SG.ACC.M on DET.ACC.SG.N head(N).ACC.SG
mid hreode
 with staff(N).DAT.SG
 “and they struck him on the head with a staff” (cowsgosp,Mk_[WSCp]:15.19.3459)

⁸⁴ Maleficiaries have also been found. However, the fact that beneficiaries are more frequent in this construction than maleficiaries is probably due to the dynamicity of the event, which entails agency on the part of the possessor (Middeke 2022: 204).

⁸⁵ <https://paveda.unipv.it/alternations/13542966233>.

- (126) *Ɔa* *genam* *hine* *Apollonius* *be*
 then take.IND.PRET.3SG 3SG.ACC.SG Apollonius(M).NOM.SG by
Ɔare *hand*
 DET.DAT.SG.F hand(F).DAT.SG
 “Then Apollonius took him by the hand.” (coapollo,ApT:51.24.580)

- (127) & *hine* *sylfne* *het* *tigan*
 and 3SG.ACC.M.REFL self.ACC.SG.M order.IND.PRET.3SG tie.INF
be Ɔam *fotum* *to* *ungetemedra*
 by DET.DAT.PL.M foot(M).DAT.PL to untame.PTCP.PST.GEN.PL.N
horsa *swuran*
 horse(N).GEN.PL neck(M).DAT.PL
 “and himself he ordered to be tied by the feet to the necks of untamed horses”
 (cocathom1,ÆCHom_I,_29:427.261.5862)

- (128) *Bindað* *hine* *handum* & *fotum*
 bind.IMP.PL 3SG.ACC.M hand(F).DAT.PL and foot(M).DAT.PL
 “bind him by the hands and the feet” (cocathom1,ÆCHom_I,_35:476.22.6917)

Finally, I will end this section mentioning a third alternation related to body parts, namely the “assisting body part” alternation, defined in the PaVeDa database of Old English as “A transitive verb involving bodily motion takes a PP with preposition *on* or *ofer* and a body-part designating the locus on contact (cfr Goddard 2013 for Present Day English)”. It is featured by the verbs CARRY *beran* and TAKE *niman*, exemplified in (129) and (130); where the PP headed by the preposition *on* indicates the body part used to transport the T-argument of the verbs.

- (129) *Ɔone* *bær* *se* *ealda*
 DET.ACC.SG.M carry.IND.PRET.3SG DET.NOM.SG.M old.NOM.SG.M
Simeon *on* *his* *earmum* *Ɔe*
 Simeon(M).NOM.SG on POSS.3SG.M arm(M).DAT.PL REL
ealle *Ɔincg* *hylt* & *gewylt.*
 all.ACC.PL.N thing(N).ACC.PL hold.IND.PRS.3SG and rule.IND.PRS.3SG
 “The old Simeon bare in his arms him who preserves and rules over all things”

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(cocathom1,ÆCHom_I,_9:250.48.1611)

- (130) *Nim* *witodlice* *þas* *gyrde* ***on***
 take.IMP.SG truly DEM.ACC.SG.F staff(F).ACC.SG in
þine ***hand,***
 POSS.2SG.ACC.SG.F hand(F).ACC.SG
 “Truly, take this staff in your hand” (cootest,Exod:4.17.2437)

The difference between the “external possessor” alternation and the “locus of personal contact” is well visible when comparing example (130) above and example (131) below. This difference, however, seems to be only syntactic, without any change in meaning. The fact that this two constructions may have been considered synonymous is supported by alternating variants in different manuscripts of the same text, as shown in (132) and (133), from the *Marvels of the East*, whose edition (Orchard 1995: 196) mentions in the apparatus that MS Cotton Vitellius A XV adds the dative pronoun “*him*”.

- (131) & *nim* ***þe*** ***on*** ***hand***
 and take.IND.PRET.3SG 2SG.DAT on hand(F).ACC.SG
ða *gyrde*
 DET.ACC.SG.F staff(F)ACC.SG
 “and take in your hand the staff [that was changed into a snake.]”
 (cootest,Exod:7.15.2588)

- (132) *þonne* *nimað* *hi* *heora* *earan*
 then take.IND.PRS.PL 3PL.NOM POSS.3PL ear(N).ACC.PL
on hand
 in hand(F).ACC.SG
 “they take their ears in their hands” (comarvel,Marv:21.4.116, MS Cotton Tiberius B V)

- (133) *þonne* *nimað* *hi* *heora* *earan*
 then take.IND.PRS.PL 3PL.NOM POSS.3PL ear(N).ACC.PL
him ***on hand***
 3PL.DAT.REFL in hand(F).ACC.SG
 “they take their ears in their hands” (Marv. 21, MS Cotton Vitellius AXV)

2.4.2.3. Cognate/kindred arguments

Cognate object constructions involve a typically intransitive verb paired with a direct object NP, “whose head noun is the event or state nominalization of the verb.” (Jones 1988: 89), i.e. the object is etymologically and semantically related to the verb. However, Visser (1963: 413) points out that cognate objects can also be used with transitive verbs. In contrast, kindred objects are nouns that are only semantically related to the verb (Visser 1963: 413). When found with one-place verbs, cognate and kindred object insertions are valency-augmenting mechanisms. However, when they are found with two- or three-place verbs they do not increase their valency. Due to the fact that PaVeDa guidelines require to assign one unique “alternation class” to alternations, independently from the verb they are found with, I decided to label cognate/kindred objects as “valency-augmenting”. Visser (1963: 415) claimed that cognate objects were “somewhat rare in Old English,” becoming more common in Middle English and quite numerous in the Modern period. Despite this historical trend, my corpus shows a notable presence of cognate and kindred objects already in Old English, particularly with one-place verbs, as Jones’s definition suggests. Cognate/kindred objects are generally found in the accusative, however some cognate/kindred arguments in the dative or expressed by a PP are also present in my corpus. Remarkably, dative cognate objects are quite unusual among Indo-European languages (Horrocks and Stavrou 2010).

Verbs allowing this alternation are BURN *byrnan*, DIE (2) *sweltan*, GIVE *gyfan*, GO *gan*, HELP *helpan*, KILL *cwellan*, LIVE *lifian*, NAME *namnian*, PLAY *plegan*, SEE *seon*, SING *singan*, SIT DOWN *sittan*, TALK *sprecan*, TEACH *tæcan* and THINK *pencan*. For instance, the verb LIVE *lifian* allows to exemplify the cognate object insertion: in (134) the NP *his liif* ‘his life’ is obviously etimologically related to *lifian*. On the other hand, example (135) shows a kindred object found with TEACH *tæcan*, in which the object *lare* ‘teaching’ is not etymologically related to the verb *tæcan* (rather to the other counterpart of TEACH *læran*), but it is semantically related to it. In (136) is shown an example of a kindred argument in the dative, featured by the verb die *sweltan*, in which the “cause of dying”, i.e. *deaþe* ‘death’ is encoded in the dative, similarly to a causal complement. Visser (1963: 415) argues that the cognate object *deaðe* with verbs of dying likely functioned as an adverbial adjunct of manner, indicated by the use of prepositions before the noun in both Middle and Modern English. Additionally, it is important to note that in this instance, the cognate object is neither specified nor qualified, which contrasts with Visser’s (1963: 415) claim. Lastly, a kindred prepositional argument

“[and Oswald prayed God to] assist with heavenly aid his worshippers in such dire necessity” (cobede, Bede_3:1.154.19.1478)

Note that, in agreement with both Jones (1988) cited above and Lavidas (2014: 44), this alternation occurs mostly with “activity verbs”, i.e. atelic verbs, such as GO *gan* or SING *singan*, though it is found also with accomplishments and achievements. Moreover, Lavidas (2013: 86-101) demonstrated that the rise of “activity/event-noun cognate constructions” (i.e. the kind of “she smiled a smile”) in the history of English is connected to the grammaticalization of the (non)progressive aspect.

2.4.2.4. Object omission and object insertion

This paragraph will deal first with object omissions and then with object insertions, respectively a valency-decreasing and a valency-augmenting alternation. Concerning object omission, this alternation is defined as “[a] canonically transitive verb appears in this derived pattern without an overt object, usually implying a specific kind of expected object” in the PaVeDa database of Old English. Levin (1993: 33) terms this “Unspecified Object Alternation”, whereas Goddard (2013) uses the term “Understood Omitted Object”.⁸⁶ In this paragraph, I will focus on P and R arguments of transitive and ditransitive verbs, particularly those coded in the accusative case. Notably, my data also show instances where R-like arguments in the dative case and locative arguments have been omitted.

Despite being accounted for in the literature under the same label “null objects” (e.g. Croft 2001: 276), it is important to distinguish between “null objects with an indefinite (or no) antecedent in the discourse” (Lavidas 2013: 71), i.e. object omission as detransitivising strategy, and the so-called “referential null objects”, i.e. “null objects with a **specific** referent that was introduced in the previous discourse” (Lavidas 2013: 71, bold in the original). The latter are frequent in Indo-European languages and occur in precise syntactic, pragmatic and stylistic conditions, in particular with coordinated verbs and clauses and conjunct participles (cf. e.g. Luraghi 2004). Similarly to many other Indo-European languages, Old English allowed referential null objects. However, this possibility was lost as the language evolved, and Modern English now requires referential objects to be expressed through an anaphoric pronoun (cf. also Lavidas 2013: 71-77). Conversely, object

⁸⁶ <https://paveda.unipv.it/alternations/3416245319>.

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omission, as intended here, serves as a valency-decreasing mechanism, where typically transitive and ditransitive verbs convey intransitive events. Transitive verbs found in this alternation are many and shown in Table 9.

PaVeDa Meaning	OE verb	Basic coding frame	Derived coding frame
BEAT	beatan	1-nom V.subj[1] 2-acc (mid 3-dat)	1-nom V.subj[1]
BUILD	timbran	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
BURN (tr)	bærnan (tr.)	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
CUT (1)	ceorfan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
DIG	delfan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
EAT	etan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
FEAR	forhtian	1-nom V.subj[1] for 2-dat	1-nom V.subj[1]
FOLLOW	folgian	1-nom V.subj[1] 2-acc/dat	1-nom V.subj[1]
GRIND	grindan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
HEAR	hyran	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
HELP	helpan	1-nom V.subj[1] 2-dat/gen	1-nom V.subj[1]
HIT	slean	1-nom V.subj[1] 2-acc (mid 3-dat)	1-nom V.subj[1] (mid 3-dat)
HUNT (FOR)	huntian	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
KNOW	cunnan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
LOAD	hladan	1-nom V.subj[1] 2-acc (mid 3-dat)	1-nom V.subj[1] (mid 3-dat)
LOOK AT	locian	1-nom V.subj[1] to 2-dat	1-nom V.subj[1]
SEARCH FOR	secan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
SEE	seon	1-nom V.subj[1] 2-acc (3-dat)	1-nom V.subj[1]
SMELL	stincan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
TEAR (2)	slitan	1-nom V.subj[1] 2-acc (mid 3-dat)	1-nom V.subj[1]
TELL	tellan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
THINK	þencan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
TIE (2)	bindan	1-nom V.subj[1] 2-acc	1-nom V.subj[1]

Table 9: Old English two-place verbs allowing object omission

A verb consistently featuring object omission is EAT *etan*, consistently also with other languages (e.g. Latin, Giuliani 2021: 65), in which the omission of the patient implies a shift in focus (from the food eaten, to the action itself and its duration), and thus a change in the *Aktionsart* of the verb,

conceptualised first as an accomplishment and then as an activity. Consider examples (138) and (139), in which the former shows a basic pattern and the latter an object omission.

- (138) *þa* *ða* *he* *þurh* *deofles* *lare*
 then when 3SG.NOM.M through devil(M).GEN.SG teaching(F).ACC.SG
æt *þone* *forbodenan* *æppel*
 eat.IND.PRET.3SG DET.ACC.SG.M forbid.PTCP.PST.ACC.SG.M apple(M).ACC.SG
 “Through greediness he was overcome, when, by the devil's instruction, he ate the forbidden apple.” (cocathom1,ÆCHom_I,_11:271.157.2122)

- (139) & *cwæð* *þæt* *hine* *lyste* *mid*
 and say.IND.PRET.3SG that 3SG.ACC.M lust.IND.PRET.3SG with
him *etan* & *drincan*.
 3PL.DAT eat.INF and drink.INF
 “and said that he desired to eat and drink with them.” (cobede,Bede_5:5.398.6.3979)

In the case of ditransitive verbs, it is possible to omit one participant (either T or R), making the verb transitive, or both simultaneously, making the verb intransitive. Table 10 shows ditransitive verbs allowing P/R omissions.

PaVeDa Meaning	OE Verb	T Omission	R Omission	T and R Omission
ASK FOR	axian	✓	✓	/
BRING	bringan	✓	/	/
GIVE	gyfan	✓	✓	✓
NAME	namnian	✓	/	/
SAY	secgan	✓	✓	✓
SEND	sendan	✓	/	✓
SHOW (1)	tæcan	✓	✓	✓
SHOW (2)	eowan	/	✓	/
SHOW (3)	æt-eowan	✓	✓	✓
TEACH (1)	læran	✓	✓	✓
TEACH (2)	tæcan	✓	✓	✓

Table 10: Three-place verbs allowing T/R object omission

As visible from Table 10, themes are more likely to be omitted than recipients: indeed, the only verb found with R omission and not with T omission is SHOW (2) *eowan*. Otherwise, when allowing single R omission or the omission of both T/R arguments, the verbs allow also the single T omission. Consider the verb TEACH (1) *læran* in examples (140), (141) and (142), showing respectively T omission, R omission and both arguments omission.

(140) & *lærde* *þæt* *folc* *þe*
 and teach.IND.PRET.3SG DET.ACC.SG.N folk(N).ACC.SG REL
he to com mid myclum wisdome.
 3SG.NOM.M to come.IND.PRET.3SG with great.DAT.SG.M
 wisdom(M).DAT.SG
 “and taught the people to which he came with great wisdom”
 (cocathom1,ÆCHom_I, 1:187.258.275)

(141) *he* *ærest ongan* *þæt* *weorc*
 3SG.NOM.M first begin.IND.PRET.3SG DET.ACC.SG.N work(N).ACC.SG
Cristes godspell læran.
 Christ(M).GEN.SG gospel(N).ACC.SG teach.INF
 “he first began the work of teaching Christ's gospel.”
 (cobede,Bede_5:17.458.22.4610)

(142) & *he* *lærde* *be hyra gesamnungum,*
 and 3SG.NOM.M teach.IND.PRET.3SG about POSS.3PL assembly(F).DAT.PL
 “He was teaching in their synagogues”
 (cowsgosp,Lk_[WSCp]:4.14.3826)

Finally, I will discuss verbs featuring object insertions, namely a P- or R-like argument. Verbs adding a further P-like argument in the accusative are zero- or monovalent verbs, in particular BE HUNGRY *hyngnan* (143), RAIN *rignan* (144),⁸⁷ SHOUT AT *clipian* (145) and STEAL *stelan* (146). The choice of considering these occurrences as alternations and not as the basic frame, with a possible object omission, is based on frequency: out of the 30 occurrences of BE HUNGRY *hyngnan* only one

⁸⁷ Cf. section 3.3.1 on the object-like status of this further argument with the zero-valent verb RAIN *rignan*.

shows this further argument, RAIN *rignan* has two occurrences of the kind out of 6 total occurrences, whereas SHOUT AT *clipian* and STEAL *stelán* are found with this object insertion, respectively, 11 times out of 217 and once out of 10.

- (143) *for=ðan=þe* *he* *geseh* *þæt* *him*
 because 3SG.NOM.M see.IND.PRET.3SG that 3SG.DAT.M
nan *ðincg* *ne* *hingrode*.
 none.ACC.SG.N thing(N).ACC.SG NEG be_hungry.IND.PRET.3SG
 “because he saw that he hungered for nothing” (cocathom1,ÆCHom_I,_11:267.42.2021)

- (144) *hyt* *rinde* *fyr* & *swefl*
 3SG.NOM.N rain.IND.PRET.3SG fire(N).ACC.SG and sulfur(M).ACC.SG
of *heofone*,
 of heaven(M).DAT.SG
 “[Truly the day Lot left Sodom,] fire and sulfur rained down from heaven”
 (cowgosp,Lk_[WSCp]:17.29.5078)

- (145) *Agar* *þa* *clypode* *Godes* *naman*
 Hagar(M).NOM.SG then shout.IND.PRET.3SG God(M).GEN.SG name(M).ACC.SG
 “Then Hagar shouted God's name” (cootest,Gen:16.13.621)

- (146) *wenst* *tu* *þæt* *we* *stælon*
 think.IND.PRS.2SG 2SG.NOM that 1PL.NOM steal.IND.PRET.PL
þines *hlafordes* *gold* *opþe*
 POSS.3SG.GEN.SG.M master(M).GEN.SG gold(N).ACC.SG or
hys *seolfor?*
 POSS.3SG.M silver(N).ACC.SG
 “Do you think that we stole your master's gold or his silver?” (cootest,Gen:44.8.1879)

A recipient-like argument can also be added to one-place and two-place verbs, and it can be encoded either in the dative on with a PP headed by different adpositions (mainly *to*, *wið*, *mid*). Once again, the choice of not adding this further argument in the basic frame depends on frequency (cf. for example the discussion on TALK *sprecan* in section 2.3.2.1). The verbs allowing this insertion are LEAVE *læfan* (147), SHOUT AT *clipian*, TALK *sprecan*, and TELL *tellan* (148).

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(147) *Ic læfe eow sibbe*
 1SG.NOM leave.IND.PRS.1SG 2PL.DAT peace(F)ACC.SG
 “I leave to you peace” (cowsgosp,Jn_[WSCp]:14.27.7002)

(148) & *þu hæfst nu giet toecan eall*
 and 2SG.NOM have.IND.PRS.2SG now yet besides ALL.ACC.SG.N
þæt ic ðe ær tealde
 DET.ACC.SG.N.REL 1SG.NOM 2SG.DAT before tell.IND.PRET.1SG
 “and you have yet in addition, all that I have already told you.”
 (coboeth,Bo:10.22.28.376)

The only verb allowing the insertion of both above-mentioned arguments, also simultaneously, is SHOUT AT *clipian*, which can feature [NOM,ACC,DAT]⁸⁸ construction like other ditransitive communication verbs. Example (149) shows the sole occurrence in my corpus of *clipian* with both a T and R argument. Similarly, the [NOM,ACC,DAT] construction can be featured by TALK *sprecan*, but these occurrences will be discussed in section 3.4.3.1 on applicatives.

(149) *Hwæt þa Iohannes to mannum*
 what then John(M).NOM.SG to man(M).DAT.PL
clypode þas ylcan word
 shout.IND.PRET.3SG DEM.ACC.PL.N same.ACC.PL.N word(N).ACC.PL
 “But John cried these same words to men” (cocathom1,ÆCHom_I,_25:386.197.4943)

2.4.2.5. Reflexive and reciprocal

This section will deal with the sole argument-identifying alternations in the PaVeDa project, namely the reflexive and the reciprocal alternation. I will first address the topic of “direct” and “indirect” reflexive, and then I will discuss so-called “understood reflexive object”. I will conclude this section illustrating the reciprocal alternation.

In her typology of reflexives, Geniušienė (1987) defines the term “reflexive” as follows:

⁸⁸ The following example feature a recipient coded with the PP *to+dat*, which is equivalent to the simple dative in these contexts, as shown in section 3.4.1.2 on the “dative alternation”.

“This term [the term reflexive] is used to refer both to form and meaning. It refers to form in the term **reflexive verb** and denotes the presence of a RM [reflexive marker] in a verb, whatever the meaning of the latter. And it refers to the meaning of semantic role coreference in the phrases **reflexive meaning, semantically reflexive (verb), semantic reflexivity.**” (Geniušienė, 1987: 27, bold in the original)

She claims that reflexive alternation marks both semantic and syntactic derivation. This allows for distinguishing two distinct functions at different levels of analysis: (a) a semantic function, which marks a change in meaning, and (b) a syntactic/structural function, which marks a change in syntactic properties (Geniušienė, 1987: 30).

Unlike other Old Germanic languages, Old English did not develop an actual reflexive pronoun. Instead, the adjective *self* was employed to add emphasis, rather than to signify coreferentiality between the agent and the patient, and – in any case – it was morphologically independent (Van Gelderen 2000: 31). In Old English, the reflexive function was fulfilled by personal pronouns in the accusative or dative (see, among others, Van Gelderen, 2000; Sinar, 2006; Pielecha, 2014). It was not until Early Modern English that the emphatic *self* began to be grammaticalized and combined with the coreferential pronoun, resulting in the reflexive forms *myself, yourself, himself, herself*, etc. (Sinar, 2006: 172). For this reason, differently from other languages in the PaVeDa project (e.g. Gothic, Zanchi & Tarsi 2021: 68-70) reflexives and reciprocals are considered uncoded alternation (also consistently with the fact that this kind of reflexive is called “non-specialized reflexive” by Zúñiga & Kittilä 2019: 197).

It must be noted that the use of reflexive pronouns in PDE differs from their use in Old English, in that PDE does not always express coreferentiality with the above-mentioned reflexive forms in the contexts where the ancient language usually placed the pronoun. As Cook (1921: 100) notes “[t]he reflexive pronoun [...] is used with certain verbs whose counterparts in Modern English would not necessarily require it. In the PaVeDa database, I distinguished between “direct” and “indirect” reflexives: in direct reflexive, the participant co-referential with the subject is encoded in the accusative (except for the verb HELP *helpan*) and generally behaves as a patient, whereas in indirect reflexive, the participant co-referential with the subject is encoded in the dative or in a PP and generally behaves either as a recipient or as a beneficiary. Despite being “participant-merging” from a semantic point of view, syntactically the reflexive can hardly be considered as a valency decreasing mechanism: the “direct reflexive” is an argument-identifying alternation in Old English, whereas the “indirect reflexive” is a valency-augmenting strategy.

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The verbs of my sample found in a “direct reflexive” alternation are CUT (1) *ceorfan*, DRESS *scrydan*, HELP *helpan*, HIDE *hydan*, NAME *namnian*, SEE *seon*, SEND *sendan*, SHOW (2) *eowan*, SHOW (3) *æt-eowan*, SIT DOWN *sittan*, THROW *weorpan*, TIE (2) *bindan*, WASH (2) *pwean*. On the other hand, the “indirect reflexive” alternation is featured by ASK FOR *axian*, BUILD *timbran*, FILL *fyllan*, GO *gan*, KNOW *cunnan*, LIVE *lifian*, PUT *settan*, SEARCH FOR *secan*, SEE *seon*, SHOW (3) *æt-eowan*, SIT DOWN *sittan*, TAKE *niman*, TALK *sprecan*, TEACH *læran* and THINK *þencan*. Examples (150) and (151) illustrate both alternations with the verb SEE *seon*, where the co-referential pronouns *mec* and *me* respectively encode the stimulus and a beneficiary-like argument.

(150) *ic* *mec* *nu* *geseo* *betwih*
 1SG.NOM 1SG.ACC.REFL now see.IND.PRS.1SG between
monnum *lifigan*
 man(M).DAT.PL live.INF
 “I see myself now living among men.” (cobede,Bede_5:13.434.1.4355)

(151) *ah* *ða* *wyrrestan* *ingewitnesse* *me*
 but DET.ACC.SG.F worst.ACC.SG.F knowledge(F).ACC.SG 1SG.DAT.REFL
ic *geseo*, & *fore* *minum* *eagum*
 1SG.NOM see.IND.PRS.1SG and before POSS.1SG.DAT.PL.N eye(N).DAT.PL
hæbbe
 have.IND.PRS.1SG
 “[I am not mad;] but I see for myself and have before my eyes the most dreadful consciousness.” (cobede,Bede_5:14.438.19.4399)

As visible from the lists above, consistently with Mitchell & Robinson (2012: 19), the frequency of Old English verbs taking reflexive object is much higher than Modern English. This is also the case of verbs of grooming, among which DRESS *scrydan* and WASH (2) *pwean*, which allow both “direct reflexive” and “implicit reflexive”, in which a one-argument clause is commonly interpreted as reflexive (Zúñiga & Kittilä 2019: 196). This corresponds to what Goddard (2013) calls “understood reflexive object”, which is defined as follows:

“Verbs like wash and dress and other verbs of “caring for the body”, whose primary frame is transitive, frequently appear without any overt object (in a nonbasic frame), with the implication

that the subject washes, dresses, etc., him or herself (Levin 1993: 35f). Notice though that an explicit reflexive is either odd (e.g. She dressed herself - implies that usually someone else does it) or anomalous (e.g. She flossed herself).” (Goddard 2013)⁸⁹

Old English grooming verb did allow the omission of the co-referential pronoun, though apparently preferring the “direct reflexive” alternation (Giarda 2023), as shown in (152) and (153), both from the West Saxon Gospel of John. These two sentences appear in the same chapter and narrate the same episode, making it challenging to identify semantic reasons to differentiate between the two alternations.

- (152) *he* *dyde* *fenn* *ofer* *mine*
 3SG.NOM.M put.IND.PRET.3SG dirt(N).ACC.SG over POSS.1SG.ACC.PL.N
eagan & *ic* *þwoh* &
 eye(N).ACC.PL and 1SG.NOM wash.IND.PRET.1SG and
ic *geseo*
 1SG.NOM see.IND.PRS.1SG
 “he put mud on my eyes, I washed and now I see” (cowsgosp,Jn_[WSCp]:9.15.6534)

- (153) *he* *for* & *þwoh* *hine*
 3SG.NOM.M go.IND.PRET.3SG and wash.IND.PRET.3SG 3SG.ACC.M.REFL
 & *com* *geseonde*
 and come.IND.PRET.3SG see.PTCP.PRS
 “He went, washed [himself] and came back seeing” (cowsgosp,Jn_[WSCp]:9.7.6513)

Old English verbs of my sample allowing the “understood reflexive object” alternation are, as mentioned, verbs of grooming DRESS *scrydan* and WASH (2) *þwean*, but also – though marginally - HIT *slean*, HUG *clyppan* PUT *settan*, and SEE *seon*, as shown for instance in (154).

- (154) *he* *ofdræd* *sloh* *adun* *þærrihte*
 3SG.NOM.M frighten.PTCP.PST hit.IND.PRET.3SG down immediately
 “he, affrighted, cast himself down straightway [and prostrated himself before all the people]” (cosevensl,LS_34_[SevenSleepers]:659.514)

⁸⁹ <https://paveda.unipv.it/alternations/3532288527>.

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It is important to mention that it is not always easy to distinguish among the categories of reflexive – non-causal – passive, as will be discussed in greater detail later in sections 2.4.3.2 and 2.4.3.3. However, it can be noted here that sometimes “understood reflexive object” occurrences are not distinguishable from “non-causal” ones, as is the case of SHOW (3) *æt-eowan*, exemplified in (155) in a “direct reflexive” frame and in (156) in a “non-causal” occurrence, which however could be interpreted as “understood reflexive object” as well. Despite the presence of “direct reflexive” occurrences, there is not clear enough evidence to support a distinction between “non-causal” and “understood reflexive object” alternation.

(155)	<i>æteowde</i>		<i>se</i>		<i>heahengel</i>		
	show.IND.PRET.3SG		DET.NOM.SG.M		archangel(M).NOM.SG		
	<i>Michael</i>		<i>hine</i>		<i>sylfne</i>		<i>þam</i>
	Micheal(M).NOM.SG		3SG.ACC.M.REFL		self.ACC.SG.M		DET.DAT.SG.M
	<i>biscope</i>	<i>on</i>	<i>gastlicere</i>		<i>gesihðe</i>		
	bishop(M).DAT.SG	on	ghostly.DAT.SG.F		vision(F).DAT.SG		

“[On the third night of the fast] the archangel Michael appeared [lit. showed himself] to the bishop in a ghostly vision” (cocathom1,ÆCHom_I,_34:466.23.6697)

(156)	<i>æteowde</i>		<i>se</i>		<i>steorra</i>		<i>þe</i>	<i>mon</i>
	show.IND.PRET.3SG		DET.NOM.SG.M		star(M).NOM.SG		REL	INDF
	<i>on boc-læden</i>		<i>hæt</i>		<i>cometa</i>			
	on book-Latin(N).DAT.SG		call.IND.PRS.3SG		comet(F).NOM.SG			

“[And this same year after Easter, around Rogation days or earlier,] appeared the star which men in book-Latin call comet’.” (cochronA-2a,ChronA_[Plummer]:892.1.1008)

Another example worth commenting is found with the verb FILL *fyllan*, which can be found without an explicit third argument, i.e. the substance filling the patient. In these cases, this third argument is co-referential with the agent, as in (157). Considering example (158), where the third argument is co-referential with the subject and still is expressed, one may be tempted to consider occurrences like (157) as “understood reflexive object”. However, given the fact that instruments (as this third argument) are generally not core arguments, thus not part of the valency of a verb, I have not added these occurrences to the PaVeDa database of Old English.

(157)	<i>& eal</i>		<i>þæt</i>		<i>hus</i>		<i>gefylde.</i>
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and all.ACC.SG.N DET.ACC.SG.N house(N).ACC.SG fill.IND.PRET.3SG
 “[Then, as it seemed to her, she saw with open eyes a great light come from the
 roof above:] and it filled all that house.” (cobede,Bede_4:24.340.7.3408)

(158) *Ic* *gefyllle* *mid* *me* *sylfum*
 1SG.NOM fill.IND.PRS.1SG with 1SG.DAT.REFL self.DAT.SG
heofonas & *eorþan*.
 heaven(M).ACC.PL and earth(F).ACC
 “I fill with myself heaven and earth” (cocathom1,ÆCHom_I,_19:327.55.3667)

Finally, I will conclude this section discussing the reciprocal alternation, which is defined in the PaVeDa database of Old English as follows:

“Reciprocal constructions behave similarly to reflexive ones, in that they have “the two nuclear arguments A and P acting on each other and being both agent and patient” (Cennamo 2015: 453). This might have been expressed by apparently the same construction as a plural subject + a reflexive personal pronoun object. For this reason, misunderstanding may have risen in the case of third person plural subjects, whose correct interpretation depended on context and situation (Visser 1963: 439). Other expression of reciprocity such as self- (Visser 1963: 440) or *ælc to oðrum*, are possible but not mandatory.”⁹⁰

Verbs of my sample allowing this alternation are HELP *helpan*, HIT *slean*, KNOW *cnawan*, MEET *metan*, in example (159), and TALK *sprecan*. Visser (1963: 440) notes that “as the reflexive pronouns, the reciprocal pronoun can have the word *self* added to them”, corresponding to the modern usage of “each other” or “one another.” Unfortunately, my corpus contains no examples of this, but the expression *ælc heora oðerne* in example (160) would correspond to this usage, emphasising reciprocity (Visser 1963: 444).

(159) *ægðer* *hiora* *bið* *þy*
 each.NOM.SG 3PL.GEN be.IND.PRS.3SG DET.INS.SG
forcuðra *gif* *hi* *hi* *gemetað*.
 more_worthless.NOM.SG if 3PL.NOM 3PL.ACC.REFL meet.IND.PRS.PL
 “Each of them is the more worthless, when they meet with each other.”

⁹⁰ <https://paveda.unipv.it/alternations/13542966263>.

one the number of the arguments with respect to the basic construction (Polinsky 2013), and it is coded because it involves a morphological change of the verb. Applicative constructions typically serve as transitivity mechanisms and are generally found with intransitive (one-place) verbs. However, transitive (two-place) verbs can also exhibit this alternation, thereby becoming ditransitive (three-place) (Peterson 2007: 2).

In Old English, this alternation is primarily coded using the prefix *be-/bi-* (< Gmc. **bi-* < PIE **bhi*, Saibene & Buzzoni 2014: 372),⁹¹ which literally means ‘around’, but also is used to transitivity the verb (Mitchell & Robinson 2012: 58). Because prefixed verbs were avoided unless the prefix significantly altered the verbal meaning, my corpus does not show any instances of this alternation with the prefix *be-/bi-*. However, Saibene & Buzzoni (2014: 372) mention the verb *be-pencan*,⁹² meaning ‘consider’. The Bosworth/Toller Dictionary provides several examples of the transitive construction of this verb, as in (162), which can be compared to the verb THINK *ðencan*, found in my corpus, found both with accusative second arguments, which is considered the basic frame as in (163)⁹³, and with clausal ((164)) or PP ((165)) complements.

(162) *þæt* *þu* *bebence* *ðone*
 that 2SG.NOM consider.SBJV.PRS.2SG DET.ACC.SG.M
rædels *ariht*
 riddle(M).ACC.SG aright
 “that you may consider the riddle aright” (coapollo,ApT:5.5.69)

(163) *Ða* *he* *þis* *þohte*
 when 3SG.NOM.M DEM.ACC.SG.N think.IND.PRET.3SG
 “While he thought this, [he saw where she stood on the other side of the stream]”
 (comary,LS_23_[MaryofEgypt]:676.446)

(164) *þa* *þohte* *he* *þæt* *he* *sceolde*
 then think.IND.PRET.3SG 3SG.NOM.M that 3SG.NOM.M shall.IND.PRET.3SG
worulde *wiðsacan*
 world(F).DAT.SG reject.INF

⁹¹ As in other Germanic languages: cf. Zanchi & Tarsi 2021:59 for Gothic, Haspelmath & Baumann 2013 for Modern German and Saibene & Buzzoni 2014: 371-372 for an overview of Old Germanic languages.

⁹² <https://bosworthtoller.com/40228>.

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“then he thought he should renounce the world” (cobede,Bede_4:3.264.1.2682)

- (165) *þa* *þohte* *heo* *bi* *þære* *gesyhðe*
 then think.IND.PRET.3SG 3SG.NOM.F about DET.DAT.SG.F vision(F).DAT.SG
 “then she reflected on her vision” (cobede,Bede_4:11.288.18.2910)

Similarly to THINK *ðencan*, also the communication verb TALK *sprecan* allows for both coded and uncoded applicatives, in the role of the theme: other than the verb *be-sprecan* ‘to speak about, to mention, to complain’ ((166)), a second argument in the accusative can be added to the monovalent basic frame (cf. section 3.3.2.1 for the discussion on the basic frame of *sprecan*). As mentioned in sections 2.3.3.1 and 2.4.2.4, *sprecan* allows a T second argument encoded by a PP ((167)) or by the simple accusative ((168)), the former could be interpreted as a “topic-about” alternation (cf. section 3.4.1.6), while the latter as an uncoded applicative.⁹⁴ When found in this alternation, the verb TALK *sprecan* features the [NOM,ACC,DAT] construction, similarly to other communication ditransitive verbs, as in (169).

- (166) *for hwi* *besprecað* *nu* *men* *þas*
 for why speak.IND.PRS.PL now man(M).NOM.PL DEM.ACC.PL.F
crīstnan *tīda*
 Christian.ACC.PL.F time(F).ACC.PL
 “why do men complain about this Christian time?” (coorosiu,Or_1:12.34.15.667)

- (167) *Ic* *sceal* *forð* *sprecan* *gen*
 1SG.NOM shall.IND.PRS.1SG forth speak.INF again
ymbe *Grendel*
 about Grendel(M).ACC.SG
 “I shall speak further about Grendel” (cobeowul,64.2069.1684)

- (168) *&* *Aaron* *spæc* *ealle*
 and Aaron(M).NOM.SG speak.IND.PRET.3SG all.ACC.PL.N
þa *word*
 DET.ACC.PL.N word(N).ACC.PL

⁹⁴ Uncoded applicatives are found also in other languages, e.g. Italian (Cennamo 2015: 437-438), Latin (Giuliani 2021: 63-64) and Gothic (Zanchi & Tarsi 2021: 48, 59-60)

“and Aaron told them everything [the Lord had said to Moses.]”

(cootest,Exod:4.30.2461)

- (169) & *ge* *gehyrað* *hwæt* *ic*
 and 2PL.NOM hear.IND.PRS.PL what.ACC.SG.N 1SG.NOM
eow *sprece.*
 2PL.DAT speak.IND.PRS.1SG
 “and you hear what I am telling you.” (cootest,Gen:45.12.1943)

Also, note that TALK *sprecan* also allows applicatives in the role of recipient, which from a dative or prepositional encoding are marked by the accusative case. However, this alternation is always coded, namely marked by the prefix *ge-*, as shown in (170). This is consistent also with Ruiz Narbona’s (2019: 233-237) finding that “*ge-* forms do favour transitivity”, though lacking consistency.

- (170) *hu* *mæig* *ic* *hine* *gesprecan*
 how may.IND.PRS.1SG 1SG.NOM 3SG.ACC.M speak.INF
 “[My Saviour,] how may I speak to him [who is the persecutor of your saints, through the power of the chief priests?]” (cocathom1,ÆCHom_I,_27:401.29.5251)

The same *ge-* prefix is found in a similar alternation, called “locative promotion”, for the sake of comparison with PDE (Goddard 2013). The constructional similarity is already noted by Goddard in his definition of the alternation, claiming that he sees “but I see an affiliation with locative applicatives, hence the coinage Locative promotion”⁹⁵ Verbs featuring the “locative promotion” are BUILD *timbran*, CLIMB *stigan*, JUMP *hleapan*, SIT DOWN *sittan*. However, the former two allow, though marginally, also uncoded “locative promotion”. Compare examples (171) - (172), where the verb BUILD *timbran* is found the uncoded “locative promotion” alternation, whereas CLIMB *stigan* is found mainly in the coded version, as in (172), but seems to allow it uncoded in poetry. However, this is the sole example of uncoded “locative promotion” with CLIMB *stigan*. On the other hand, JUMP *hleapan*, SIT DOWN *sittan* allow only the coded version of the alternation, thus always with the *ge-* prefix, as in (174) and (175). Once again, example (174) is from the poetry corpus and is the sole occurrence with the verb JUMP *hleapan*.

⁹⁵ <https://paveda.unipv.it/alternations/3971461457>.

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- (171) *ongon* *þa* *hrædlice* *timbran* *þa*
begin.IND.PRET.3SG then rapidly build.INF DET.ACC.SG.F
stowe *þæs* *mynstres*
place(F).ACC.SG DET.GEN.SG.N monastery(N).GEN.SG
“and began rapidly to build [on] the site of the monastery”
(cobede,Bede_3:14.210.19.2137)
- (172) & *gefeonde* *þa* *heofonlican* *rico*
and rejoice.PTCP.PRS DET.ACC.PL.N heavenly.ACC.PL.N realm(N).ACC.PL
gestah & *gesohte.*
climb.IND.PRET.3SG and seek.IND.PRET.3SG
“and with joy [St. Laurentius] ascended and entered into the kingdom of heaven.”
(cobede,Bede_2:7.116.20.1108)
- (173) *heah-lond* *stigon* *sibgemagas,* *on*
high-land(N).ACC.SG climb.IND.PRET.PL kinsman(M).NOM.PL on
Seone *beorh.*
Sion hill(M).ACC.SG
“those kinsmen climbed the hill, the mountain in Sion” (coexodus,102.384.312)
- (174) *gehleaped* *hea* *dune,* *hyllas*
jump.IND.PRS.3SG high.ACC.PL.F mountain(F).ACC.PL hill(M).ACC.PL
ond *cnollas*
and knoll(M).ACC.PL
“[This shall be made known: that the King of angels, the Lord mighty in strength, will come springing upon the mountain,] leaping the high uplands; hills and downs”
(cochrist,23.712.494)
- (175) & *he* *gesæt* *þone* *bisceopstol*
and 3SG.NOM.M sit.IND.PRET.3SG DET.ACC.SG.M episcopal_seat(M).ACC.SG
“and he sit on the episcopal seat on the day of the two apostles Simon and Jude, at Winchester” (cochronA-5,ChronA_[Plummer]:984.1.1411)

It seems suitable to mention in this section also what is called “locative” alternation, following Goddard’s (2013) database of PDE, defined as “[a] transitive verb depicting someone moving something (T) to a vehicle, container or other “thing-like” location can appear with the location as direct object and the thing moved in a with-phrase, e.g. loaded hay onto the truck ~ loaded the truck with hay”.⁹⁶ Differently from the “locative promotion”, which is a valency-increasing mechanism, the “locative” alternation is a valency-rearranging strategy, both in OE and in PDE. However, in a comparative perspective, this alternation can be considered an applicative in other languages, such as German, as reminded, for instance, by Zúñiga & Kittilä (2019: 57), “remapping applicatives” in their terms) and illustrated by example (176), from the ValPaL database of German (Haspelmath & Baumann 2013).⁹⁷

(176) *Ich* *be-lad-e* *den* *Anhänger* *mit* *Möbel-n*
 1SG.NOM APPL-load-1SG.PRS DEF.M.ACC trailer(ACC) with furniture-DAT
 “I am loading the trailer with furniture” (adapted from Haspelmath & Baumann 2013)

(177) *ond þa* *gehlodon* *hildesercum,* *bordum*
 and then load.IND.PRET.PL battle_coats(F).DAT.PL shield(N).DAT.PL
ond ordum, *byrnwigendum,* *werum*
 and spear(M).DAT.PL armour_wear.PTCP.PRS.DAT.PL man(M).DAT.PL
ond wifum, *wæghengestas.*
 and woman(F).DAT.PL ship(M).ACC.PL
 “and then loaded **the ships, wavehorses**, with battle-coats, with shields and with spears, with armoured soldiers, with men and with women.” (cocynew,72.232.299)

(178) *þa* *wæs* *on* *sande* *sægeap*
 then be.IND.PRET.3SG on sea-shore(N).DAT.SG spacious.NOM.SG.N
naca *hladen* *herewædum,* *hringedstefna,*
 ship(M).NOM.SG load.PTCP.PST armour(F).DAT.PL ring-prowed.NOM.SG.N
mearum *ond* *maðmum*
 horse(M).DAT.PL and treasure(M).DAT.PL
 “There on the beach that ship was laden with armour, the ring-prowed ship, and with horses and with treasures” (cobeowul,58.1896.1563)

⁹⁶ <https://paveda.unipv.it/alternations/3583489843>.

⁹⁷ <https://paveda.unipv.it/alternationvalues/82438>.

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Example (177) shows the “locative” alternation in Old English with the verb LOAD *hladan* (cognate with German *laden*),⁹⁸ in which the “loaded thing”, i.e. the theme, is encoded in the dative, taking up instrumental-like functions, and the “loading place”, i.e. a recipient-like argument, is encoded in the accusative. This is the only occurrence of the kind found in my corpus, and it features the same *ge-* prefix mentioned above for the “locative promotion”. Once again, this sole occurrence has been found in the poetry corpus, linking this “*ge-*applicative” to a more poetic and formal language. Remarkably, the poetry corpus also shows a passive occurrence, in (178), in which the passivised argument is not the theme, here encoded in the dative, but the recipient, *sægeap naca* ‘a spacious ship’, here encoded in the nominative. Since in this example, the past participle has been found without the prefix *ge-*, the “locative” alternation has been considered uncoded, also consistently with PDE.

2.4.3.2. Causal vs non-causal alternation

This section aims to outline the various ways in which the causal/non-causal alternation is represented in Old English. Firstly, I will contextualize the Proto-Germanic causal *-ja* suffixation, illustrating its evolution in Old English. Next, I will explore the so-called labile verbs, which are a notable feature of English (and more so in later stage of the language) compared to other languages. Finally, I will focus on marked causal construction, namely the periphrases *lætan* and *don* + infinitive.

The derivation of causal verbs using the *-ja* suffix is a strategy shared by all Germanic languages, albeit to varying extents. This strategy likely existed in Proto-Germanic, though in an “embryonic state” (Ottósson 2013: 329). This might explain why only remnants of this suffixation process are evident in Old English, unlike other languages such as Gothic, “in which the causal member of the alternation is almost always expressed by *ja-*verbs” (Zanchi & Tarsi 2021: 63).⁹⁹ According to García García (2020: 163), Old English had 59 definite causal-noncausal pairs, marked by vowel alternation resulting from the vowel raising triggered by the original *-ja* suffix (Saibene & Buzzoni 2014: 116-117). However, the *-ja* causative formation was no longer productive in Old English, nor was it consistently applied, as the correspondence of strong verb = intransitive and weak verb = transitive-causative was not stable (García García 2020: 170). Some of the pairs mentioned in

⁹⁸ Note, however, that ***be-hladan* is not attested in Old English.

⁹⁹ As one of the reviewers of this thesis suggests, it may also be the case that Old English lost the strategy, as it is later attested than Gothic. This might be the reason why in the Gothic text the Germanic strategy is better preserved.

García García (2020) correspond to the PaVeDa meanings analysed in my corpus: e.g. BOIL *weallan* ‘to boil, to bubble’ - *wyllan* ‘to make boil’, BURN *baernan* ‘to make burnt’ - *byrnan* ‘to become burnt’, KILL and DIE *cwellan* ‘to kill’ - *cwelan* ‘to die’, SINK *sencan* ‘to make sink’ - *sincan* ‘to become sunk’, TEAR *slaetan* ‘to make an animal attack, bite, tear’ - *slitan* ‘to tear, to bite’, BE COLD *celan* ‘to make cold’ - *calan* ‘to be cold’. Of these pairs, the latter two have one single translational equivalent, namely the non-causal one, since the PaVeDa meaning do not distinguish between them, as it is the case of the others.¹⁰⁰ However, it must be noted that some of these verbs already exhibited lability, though marginally.

Following Haspelmath et al (2014: 590), we can define causal verbs or verbal expressions as including “a ‘cause’ meaning component”, whereas a “noncausal verb is a verb that has the same basic meaning [core-event, in their terms] as a causal verb but lacks the ‘cause’ component”. In other terms, namely Zúñiga & Kittilä’s (2019: 15), “causatives increase the semantic valency of predicates by introducing a new [external] agent”, i.e. the causer, which can be a prototypical agent or instigate the event without being responsible for its performance.¹⁰¹ On the other hand, they define anticausatives, i.e. non-causals, as removing an agent from the verbal semantics (Zúñiga & Kittilä 2019: 41). Labile verbs encode both the causal and the non-causal event in the same verb, without any morphological marking. Though Old English still expressed this alternation through verbal pairs differentiated by vowel raising triggered by the original *-ja* suffix, some verbs are found in an unmarked causal/non-causal alternation. The verb BE SAD *unrotsian*, whose more frequent coding frame is monovalent, can also be found in unmarked causal frames, as shown respectively in (179) and (180).

(179) *and he ne geunrotsige*
 and 3SG.NOM.M NEG be_sad.SBJV.PRS.3SG
 “and he shall not be sad” (cobenrul,BenR:34.57.19.710)

(180) *beahhwæpere þæt we hi ne geunrotsigeon*
 yet that 1PL.NOM 3PL.ACC NEG make_sad.SBJV.PRS.PL
 “But so that we may not cause offense, go to the lake and throw out your line.”
 (cowsgosp,Mt_[WSCp]:17.27.1176)

¹⁰⁰ ValPaL/PaVeDa meanings distinguish between BOIL and BOIL (tr), BURN and BURN (tr), ROLL and ROLL (tr), SINK and SINK (tr).

¹⁰¹ Zúñiga & Kittilä (2019: 18-19) remind that, though both two-place constructions with an agent and a patient, transitive causatives and base transitive events “can and need to be distinguished”.

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Except for BE SAD *unrotsian*, the other verbs featuring this alternation have a two-place basic frame but show unmarked non-causal occurrences; these verbs are BURN (tr) *bærnan*, KILL *cwellan*, TEAR *slitan*,¹⁰² SMELL *stincan*, SHOW (3) *æt-eowan*. On the different usages of smell *stincan*, following Klein’s (1998) analysis has already been discussed in section 2.3.3.3. In the same way, I already hinted in section 2.4.2.5 at the possible overlapping between reflexive and non-causal for the verb SHOW (3) *æt-eowan*, which has a basic bivalent frame meaning ‘to show (something to someone)’, as in (181), but in the non-causal alternation means ‘appear’ or ‘show oneself’, as visible in example (156) above, but also (182) below.

- (181) *ac Petrus æteowde þone*
 but Peter(M).NOM.SG show.IND.PRET.3SG DET.ACC.SG.M
gebletsodan hlaf þam hundum
 bless.PTCP.PST.ACC.SG.M bread(M).ACC.SG DET.DAT.PL.M dog(M).DAT.PL
 “but Peter showed the blessed bread to the dogs”
 (cocathom1,ÆCHom_I,_26:395.189.5124)

- (182) *þonne æteawest þu læsson þonne ic*
 then show.IND.PRS.2SG 2SG.NOM less than 1SG.NOM
nu ær to þe gelyfde
 now before to 2SG.DAT believe.IND.PRET.1SG
 “And if it is otherwise, then you show yourself [or appear] a lesser man than I previously believed of you.” (coalex,Alex:5.6.23)

Reflexives and non-causals both lack an external agent to initiate the event. Generally, the most distinguishing feature of reflexives compared to non-causals is the aspect of control (e.g., Ježek 2003 on Italian). The connection between reflexive and non-causal meanings is further supported by Geniušienė’s (1987: 30) assertion that reflexives can function to indicate “decausation”. She uses the term “decausatives” to refer to what is also known in the literature as “inchoative” (e.g. Haspelmath, 1993), “anticausatives” (e.g. Haspelmath, 2016), or “non-causal” (e.g. Haspelmath et al., 2014), the latter being the term used in the PaVeDa database. Because Old English allows for “understood reflexive objects”, distinguishing between this alternation and non-causal occurrences

¹⁰² Differently from what was found by García García & Ingham (2023), though only one occurrence of the kind was found in my corpus (<https://valpal.apnetwork.it/alternationvalues/129941>).

of the verb is not always straightforward, at least from a syntactic perspective. Geniušienė (1987: 257-258) claims that the “decausative function” of the reflexive is common in many Old Indo-European languages, including Old Germanic languages like Gothic, Old High German, and Old Icelandic. Ottósson (2013) also discusses these languages, suggesting that the higher number of labile verbs in Old English, compared to other Germanic languages, might be due to the absence of “reflexive middles” (Ottósson 2013: 376). Unlike Old English and other Ingvaemonic languages, other branches of Germanic developed a reflexive pronoun/marker, such as Gmc. **siz* > Gothic *sik*, German *sich*, Old Icelandic *-s*,¹⁰³ which also expressed decausativisation. Kemmer (1993: 192) notes that, similar to other Germanic languages, Old English uses the coreferential pronoun to express both reflexive and middle meanings, as demonstrated in Table 11.

	Emph. Refl.	Dir. Refl.	Middle
1. Proto-Germanic	* <i>selbo</i>	* <i>sik</i>	(<i>intrans.</i>)
2a. OE	(<i>pro.</i>) <i>self</i>	(<i>pronoun</i>)	(<i>pronoun</i>)
2b. German	(<i>sich</i>) <i>selbst</i>	<i>sich</i>	<i>sich</i>
2c. Old Norse	(<i>sik</i>) <i>sjálf-</i>	<i>sik</i>	<i>-sk</i>
3a. English	(<i>pro.</i>) <i>self</i>	(<i>pro.</i>) <i>self</i>	(<i>various</i>)
3b. Dutch	(<i>zich</i>) <i>zelf</i>	<i>zichzelf</i>	<i>zich</i>
3c. Norwegian	(<i>seg</i>) <i>selv</i>	<i>seg</i>	<i>seg/(-s)</i>

Table 11: Reflexive and middle strategies in Germanic languages (from Kemmer 1993: 172)

Also, the verb KILL *cwellan* is worth discussing: the occurrence in (183) is not mentioned in the DOE, neither in the lemma *cwellan* ‘kill’ nor in *cwelan* ‘die’. According to the DOE, these two lemmas seem to differentiate for consonantal length, which however does not seem distinctive since example with *-ll-* are present in *cwelan* ‘die’. Because the causal vs. non-causal alternation is frequently represented by verb pairs differing in thematic vowel (a relic of the old Germanic *-ja* suffix), and graphical variants are common in Old English, it could be argued that *cwelan* and *cwellan* are not distinct verbs, but rather different spellings of the same verb, which would allow labiality.

(183) <i>se</i>	<i>bið</i>	<i>swylce</i>	<i>he</i>	<i>sie</i>
DET.NOM.SG.M	be.IND.PRS.3SG	like	3SG.NOM.M	be.SBJV.PRS.3SG

¹⁰³ “Sīna-” in: Etymological Dictionary of Proto-Germanic Online, edited by: Guus Kroonen, Ph.D. (2009). Consulted online on 25/11/2025 <https://dictionaries.brillonline.com/search#dictionary=proto_germanic&id=pg1993>

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<i>ealne</i>	<i>weg</i>	<i>cwellende.</i>
all.ACC.SG.M	way(M).ACC.SG	kill/die.PTCP.PRS

“[He who is always afraid] is like one who is always dying”
(codicts,Prov_1_[Cox]:1.76.140)

The other verbs allowing unmarked non-causal occurrences, namely BURN (tr) *bærnan*, FRIGHTEN *fyrhtan* and TEAR *slitan*, do have non-causal counterparts, i.e. *byrnan* ‘burn (intr.)’, *forhtian* ‘fear’ and *slætan* ‘to make an animal attack, bite, tear’, but show nonetheless non-causal occurrences, as in (184) - (186).

(184)	<i>Fyr</i>	<i>ic</i>	<i>sende</i>	<i>on</i>	<i>eorþan</i>	<i>&</i>
	fire(n).ACC.SG	1SG.NOM	send.IND.PRS.1SG	on	earth(F).ACC.SG	and
	<i>hwæt</i>	<i>wylle</i>	<i>ic</i>	<i>buton</i>	<i>þæt</i>	
	what.ACC.SG.N	want.IND.PRS.1SG	1SG.NOM	except	that	
	<i>hit</i>	<i>bærne.</i>				
	3SG.NOM.N	burn.SBJV.PRS.3SG				

“I have sent fire on the earth, and how I wish it was already burning!”
(cowsgosp,Lk_[WSCp]:12.49.4720)

(185)	<i>&</i>	<i>þæt</i>	<i>heo</i>	<i>ne</i>	<i>fyrhte</i>	<i>þæt</i>
	and	that	3PL.NOM	NEG	frighten.IND.PRET.PL	DET.ACC.SG.N
	<i>gewiin</i>		<i>þæs</i>		<i>siðfætes</i>	<i>ne</i>
	tumult(N).ACC.SG		DET.GEN.SG.M		journey(M).GEN.SG	NEG
	<i>wyrgcweodulra</i>		<i>monna</i>		<i>tungan</i>	<i>ne</i>
	evil_speaking.GEN.PL.M		man(M).GEN.PL		tongue(F).ACC.PL	NEG
	<i>bregde</i>					
	terrify.IND.PRET.3SG					

“that they should not be afraid of the toil of the journey, nor dread the tongues of evil-speaking men” (cobede,Bede_1:13.56.10.523)

(186)	<i>Ne</i>	<i>asend</i>	<i>nan</i>	<i>man</i>
	NEG	send.IND.PRS.3SG	none.NOM.SG.M	man(M).NOM.SG
	<i>scyp</i>	<i>of</i>	<i>niwum</i>	<i>reafe</i>
				<i>on</i>
				<i>eald</i>

patch(M).ACC.SG of new.DAT.SG.N garment(N).DAT.SG on old.ACC.SG.N
reaf, *elles þæt niwe slit*

garment(N).ACC.SG else DET.NOM.SG.N new.NOM.SG.N tear.IND.PRS.3SG

“One does not put a patch from a new garment on an old one, otherwise the new one gets torn” (cowsgosp,Lk_[WSCp]:5.36.3976)

Remarkably, one of the most cited verbs when dealing with lability, i.e. *break* (< OE *brecan*) has not been found in my corpus in non-causal occurrences, except for the one shown in (187), in which however the adverb *ut* is present, therefore not considered among the data because of the morphological criterion presented in 1.3. Nonetheless, the Bosworth/Toller Dictionary¹⁰⁴ gives examples for both transitive and intransitive usage of the verb, together with a reflexive occurrence. However, the intransitive usages seem to mean ‘to break out, to burst’, rather than an actual spontaneous event of breaking, the latter maybe expressed through a marked causal construction (as in (192) below) or the passive (cf. non-causal passives in section 3.4.3.3), as exemplified in (188), for which more context is given in the translation in order to better understand the spontaneous (non-causal) nature of the breaking event.

(187) & *hi næfre syððan ut brecan*
 and 3PL.NOM never afterwards out break.INF
ne magon
 NEG may.IND.PRS.PL

“and they never afterwards may burst out” (cocathom1,ÆCHom_I,_11:270.113.2082)

(188) & *se ðuma gebrocen wæs*
 and DET.NOM.SG.M thumb(M).NOM.SG break.PTCP.PST be.IND.PRET.3SG

“[Then it happened through divine providence, in punishment of my sin of disobedience, that, when I was falling, I came driving with my head and hand on the stone.] And the thumb was broken, [and the sutures of my skull were also fractured and opened.]”

(cobede,Bede_5:6.400.28.4025)

Another way to express causality is through “factitive” periphrasis, i.e. a valency increasing alternation realized through the adjoining of two predicates (cf. Cennamo 2015: 448 on Italian).

¹⁰⁴ <https://bosworthtoller.com/4997>.

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This is labelled as “marked causal” in the PaVeDa database of Old English and defined as “A “causer” participant is added to the valency: it triggers agreement on the auxiliary verb (*lætan/don*)¹⁰⁵ and the main verb is in the infinitive. The subject of the basic frame (either A or S) is now expressed in the accusative”.¹⁰⁶ These two constructions can be seen as parallel to the Modern English “*let*” and “*make*” constructions. However, their meanings differ slightly from their modern equivalents. Specifically, *lætan* often conveys a causal meaning rather than simply “allowing”.

The verbs of my sample allowing for marked causals are BE DRY *adrugian*, BOIL *weallan*, BREAK *breccan*, BRING *bringan*, CARRY *beran*, GO *gan*, RAIN *rignan*, RUN *yrnan*, SEE *seon*, TAKE *niman*, and TALK *sprecan*. Remarkably, none of the previously mentioned verbs allowing the unmarked causal alternation is found in the marked causal alternation, except for those occurrences of BREAK *breccan* meaning ‘to burst out’. Of the two auxiliaries, *lætan* and *don*, the latter is rather infrequent (only one occurrence in my corpus), consistently with Visser’s claim that “the number of examples in Old English is very small” (Visser 1963: 1344). *Don* is only found in the construction *don* + *þæt*-subordinate, exemplified in (189), and not with an infinitive as in (190), i.e. the same pattern found with *lætan* in (191) and (192).

(189) *þa* *cwæð* *se* *hælend*
 then say.IND.PRET.3SG DET.NOM.SG.M Saviour(M).NOM.SG
doð *þæt* *þæt* *folc* *sitte*
 do.IMP.PL that DET.NOM.SG.N folk(N).NOM.SG sit.SBJV.PRS.3SG
 “then the Saviour said ‘make the folk sit’.” (cocathom1,ÆCHom_I,_12:276.48.2225)

(190) *doð* *us* *hider* *bringan* *wæter* *to*
 do.IMP.PL 1PL.ACC hither bring.INF water(N).ACC.SG to
 “make us bring water hither” (cojames,LS_11_[James]:136.122)

(191) *þa* *nytenu* *he* *let*
 DET.ACC.PL.N cattle(N).ACC.PL 3SG.NOM.M let.IND.PRET.3SG
gan *alotene*
 go.INF bend.PTCP.PST

¹⁰⁵ Note that Visser (1963:1352) considers the construction *hātan* + infinitive as a way to convey causal meaning as well, in that “the idea of ordering, commanding, often shades off into that of causing”.

¹⁰⁶ <https://paveda.unipv.it/alternations/13542966237>.

“He made the animals go bent down” (cocathom1,ÆCHom_I,_20:335.14.3835)

(192)	<i>Let</i>	<i>se</i>	<i>hearda</i>	<i>Higelaces</i>
	let.IND.PRET.3SG	DET.NOM.SG.M	strong.NOM.SG.M	Hygelac(M).GEN.SG
	<i>þegn</i>	<i>bradne</i>	<i>mece,</i>	[...] <i>breca</i>
	thane(M).NOM.SG	broad.ACC.SG.M	mace(M).ACC.SG	[...] break.INF
	<i>ofer</i>	<i>bordweal</i>		
	over	shield_wall(M).ACC.SG		

“This caused the hardy thane of Hygelac, [when his brother lay,] to break through the protecting shield with a broad mace, [an old sword and helmet made by giants]”
(cobeowul,92.2977.2405)

2.4.3.3. Passive

Zúñiga & Kittilä (2019: 82-83) define the prototypical passive as “a voice with a subject P and an adjunct A”, having the following characteristics and schematized as in Figure 7:

- Syntactic valency is one less than in the active diathesis (e.g., the verb is monovalent when its active counterpart is bivalent).
- Its subject corresponds to the nonsubject P of the active voice.
- Its peripheral, and optional, argument (typically marked by non-core case or adposition) corresponds to the subject A of the active voice.
- Passivization is formally coded on the predicate complex.

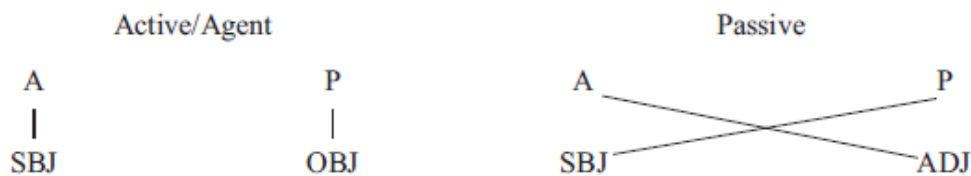


Figure 7: Active/agent and passive diatheses from Zúñiga & Kittilä (2019: 83)

Consistently with a), passives are valency-decreasing mechanisms, and the optionality of the A argument, as mentioned in c), is visible in my sample of Old English verbs since it is rare to find an explicit agent in passive constructions. Indeed, using Kemmer’s (1993: 205) words “[t]he passive is a midway between a two- and a one-participant event, in the sense that like the prototypical transitive

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event, it has two participants, but like the intransitive, the event is treated as having only one salient entity, which is brought into grammatical focus.”

Old English lacks a synthetic passive (differently from other IE languages, as Latin, Giuliani 2021: 68 or Gothic, Zanchi & Tarsi 2021: 60) with distinct morphological markers. However, it encodes the passive alternation through compound verbs. Specifically, the Old English analytic passive is formed with the auxiliary verbs *beon/wesan* ‘to be’ or *weorþan* ‘to become’ followed by an inflected or non-inflected past participle. This past participle often appears more adjectival than verbal (Mitchell & Robinson 2012: 104-105). The distinction between these two auxiliaries remains unclear: some scholars suggest an aspectual difference, though the auxiliaries sometimes seem to be used interchangeably (cf. Vezzosi 1998: 55). Compare examples (193) and (194) in which the verb BUILD *timbran* is found respectively with the auxiliary *weorþan* ‘to become’ and the auxiliary *beon* ‘to be’ and the agent expressed through the PP *þurh*+accusative, excluding a more stative reading.

(193)	<i>Seo</i>	<i>burh</i>	<i>wearð</i>	<i>syððan</i>
	DET.NOM.SG.F	city(F).NOM.SG	become.IND.PRET.3SG	afterwards
	<i>on oðre</i>	<i>stowe</i>	<i>getimbrod</i>	
	on other.DAT.SG.F	place(F).DAT.SG	build.PTCP.PST	

“Afterwards, the city was built in another place” (cocathom1,ÆCHom_I,_28:412.58.5497)

(194)	<i>þæt</i>	<i>ða</i>	<i>beon</i>	<i>getimbrode</i>	<i>þurh</i>
	that	DEM.NOM.PL	be.SBJV.PRS.PL	build.PTCP.PST	through
	<i>his</i>	<i>behreowsunge</i>			
	POSS.3SG.M	repentance(F).ACC.SG			

“that those may be edified by his repentance” (cocathom1,ÆCHom_I,_33:462.113.6646)

Of the 49 verbs, shown in Table 8, featuring a basic transitive frame, 32 have been found in the passive alternation, as visible in Table 12. Moreover, the passive alternation is also featured by the two-place verb TOUCH *hrinan* and by the one-place verbs BE SAD *unrotsian* (195), SHOUT AT *clipian* (196), SING *singan* (197), in which the second optional argument is passivized.

(195)	& <i>nolde,</i>	<i>þæt</i>	<i>his</i>	<i>þeowe</i>	<i>on</i>	<i>swa</i>
	and not_want.IND.PRET.3SG	that	POSS.3SG.M	servant(F).NOM.SG	in	so
	<i>medemlice</i>	<i>þingen</i>	<i>geunrotsed</i>	<i>wære.</i>		

middling.DAT.PL.N think(N).DAT.PL make_sad.PTCP.PST be.SBJV.PRET.3SG

“and he did not want his servant to be made sad by so middling things.”

(coneot,LS_28_[Neot]:75.64)

- (196) *on idel* *beoð* *ðæs* *bydeles*
 on vain(N).ACC.SG be.IND.PRS.PL DET.GEN.SG.M preacher(M).GEN.SG
word *wiðutan* *geclypode.*
 word(N).ACC.PL outside shout.PTCP.PST

“[If the Holy Ghost does not teach a man's mind from within,] in vain will be the words of the preacher shouted out loud.” (cocathom1,ÆCHom_I,_22:360.150.4445)

- (197) *On hwylcum* *tidum* *alleluia* *sceole*
 on which.DAT.PL.F time(F).DAT.PL Halleluja shall.SBJV.PRS.3SG
beon *sungen.*
 be.INF sing.PTCP.PST

“In which hours will Halleluja be sung?” (cobenrul,BenR:16.6.21.85)

PaVeDa meaning	Old English verb	Basic coding frame	Passive ¹⁰⁷
BEAT	beatan	1-nom V.subj[1] 2-acc (mid 3-dat)	✓
BOIL (tr)	wyllan (tr.)	1-nom V.subj[1] 2-acc	✓
BREAK	brecan	1-nom V.subj[1] 2-acc	✓*
BUILD	timbran	1-nom V.subj[1] 2-acc	✓
BURN (tr)	bærnan (tr.)	1-nom V.subj[1] 2-acc	✓*
CARRY	beran	1-nom V.subj[1] 2-acc (3-dat)	✓
COOK	brædan	1-nom V.subj[1] 2-acc	✓
COVER	bewreon	1-nom V.subj[1] 2-acc (mid 3-dat)	✓
CUT (1)	ceorfan	1-nom V.subj[1] 2-acc	✓
CUT (2)	sniþan	1-nom V.subj[1] 2-acc	/
DIG	delfan	1-nom V.subj[1] 2-acc	✓
DRESS	scrydan	1-nom V.subj[1] 2-acc (mid 3-dat)	✓

¹⁰⁷ The symbol ✓* indicates that the occurrences have not been found in the sample corpus, but come from Giarda (2022).

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EAT	etan	1-nom V.subj[1] 2-acc	✓
FILL	fyllan	1-nom V.subj[1] 2-acc (mid 3-dat)	✓
FRIGHTEN (1)	egesian	1-nom V.subj[1] 2-acc	✓
FRIGHTEN (2)	fyrhtan	1-nom V.subj[1] 2-acc	✓
GRIND	grindan	1-nom V.subj[1] 2-acc	/
HEAR	hyran	1-nom V.subj[1] 2-acc	✓
HIDE	hydan	1-nom V.subj[1] 2-acc	✓
HIT	slean	1-nom V.subj[1] 2-acc (mid 3-dat)	✓
HUG	clyppan	1-nom V.subj[1] 2-acc	/
HUNT (FOR)	huntian	1-nom V.subj[1] 2-acc	/
KILL	cwellan	1-nom V.subj[1] 2-acc	/
KNOW (1)	cnawan	1-nom V.subj[1] 2-acc	/
KNOW (2)	cunnan	1-nom V.subj[1] 2-acc	/
LEAVE	læfan	1-nom V.subj[1] 2-acc	✓
LOAD	hladan	1-nom V.subj[1] 2-acc (mid 3-dat)	✓
MEET	metan	1-nom V.subj[1] 2-acc	✓
PEEL	be-rendan	1-nom V.subj[1] 2-acc	/
POUR	geotan	1-nom V.subj[1] 2-acc (uppan 3-dat)	✓
PUSH	scufan	1-nom V.subj[1] 2-acc (on 3-dat)	/
ROLL (tr)	a-wyltan	1-nom V.subj[1] 2-acc	✓
SEARCH FOR	secan	1-nom V.subj[1] 2-acc	✓
SEE	seon	1-nom V.subj[1] 2-acc (3-dat)	✓
SHAVE (1)	sciran	1-nom V.subj[1] 2-acc	✓
SHAVE (2)	be-sciran	1-nom V.subj[1] 2-acc	✓
SINK (tr)	sencan (tr.)	1-nom V.subj[1] 2-acc	✓
SMELL	stincan	1-nom V.subj[1] 2-acc	/
TAKE	niman	1-nom V.subj[1] 2-acc	✓
TEAR (1)	teran	1-nom V.subj[1] 2-acc (mid 3-dat)	/
TEAR (2)	slitan	1-nom V.subj[1] 2-acc (mid 3-dat)	/

TELL	tellan	1-nom V.subj[1] 2-acc	/
THINK	þencan	1-nom V.subj[1] 2-acc	✓
TIE (1)	tigan	1-nom V.subj[1] 2-acc	✓
TIE (2)	bindan	1-nom V.subj[1] 2-acc	✓
WASH (1)	wascan	1-nom V.subj[1] 2-acc	✓
WASH (2)	þwean	1-nom V.subj[1] 2-acc	/
WINK (2)	be-priwan	1-nom V.subj[1] 2-acc	/
WIPE	wipian	1-nom V.subj[1] 2-acc (mid 3-dat)	/

Table 12: Two-place transitive verbs allowing the passive alternation

Concerning three-places verb, passivisation of both T and R arguments is possible, generally when they are encoded in the accusative. T passivisation is allowed by the verbs ASK FOR *axian*, BRING *bringan*, GIVE *gyfan*, SAY *secgan*, SEND *sendan*, SHOW (1) *tæcan*, SHOW (2) *eowan*, SHOW (3) *æt-eowan*, TEACH (1) *læran* and TEACH (2) *tæcan* and THROW *weorpan*. Also, when behaving as a ditransitive verb, TALK *sprecan* also allows the passivisation of T. On the other hand, R passivisation is less frequent and found only with the verbs ASK FOR *axian*, TEACH (1) *læran* and THROW *weorpan*. If the passivisation of the third argument of ASK FOR *axian*, and TEACH (1) *læran* could be expected since it could be encoded not only in the dative but also in the accusative, it is remarkable to see the passivisation of the dative recipient of THROW *weorpan*, as in (198). However, this construction is found only in my poetry sample.

- (198) *þeah he stangreopum worpod wære*
 though 3SG.NOM.M stone_ditch(F).DAT.PL throw.PTCP.PST be.SBJV.PRET.3SG
 “[because he, Stephen, was faithful to you,] though he was done to death by stoning”
 (cocynew,89.818.683)

Some verbs, namely KNOW *cunnan*, HEAR *hyran*, SAY *secgan*, and SEE *seon*, are also found in an “impersonal passive” construction, i.e. when the verb “is used without its syntactic subject (with or without an expletive hit), conjugated in the passive voice, 3rd person singular”.¹⁰⁸ This construction is found when the subject of the active pattern (generally an experiencer) corresponds to a crowd, having a general knowledge, as in (199), (200) and (201). When a specific experiencer is present, it

¹⁰⁸ <https://paveda.unipv.it/alternations/13542966261>.

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can be coded in the dative, as in (202). However, this happens only with the verb SEE *seon*, which, acquiring the meaning ‘to seem’ rather than ‘to see’, may follow the same pattern as *þincan* ‘to seem’, whose basic pattern has a dative experiencer.¹⁰⁹

(199) *nu hit is openlice cuð þæt [...]*
 now 3SG.NOM.N be.IND.PRS.3SG openly know.PTCP.PST that
 “[...] since it is evidently known [that the best felicities are in no other things but in God.]” (coboeth,Bo:34.84.3.1604)

(200) *& gyt ys gesæd swa [...]*
 and yet be.IND.PRS.3SG say.PTCP.PST so
 “and yet it is said so: [‘*in monte Dominus vidit*’, that is God sees on the mountain.]”
 (cootest,Gen:22.14.953)

(201) *þonon monegum wæs gesewen & oft*
 thence many.DAT.PL be.IND.PRET.3SG see.PTCP.PST and often
cweden, þætte [...]
 say.PTCP.PST that
 “For this reason, many thought and often repeated [lit. was seen and often said by many], that [a man of such a character was more suitable for consecration as bishop, than for being king]” (cobede,Bede_4:14.294.10.2963)

(202) *þæt me is eallinga lytel &*
 that 1SG.DAT be.IND.PRS.3SG entirely little.NOM.SG.N and
medmicel gesewen, þæt [...].
 venial.NOM.SG.N see.PTCP.PST DET.ACC.SG.N.REL
 “[But so fully do I now understand the method of observing this time, that whatever I knew and understood previously] seems to me utterly poor and petty.”
 (cobede,Bede_5:19.470.10.4729)

As already mentioned in sections 2.4.2.5, the domain of passives and that of reflexives may overlap: the connection between passive and middle functions is well known in Old Indo-European

¹⁰⁹ Cf. Bosworth-Toller dictionary: <https://bosworthtoller.com/32414>.

languages, where middle forms frequently also served a passive function. For instance, Geniušienė (1987: 266) cites examples from Ancient and Classical Greek, Sanskrit, and Latin. Reflexives and passives do not change the semantic valency of an event but only affect the number of verbal arguments (Kittilä 2010: 360). Specifically, reflexives, like reciprocals, introduce an element of co-reference (Zúñiga & Kittilä 2019: 151). The link between reflexives and passives has also been discussed by Haspelmath (2003: 235), who showed it through semantic maps, as the one in Figure 8. Haspelmath's maps illustrate how the same morphosyntactic strategy can express both reflexive and passive, as seen with the French *se* and the Italian *si*. Additionally, Kemmer's (1993: 202) semantic map (Figure 9), which displays the functional relationships among middles, reflexives, and other event types, illustrates the connection between direct reflexives and passives. This relationship is mediated by what she refers to as "passive middle", which is similar to the reflexive for the direct affectedness of the chief participant, but, differently from the reflexive prototype, an external agent is present and the chief participant lacks volition (Kemmer 1993: 205).

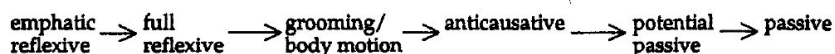


FIG. 8.17. A semantic map for reflexive and middle functions, including directionality.

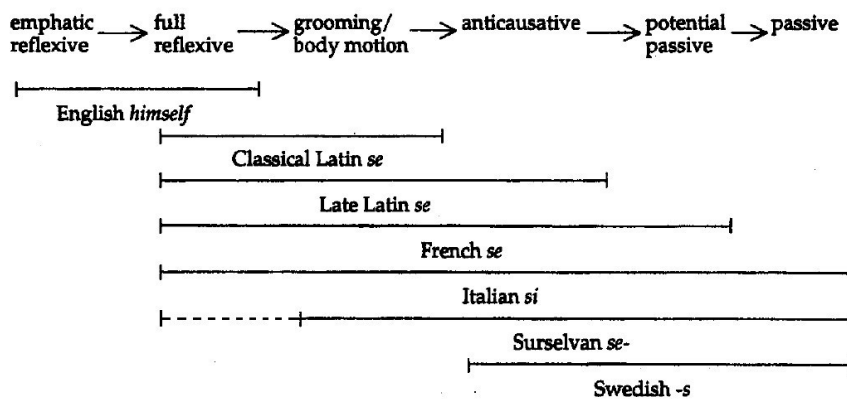


FIG. 8.18. The boundaries of reflexive/middle forms in seven languages.

Figure 8: Semantic maps for reflexive and middle functions; adapted from Haspelmath (2003: 233).¹¹⁰

¹¹⁰ As a native speaker of Italian, I added the dashed line since Italian does allow the expression of full reflexives with *si*, e.g. *egli si vede allo specchio* 'he sees himself in the mirror'.

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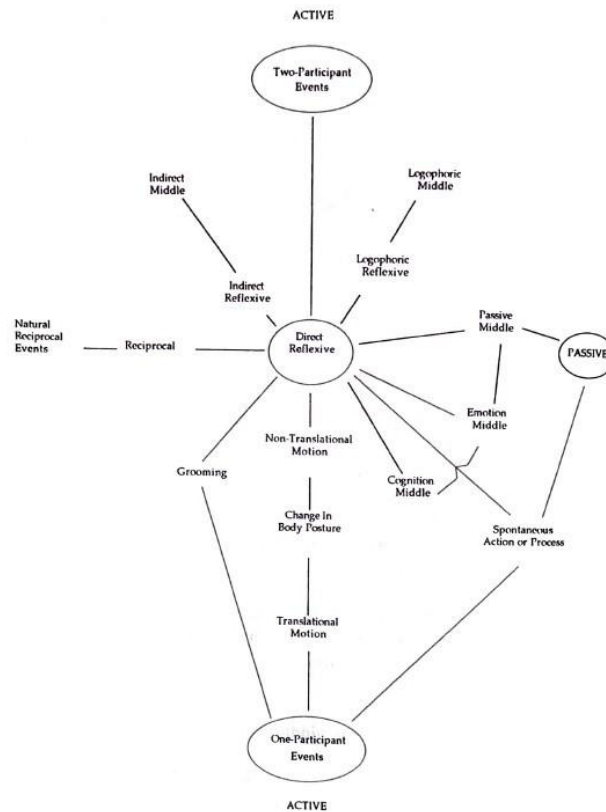


Figure 9: Semantic relations among middle and other situation types (from Kemmer 1993: 202)

Indeed, some Old English occurrences seem to allow non-passive (“middle”) readings, despite grammatically presenting a passive form. These can hardly be interpreted as a prototypical passive, as defined by Zúñiga & Kittilä (2019: 82-83), but a non-causal or reflexive interpretation seems more suitable. As a matter of fact, Kemmer (1993: 205) reminds that “the passive in general has links to other situation types independent of the reflexive [...] specifically the spontaneous events class (e.g. ‘grow’) and emotion events (e.g. ‘be afraid’)”.¹¹¹ Given the difficulty in disambiguating non-causals and (understood) reflexives already mentioned in sections 2.4.2.5 and 2.4.3.2, in the PaVeDa database of Old English these occurrences are considered all together and labelled as “non-causal passive”, defined as such:

“The Proto-Indo-European mediopassive does not continue in Old English. However, some instances of the periphrastic passive can hardly be interpreted as such. Although morphologically identical to the *beon/wesan* passive (or more marginally to the *weorðan*

¹¹¹ “It [the passive] relates to spontaneous events in terms of the affectedness of the chief participant and the low-to-vanishing saliency of any participant that might be conceived as the originator of the event. It relates to emotion events in terms of affectedness and low or non-existent volitionality” (Kemmer 1993: 205).

passive), these occurrences allow for non-passive interpretations, i.e. reflexive-middle (cf. Cennamo 2015: 452, where she argues for a ‘reflexive-middle’ continuum) or non-causal.”¹¹²

The verbs of my sample allowing this alternation are BE DRY *a-drugian*, BREAK *brecan* (cf. example (188) above), HIDE *hydan*, LEAVE *læfan*, PUT *settan*, SEE *seon*, SHOW (3) *æt-eowan* and WASH (2) *þwean*, the latter two exemplified, respectively, in (203) and (204).

Remarkably, example (203) shows the passive with *weorþan* ‘to become’, showing that these non-prototypical passive interpretations are not connected only to the verb *beon/wesan*. It is true though that some occurrences may be ambiguous, and even the context is not always helpful in disambiguating the different interpretations. For instance, in (205), *sint gehydde* could represent a passive (‘where the felicities have been hidden before by someone’), a stative event (‘where the felicities are hidden now’), or a reflexive (‘where the felicities have hidden themselves’).

(203)	<i>Se</i>	<i>hælend</i>	<i>wearð</i>	<i>þa</i>
	DET.NOM.SG.M	Saviour(M).NOM.SG	become.IND.PRET.3SG	then
	<i>gelomlice</i>	<i>æteowod</i>	<i>his</i>	<i>leorningcnihtum</i>
	frequently	show.PTCP.PST	POSS.3SG.M	disciple(M).DAT.PL
	“Jesus then frequently appeared to his disciples” ¹¹³			
	(cocathom1,ÆCHom_I,_15:301.67.2809)			

(204)	<i>hwī</i>	<i>he</i>	<i>geþwogen</i>	<i>nære</i>
	why	3SG.NOM.M	wash.PTCP.PST	not_be.SBJV.PRET.3SG
	<i>ær</i>	<i>his</i>	<i>gereorde</i>	
	before	POSS.3SG.M	meal(N).DAT.SG	
	“[The Pharisee began to meditate and say] why he did not wash before the meal.”			
	(cowsgosp,Lk_[WSCp]:11.38.4617)			

(205)	<i>þæt</i>	<i>hi</i>	<i>nyton</i>	<i>hwær</i>	<i>þa</i>
	that	3PL.NOM	not_know.IND.PRS.PL	where	DET.NOM.PL
	<i>sodan</i>	<i>gesælþa</i>	<i>sint</i>	<i>gehydde</i>	
	true. NOM.PL.F	happiness(F).NOM.PL	be.IND.PRS.PL	hide.PTCP.PST	

¹¹² <https://paveda.unipv.it/alternations/13542966235>.

¹¹³ A similar occurrence is also found in Gothic, where the analytic passive of the verb *at-augjan* ‘is used to describe Jesus who appears directly to his disciples. (Zanchi & Tarsi, 2021, pp.66-67)

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“[But it is a very miserable thing that foolish men are so destitute of all judgment,] that they do not know where the true felicities are hid, [nor indeed have they any desire to seek them!]” (coboeth,Bo:32.74.5.1373)

Such occurrences further support the idea of a continuum between passive and reflexive constructions, with “understood reflexive objects” and “non-causal passives” occupying a mid-position in this continuum. Additionally, the use of the same syntactic frame to express both alternations and non-causal meanings, along with the gradual development of labile verbs during the Old English period (cf. García García 2020, among others), indicate that the system of expressing causality was still unstable in the early stages of English.

2.4.3.4. *Man*-alternation

The status of *man* has been matter of debate in the literature (cf. e.g. Van Bergen 2003: 119ff.), with some scholars analysing it as a clitic, whereas others as a (weak) personal pronoun. While taking sides in the debate is beyond the scope of this research, it must be noted that regardless of its status, *man* is not a nominal and thus can be considered a marking on the verb, making this alternation a coded one. The *man*-construction is a particular construction found in various Germanic languages (e.g., still in Modern German or Dutch), where the subject/agent (S/A) of active verbs is replaced by *man*, which and is gradually replaced by *one* during Middle English, still used in PDE.¹¹⁴ In this construction, the S/A becomes irrelevant, leading many scholars to consider it as a form of passive construction (e.g., Quirk & Wrenn 1960: 81; Vezzosi 1998). Indeed, it can translate Latin -r mediopassives and other passive constructions (Quirk & Wrenn 1960: 73), but I argue that it should be analysed separately from the Old English periphrastic passive. Although it functions semantically as a passive, morphologically and syntactically, it is an active syntactic form. Although Vezzosi (1998: 60-61) includes the *man*-construction among passive constructions, she notes a different degree of control and transitivity between various passive constructions. She claims that the *man*-construction implies “an implicit human agent (that needn't be fully named or explicitly referred to),” unlike in periphrastic passives, which focus solely on the resulting state of the patient. Indeed, it seems to be used when the focus of interest is totally removed from the referent of the subject to some

¹¹⁴ Los (2002: 183) claims that there is a time-lag between the rise of *one* and the loss of *man*, so it is not possible to speak of a straightforward case of replacement. Moreover, the hypothesis of replacement is made even more unlikely by the significant differences between the use of *one* in PDE and that of *man* in other Germanic languages.

other element of the clause (Rissanen 1987: 417-418). Due to these distinctions, I have chosen to address this topic in a separate section.

Verbs found in my corpus featuring the *man*-alternation are BRING *bringan*, BUILD *timbran*, BURN (tr) *bærnan*, CARRY *beran*, CUT *snipan*, DRESS *scrydan*, EAT *etan*, FEEL PAIN *acan*, FILL *fyllan*, GIVE *gyfan*, HEAR *hyran*, HIT *slean*, KILL *cwellan*, NAME *namnian*, PUT *settan*, SAY *secgan*, SEARCH FOR *secan*, SEE *seon*, SEND *sendan*, SHAVE (2) *be-sciran*, SHOW (1) *tæcan*, THROW *weorpan*, TIE *bindan*, WASH *pwean*. Compare, for instance, example (206) and (207), in which the verb BUILD *timbran* is respectively found in a passive alternation and in a *man*-alternation.

(206)	<i>seo</i>	<i>burh</i>	<i>wæs</i>	<i>on</i>	<i>midre</i>
	DET.NOM.SG.F	city(F).NOM.SG	be.IND.PRET.3SG	on	middle(F).DAT.SG
	<i>þære</i>	<i>ea</i>	<i>in</i>	<i>anum</i>	
	DET.GEN.SG.F	river(F).GEN.SG	in	one.DAT.SG.N	
	<i>eglonde</i>	<i>getimbred.</i>			
	island(N).DAT.SG	build.PTCP.PST			

“The village was built in the middle of the river on an island” (coalex,Alex:15.1.127)

(207)	<i>ac</i>	<i>afterþon</i>	<i>þer</i>	<i>mon</i>	<i>getimbrade</i>	<i>cirican</i>
	but	afterwards	there	INDF	build.IND.PRET.3SG	church(F).ACC.SG

“and afterwards a church was built there” (cohad,LS_3_[Chad]:204.127)

Even though the *man*-alternation apparently does not change the number of arguments, since both an A-like and a P argument are expressed in (207), I consider this alternation a valency decreasing mechanism. Differently from PDE’s *one*, *man* exhibits a functional equivalence with passives, as it could translate Latin passives even when a passive construction would be perfectly acceptable (Los 2002: 192-193). In the *man*-alternation, what differs from both the active and passive constructions is the degree of relevance of the agent, which is irrelevant and undefined. Indeed, Rissanen (1987: 417-418; 1997: 514) claims that *man* seems to be used when the focus shifts entirely away from the subject’s referent to another element within the clause. Moreover, Los (2002: 184) states that “*man* is too weak in content to be a marked theme, as unmarked theme it only provides anaphoric reference in the loosest sense”. Consequently, it is expected to occur in initial-clause position only when textual cohesion is relaxed, such as when it initiates a new discourse unit or when other elements assume the role of maintaining textual cohesion. Concerning *man* in non-clause-initial

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position, Los (2002: 186) links the lower degree of prominence of this position in the clause to “such an empty element as *man*”, thus explaining its higher frequency in non-clause-initial position. However, Los (2002: 198, fn 6) also claims that *man* should not be considered as the PDE “dummy *it*”, since OE *man* “does carry a thematic role (AGENT of the verb) and is therefore not as ‘dummy’ as dummy *it*”.

Remarkably, and consistently with Los’ claim, the verbs of my sample allowing the *man*-alternation are mainly two- and three-place verbs, with agent first arguments. Out of the 29 verbs of the sample found in the *man*-construction, only two do not feature an agent subject, namely the experiential verbs FEEL PAIN *acan* (in (208)) and HEAR *hyran* (in (209)), where *man* substitutes the experiencer. Also, two one-place verbs, i.e. SING *singan* and TALK *sprecan*, respectively in (210) and (211), feature the *man*-construction, which however is not unexpected, since both of them often add a second theme-/patient-like argument, thus behaving as two-place verbs.

- (208) *Gif mon on healf heafod ace*
 if INDF on half.ACC.SG.N head(N).ACC.SG ache.SBJV.PRS.3SG
gecnua rudan swiþe
 pound.IMP.SG rue(F).ACC.SG much
 “If a person has a half headache: pound mountain rue completely.”
 (colaece,Lch_II_[3]:1.1.14.3518)

- (209) *buton hyne man ær gehyre &*
 unless 3SG.ACC.M INDF before hear.SBJV.PRS.3SG and
wite hwæt he do?
 know.SBJV.PRS.3SG what.ACC.SG.N 3SG.NOM.M do.SBJV.PRS.3SG
 “Do you say our law condemns a man without first hearing him and knowing what he has done?” (cowsgosp,Jn_[WSCp]:7.50.6355)

- (210) *singe man ærest six sealmas*
 sing.SBJV.PRS.3SG INDF first six psalm(M).ACC.PL
 “at first, six psalms shall be sung” (cobenrul,BenR:11.35.5.478)

- (211) *Hit byð dysig þæt man*
 3SG.NOM.N be.IND.PRS.3SG foolish.NOM.SG.N that INDF

2. Old English

are so many labile verbs”, whereas García García (2020: 171) argues that “OE seems to be transitivity in terms of the high number of basic intransitive verbs and of the prevalent valency-changing operation, namely causativisation by means of the Germanic *ja*-formation.” However, she also maintains that an orientation towards “indeterminate” coding (in Nichols et al.’s 2004 terms) can be deduced from the significant number of labile verbs. The discussion on the causal vs non-causal alternation (2.4.3.2) in this chapter does not add much to García García’s (2020) work, since it shows that lability was already present in Old English. However, when considering *ja*-formations, though opaque and not productive anymore, together with the presence of “marked causals”, it is possible to support García García’s idea that OE was transitivity. Moreover, the presence of applicative prefixes (cf. section 2.4.3.1) shows different ways to mark transitive patterns (cf. also Ruiz Narbona 2019).

Old English presents a morphologically rich system that profoundly influenced valency patterns. Its four-case system (nominative, accusative, dative, genitive) and agreement mechanisms allowed for flexible word order and nuanced encoding of semantic roles. Valency patterns ranged from zero-valent weather verbs to complex three-place ditransitives. The majority of verbs followed the [NOM, ACC] construction, reflecting a nominative–accusative alignment, but experiential verbs introduced variability through oblique subjects (dative or accusative), revealing a split in subject encoding based on agentivity and control.

Transitivity prominence in Old English was calculated at 0.49, slightly lower than Present-Day English, due to the presence of non-canonical subjects and alternative case-marking strategies. Experiential verbs showed competition between nominative and oblique subjects, with dative and accusative marking often linked to lower volitionality and reduced control. Alternations were highly productive and diverse, including direct case vs. PP alternations (such as conative, dative alternation, partitive, to-resultative, and topic-about), other uncoded alternations (benefactive/malefactive, external possessor, body-part alternations, cognate/kindred object insertion, object omission/insertion, reflexive and reciprocal), and coded alternations (applicative, causal vs. non-causal, passive, and the *man*-construction). While morphological marking was robust, processes like causative suffixation and instrumental case were already declining, foreshadowing the analytic tendencies of later English. Overall, Old English maintained a synthetic typology where morphology governed argument coding and alternation strategies, enabling a high degree of structural variation and semantic precision.

Chapter 3. Middle English

3.1 . Middle English

3.1.1. Middle English: Genealogical affiliation; time span; dialectal differences

The Norman Conquest of England in 1066 conventionally marks the end of the Old English period. William the Conqueror's triumph at the Battle of Hastings and his subsequent coronation in London represented more than just a simple replacement of one monarch with another. Indeed, a whole new French-speaking nobility replaced the old Early English noble class. In the same way, Norman prelates were gradually appointed to all significant positions within the church hierarchy. The new ruling class was dominant enough to continue using their own language: for two centuries after the Norman Conquest, French—more precisely, its British variant known as Anglo-Norman—remained the everyday language of the English upper class. However, the language of the masses remained English, though disappearing from written records until the XIII century.¹ The extent to which Anglo-Norman dominated the English court during this period is vividly illustrated by the literature created for the royal family and nobility. Many works were written in Anglo-Norman, reflecting the language's prominence and the cultural influence of the Norman rulers (Baugh & Cable 2013: 107-114). The multilingual nature of society at the time, with English, Anglo-Norman, and Latin coexisting, reflects the social hierarchy and linguistic stratification of the period.

However, shortly after 1200, the political conditions changed: England lost its French territories, thus loosening the bonds with France. Subsequently, a rivalry emerged between the two countries, accompanied by an anti-foreign sentiment in England, which ultimately led to the Hundred Years' War (Baugh & Cable 2013: 122). This sense of national identity appeared also in choice of language: though French was still being spoken by the upper class, the spread of English was making steady progress (Baugh & Cable 2013: 129-131). By the beginning of the XIV century, the language was once again known by everyone in England.

The literature produced in England during the Middle English period closely mirrors the shifting prominence of the English language. When French was the dominant language among the upper classes, their reading and listening materials were predominantly in French. They had access to the

¹ With a few exceptions such as the *Ormolum* or Layamon's *Brut* and *The Owl and the Nightingale*.

entire body of continental French literature, complemented by a significant collection of French poetry written in England. As a result, the surviving English literature from this period (1150-1250) is almost entirely religious or admonitory in nature (e.g. the *Ancrene Riwe* or the *Ormolum*). The two notable exceptions to the predominance of religious or admonitory English literature from this period are Layamon's *Brut* (ca. 1200), which is largely based on Wace's work in French, and the remarkable debate poem *The Owl and The Nightingale* (ca. 1195). The separation between the English nobility and France became more evident around 1250, leading to a broader adoption of English among the upper classes. This shift is reflected in the English literature of the following century, where genres that were previously written in French began to appear in English. Among these genres, the romance was the most popular. The widespread adoption of English by all social classes, which occurred by the latter half of the fourteenth century, led to a flourishing of English literature, marking a peak in medieval English literary achievements. The period from 1350 to 1400 is known as "The Period of Great Individual Writers". The most prominent figure of this era is Geoffrey Chaucer (1340-1400), who authored notable works such as *Troilus and Criseyde* and *The Canterbury Tales*.² This period also includes William Langland (1362-1387), known for his extensive social allegory *Piers Plowman*, John Gower (d. 1408), whose works include the *Confessio Amantis*, and John Wycliffe (d. 1384), reputed as a translator of the Bible and a prolific writer of influential and controversial prose. Lastly, the fifteenth century is often referred to as the "Imitative Period" because much of the poetry written during this time was created in imitation of Chaucer's style. It is also known as the "Transition Period", as it spans much of the gap between the age of Chaucer and the age of Shakespeare. In terms of prose works, notable authors from the end of this century include Thomas Malory (d. 1471), author of the well-known *Morte Darthur*, and William Caxton (d. 1491), first English printer (Baugh & Cable 2013: 149-151).

Moreover, between the 12th and 15th centuries, Middle English theatre experienced a significant evolution, progressing from liturgical performances held within ecclesiastical settings to increasingly elaborate public spectacles. Initially centred on biblical narratives, the genre included mystery plays (such as those in the *York*, *Chester*, *Wakefield*, and *N-Town* cycles), which dramatized stories from Creation to the Last Judgment. Miracle plays, like *The Play of Saint Nicholas* by Jean Bodel, depicted the lives and deeds of saints. Morality plays, such as *Everyman*

² Geoffrey Chaucer, often regarded as the "Father of English literature", played a pivotal role in elevating the London dialect through his literary works, most notably *The Canterbury Tales*. By choosing to write in the vernacular of London—a dialect that blended elements of Kentish, East Midlands, and Southern English—Chaucer not only reflected the linguistic reality of the capital but also contributed to its prestige and dissemination. His widespread readership and influence helped establish this dialect as a model for what would later evolve into Standard English.

3. Middle English

and *The Castle of Perseverance*, used allegorical characters to teach moral and spiritual lessons. These performances, often organized by trade guilds and staged during festivals like Corpus Christi, played a crucial role in shaping English drama and paved the way for the theatrical innovations of the Renaissance.³

As evident from the brief description above, the Middle English period is conventionally said to last from the Norman Conquest in 1066 to the beginnings of the XV century. Toward the end of the Middle English period, the orthographic reform and the *Great Vowel Shift* started to reshape the English language, significantly influencing its transition to the modern form. The *Great Vowel Shift*, occurring roughly between the 15th and 18th centuries, involved a systematic change in the pronunciation of long vowels, which moved upward in the mouth. This phonological transformation created a major discrepancy between English spelling and pronunciation. In response, various orthographic reforms were proposed—some informally adopted by printers like William Caxton, and others more systematically attempted in later centuries—to regularize English spelling. However, due to the timing of the printing press’s introduction and the lack of a central linguistic authority, many inconsistencies persisted.

Differently from Old English, for which we see scarce diachronic evolution across the centuries, Middle English is “a period of great change” (Baugh & Cable 2013: 152) and this change affected the English language in its phonology, morphosyntax and vocabulary (cf. section 4.1.3). This change is evident in the comparison of the texts of the XII century with those of the XV. Examples (213) and (214) well illustrate this change: if example (213) from the beginning of the XIII century still resembles Old English in several aspects (e.g. the form *eornen* ‘run’, without metathesis or the possessive *hare* ‘their’), example (214) from Malory’s *Morte Darthur* does not need to be glossed and is perfectly comprehensible to an English-speaking person.

(213) *The Martyrdom of Saint Katherine* (1200-1225)

<i>þah</i>	<i>þu</i>	<i>wið</i>	<i>þi</i>	<i>wicche-creft</i>	<i>habbe</i>
though	2SG.NOM	with	2SG.GEN	witchcraft	have.PRS.SG
<i>imaket</i>	<i>se monie to</i>	<i>eornen</i>	<i>towart</i>	<i>hare</i>	<i>deað</i>
make.PTCP.PST	so many to	run.INF	towards	3PL.GEN	death

³ The distinctions among different forms of medieval drama are thoroughly explored in the essays included in the volume edited by Beadle and Fletcher (2008).

“though you with your witchcraft have made so many run towards their deaths”
(CMKATHE-M1,50.480)

(214) *Malory's Morte Darthur* (1470)
*and with that his horse **ran** away with hym*
(CMMALORY-M4,188.2707)

This difference poses several issues on the generalisation that needs to be made in order to compile the PaVeDa database. First, the relationship between “Old” and “Middle English” (cf. Laing 2000 and the more recent Faulkner 2022). When does the Old English period actually end? Consequently, which data is to be added to the Old English database and which to the Middle English one? Secondly, how generalisable is the data added to the database, as for instance some alternations only occur in the earlier stages? The issue is complex, as languages (when they do not die) do not suddenly stop or change, but they undergo a *process* of change in time. Since a definition of the chronological boundaries of Middle English goes beyond the scopes of this work, I decided to rely on the well-established Penn-corpora, namely the PPCME2 (Kroch et al., 2000) and PCMEP (Zimmermann, 2014) for Middle English. Thus, in order to be as comprehensive as possible, all data found in the analysis have been added to the PaVeDa database of Middle English, regardless of the source text.

A further problem to the generalisation of data is posed by the extreme dialectal differentiation of Middle English. Indeed, Contrary to Old English, for which most texts are written in the West-Saxon standard, Middle English is attested in different dialects (cf. Fulk 2012: 112-128; Williamson 2017: 134-164). The term “dialect” is here to understand, following Williamson (2017: 135), as “some assemblage of diatopically coherent linguistic features which co-occur over all or part of their geographical distributions and so delineate an area within the dialect continuum”. A thorough discussion of dialectal differences in Middle English goes beyond the scopes of this work (but cf. e.g. the LALME (McIntosh et al. 1986) and LAEME projects (Laing 2013-)): it is sufficient to mention that five macro-areas have been identified, namely the Northern, West-Midlands, East-Midlands, Southern, East-Southern (or Kentish), as shown in Figure 10.

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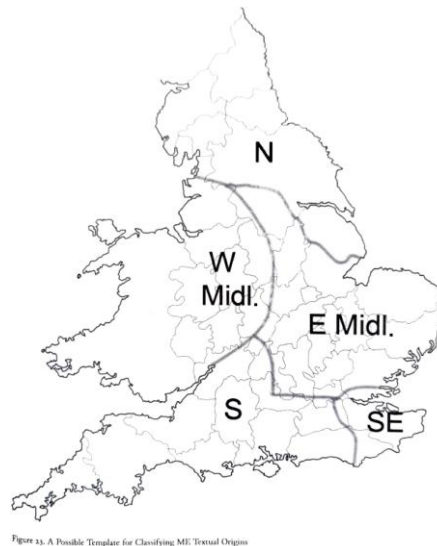


Figure 10. A Possible Template for Classifying ME Textual Origins

Figure 10: Middle English dialectal areas (Fulk 2012: 127)

The change that English underwent during Middle English under French influence⁴ was so massive (mainly on the lexicon) that some scholars have hypothesized a process of “creolization” (among others, Bailey & Maroldt 1977). However, consistently – among others – with Allen (2008), Trotter (2017) has successfully shown how this hypothesis should be rejected, as the contact between Anglo-French and Middle English was extensive and impactful, but “contact and impact are part of, but the not same as, creolization.” (Trotter 2017: 236). As Baugh & Cable (2013) remind “[i]t must not be thought that the extensive modification of the English language caused by the Norman Conquest had made of it something else than English. The language had undergone much simplification of its inflections, but its grammar was still English. It had absorbed several thousand French words [...] It had lost a great many native words and abandoned some of its most characteristic habits of word formation. But great and basic elements of the vocabulary were still English.” (Baugh & Cable 2013: 178-179)

3.1.2. Prose and poetry: Choice of corpus sample

The reference corpus for Middle English data has been selected according to the same principles presented in section 2.1.2 for Old English. In particular, I attempted to balance date, dialectal differences, genre and theme. Table 13 shows, in alphabetical order, the texts included in the reference sample, comprising 551.202 tokens, compared to the 547.979 tokens of the Old English sample. More detailed information on the date and dialect of the texts included in the sample are given in Appendix

⁴ Note however that Middle English also exhibits traces of the massive contact with the Scandinavian tribes which settled in the Danelaw during the later Old English period (cf. Baugh & Cable 2013: 87-102).

3: Middle English prose texts (date, dialect and genre). and Appendix 4: Middle English poetry texts (date, dialect and genre).

Middle English prose	Middle English poetry
<ul style="list-style-type: none"> • A Late Middle English <i>Treatise on Horses</i> (Word count: 6.313) • Boethius' <i>De Consolatione Philosophiae</i> (Chaucer) (Word count: 10.682) • John of Trevisa's <i>Polychronicon</i> (Word count: 46.326) • <i>Kentish Homilies</i> (Word count: 4.287) • <i>Kentish Sermons</i> (Word count: 3.515) • <i>Lambeth Homilies</i> (Word count: 20.653 + 6.462) • <i>Life of St. Edmund</i> (Word count: 3.872) • Malory's <i>Morte Darthur</i> (Word count: 60.297) • <i>Mandeville's Travels</i> (Word count: 51.715) • <i>Peterborough Chronicle</i> (Word count: 7.333) • <i>Sawles Warde</i> (Word count: 4.304) • <i>St. Juliana</i> (Word count: 7.180) • <i>St. Katherine</i> (Word count: 9.032) • <i>St. Margaret</i> (Word count: 8.523) • <i>Tale of Melibee</i> (Chaucer) (Word count: 17.518) • <i>The Book of Vices and Virtues</i> (Word count: 7.184) • <i>The Brut</i> or <i>The Chronicles of England</i> (Word count: 50.377) • <i>The Liber de Diversis Medicinis</i> in Thornton Ms. (Word count: 5.720) 	<ul style="list-style-type: none"> • 11 Poems by Laurence Minot (Word count: 6664) • <i>A Metrical Treatise on Dreams</i> (Word count: 1736) • <i>Bestiary</i> (Word count: 4259) • <i>Body and Soul</i> (Word count: 2781) • <i>Havelok the Dane</i> (Word count: 17394) • <i>Poema morale</i> (Word count: 4080) • <i>Saint Brendan</i> (Word count: 8511) • <i>Saint Eustace</i> (Word count: 2320) • <i>Saint Juliana</i> (Word count: 2529) • <i>The Bird with Four Feathers</i> (Word count: 1508) • <i>The Owl and the Nightingale</i> (Word count: 10941) • <i>The Passion of Our Lord</i> (Word count: 6249) • <i>The proverbs of Alfred</i> (Word count: 3095) • <i>The Song of the Husbandman</i> (Word count: 604)

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<ul style="list-style-type: none"> • <i>The New Testament</i> (Wycliffe) (Word count: 11.001) • <i>The Old Testament</i> (Wycliffe) (Word count: 9.910) • <i>The Parson's Tale</i> (Chaucer) (Word count: 30.626) • <i>The Rule of St. Benet</i> (Word count: 18.312) • <i>The Siege of Jerusalem</i> (Word count: 7.757) • <i>Trinity Homilies</i> (Word count: 41.571) • <i>Vices and Virtues</i> (Word count: 28.061) 	
Total Word Count: 478.531	Total Word Count: 72.671

Table 13: Middle English texts sample

Particular attention has been paid to the genre and themes when texts were selected: both Old and Middle English samples feature the following genres:

- Historical prose (e.g. OE Bede's *Historia ecclesiastica*, ME John Trevisa's *Polychronicon*)
- Homilies (e.g. OE Ælfric's *Catholic Homilies I*, ME *Lambeth Homilies*)
- Lives of Saints (e.g. OE *Saint Eustace and his Companions*, ME poem on *Saint Eustace*)
- Religious prose and treatises (e.g. OE Alcuin's *De Virtutibus et Vitiis*, ME *Vices and Virtues*)
- Romances (e.g. OE *Apollonius of Tyre*, ME Malory's *Morte Darthur*)
- Scientific prose texts (e.g. OE *Byrhtferth's Manual*, ME *Treatise on Horses* and *Liber de Diversis Meidicinis*),
- Travel stories (e.g. OE *Marvels of the East*, ME *Mandeville's Travels*)

Moreover, some of the texts included in the two samples are different translations of the same text: that is the case of the *Benedictine Rule*, Boethius' *De Consolatione Philosophiae* and the Bible (both Old and New Testament). However, it must be noted that, whereas these texts are included in

their entirety in the Old English corpus (YCOE, Taylor et al. 2003), the PPCME2 (Kroch & Taylor 2000) includes only some samples. Thus, for instance, the *Genesis* is complete in the Old English corpus, but the Middle English one contains only Genesis I.1-III.24, VI.1-IX.29, XII.1-XIV.20, XXII.1-XXII.19.⁵ Obviously, this fact may hinder the direct comparison of those specific texts. However, given the remarkable size of the sample, data can still be considered suitable for the generalisation needed in the PaVeDa database.

Contrary to the Old English poetry corpus (YCOEP, Pintzuk & Plug 2002), the *Parsed Corpus of Middle English Poetry* (PCMEP, Zimmermann 2014) is much bigger, thus a representative sample has been chosen to match the token number of the Old English poetry sample, always trying to balance date, dialectal differences, genre and theme. Remarkably, the two treebank of Middle English (PPCME2, Kroch & Taylor 2000 and PCMEP, Zimmermann 2014) do not contain any drama play, despite the important production during the Middle English period (on the topic, see Beadle & Fletcher 2008). The lack of data from drama is an obvious limitation of this work, as the language of the theatre could have provided more realistic data, closer to the spoken language (cf. e.g. Dillon 1998; see also Giuliani's 2021 choice on Plauto for Old Latin). For this reason, further research in this direction would be needed and welcomed.

3.1.3. Middle English morphosyntax: Basic sentence structure

It is said the English has undergone a typological shift, from a synthetic pattern to analytic structures (cf. among others Allen 2016). Indeed, Middle English is characterised by a gradual decay of inflectional paradigms (a deflection that eventually lead to typological change, Allen 2016: 445), due primarily to phonological changes happening between 1100 and 1500 ca, especially the reduction of vowels in unstressed syllables (Wełna 2017: 51). The main morphological processes are the following:

1. NOUNS: loss of the majority of oblique cases, generalization of plural *-s*, semantic gender (substituting grammatical gender)
2. ADJECTIVES: loss of inflections, initial stage of periphrastic comparison
3. PRONOUNS: spread of *she, they, them, their* (the latter three of Scandinavian origin)

⁵ <https://www.ling.upenn.edu/histcorpora/PPCME2-RELEASE-4/index.html>.

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4. VERBS: loss of inflections, decay of the subjunctive mood, disintegration of the ablaut system (spread of weak verbs).

Regarding the division of time, Middle English inflectional morphology can be categorized into two distinct types. Texts from before 1300 maintained conservative features, including inflections (e.g., the *Poema Morale*, which still exhibits the dative singular ending *-e*). However, after 1300, the morphological system disintegrated, with only verbs retaining their inflections (Weina 2017: 51).

Concerning the nominal system, already in the late stages of Old English, the system for marking plurals began to lose its transparency as the endings tended towards levelling (Weina 2017: 52). In the same way, already in late Northumbrian, the distinctions among the four Old English cases had been in part obscured (with accusative/dative syncretism). Though some frequently used nouns retained features of their original class, most nouns adopted the endings of what were originally *a*-stem nouns: *-es* for the possessive and plural forms, with null inflection otherwise. Although Chaucer consistently used *-es* for the plural of originally feminine nouns, the ending *-en* occasionally appeared in plural forms until the fourteenth century, especially in the South (Fulk 2012: 57). The sole case distinction in Middle English (and still in PDE) is found with personal pronouns, for which a nominative and an oblique form⁶ are distinguished (Fulk 2012: 63-64). Otherwise, the Old English nominative case rarely had distinctive inflections, and none of the few distinctive inflections remained unambiguous in Middle English. The accusative case is sometimes identifiable by the distinctive form of a preceding article or an adjective inflection. In contrast, the dative case, particularly in early texts, although sometimes formally indistinguishable from the accusative, can be recognized based on its function, e.g. the encoding of indirect objects. The dative also bore the function of the instrumental (whose forms were almost indistinguishable already in Old English). Moreover, dative external possessors became rare in Middle English (Fulk 2012: 91).

The grammatical categories of the Old English verbal system, i.e. person, number, tense and mood, were substantially retained in Middle English, though many inflectional endings were lost. As in Old English, however, there is still agreement between subject and verb in number and person (Smith 2023: 91). The distinction between weak and strong verbs remained valid. However, their distribution changed as many originally strong verbs began using the suffix *-ed* to indicate the past

⁶ In Early Middle English, masculine and neuter pronouns show distinct forms for the accusative and dative. However, whereas the masculine forms *hin(e).ACC* and *him.DAT* eventually merged, in the neuter pronoun *hit.ACC* and *him.DAT* never fall together in ME (Fulk 2012: 64).

tense.⁷ Moreover, the periphrastic future tense and of two types of aspect, namely perfect and progressive, emerged at the end of the period (Fulk 2012: 71-72; Welna 2017: 60). Not all Old English “preterite-present verbs” survived in Middle English, however a borrowing from Old Norse, *mun* ‘will’ was added. As mentioned, these verbs are the sources of most PDE modal auxiliaries (Fulk 2012: 86). As in Old English, four verbs show irregular paradigms, in which no connecting vowel between the verb stem and the inflections was present. There are *don* ‘do’, *gon* ‘go’, *willen* ‘will’ and the copula *ben* ‘be’, whose paradigm shows suppletive form from four IE stem and is given in

	South	Kent	WMidl.	EMidl.	North
PRESENT					
Ind. Sg. 1	am, em	em	am	am	am, be, es
Ind. Sg. 2	art, bist, best	art	art	art, best	art, ert, (b)es
Ind. Sg. 3	is, be(o)þ	is	is, boþ	is	es, bes
Ind. Pl.	be(o)þ, both	byeþ	arn	ar(e)n, ben	ar, er, es, bes
Subj. Sg.	beo, bo	by	b(e)o	be	be
Subj. Pl.	b(e)on		b(e)on	ben	bes
Imp. Sg.	b(e)o		b(e)o	be	be
Imp. Pl.	beoþ		beoþ	beþ	bes
PRETERITE					
Ind. Sg. 1	was	wes	was	was	was, wes
Ind. Sg. 2	weore		wore	were, wast	was, wes
Ind. Sg. 3	was	wes	was	was	was, wes
Ind. Pl.	weore	were	woren	were(n)	wer, war, wes
Subj. Sg.	were		wore	were	war(e)
Subj. Pl.	were		woren	were(n)	war(e)
NON-FINITE					
1st part.				being	beand(e)
2nd part.	y-be		ben	(i-)be(n)	ben
Inf.	b(e)on, bo	bi, bie(n)	ben	ben, be	be

Table 14.

⁷ Verbs of French and Latin origin were almost without exception declined weak (Fulk 2012: 71).

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	South	Kent	WMidl.	EMidl.	North
PRESENT					
Ind. Sg. 1	am, em	em	am	am	am, be, es
Ind. Sg. 2	art, bist, best	art	art	art, best	art, ert, (b)es
Ind. Sg. 3	is, be(o)þ	is	is, boþ	is	es, bes
Ind. Pl.	be(o)þ, both	byeþ	arn	ar(e)n, ben	ar, er, es, bes
Subj. Sg.	beo, bo	by	b(e)o	be	be
Subj. Pl.	b(e)on		b(e)on	ben	bes
Imp. Sg.	b(e)o		b(e)o	be	be
Imp. Pl.	beoþ		beoþ	beþ	bes
PRETERITE					
Ind. Sg. 1	was	wes	was	was	was, wes
Ind. Sg. 2	weore		wore	were, wast	was, wes
Ind. Sg. 3	was	wes	was	was	was, wes
Ind. Pl.	weore	were	woren	were(n)	wer, war, wes
Subj. Sg.	were		wore	were	war(e)
Subj. Pl.	were		woren	were(n)	war(e)
NON-FINITE					
1st part.				being	beand(e)
2nd part.	y-be		ben	(i-)be(n)	ben
Inf.	b(e)on, bo	bi, bie(n)	ben	ben, be	be

Table 14: The Middle English copula (adapted from Fulk 2012: 88)

The verb *ben* ‘to be’ was used to form the periphrastic passive, though in earlier texts *wurðen* ‘to become’ is also found as auxiliary. Passive meaning could also be conveyed by what in Old English was the *man*-construction (cf. section 2.4.3.4), in which Middle English usually has the form *me*. However, *man/me* is gradually replaced by *one* during the Middle English period (Fulk 2012: 94, 105). Other periphrastic constructions were found not only with the auxiliary *ben* ‘to be’ (e.g. the perfect of intransitive verbs), but also with *haven* ‘to have’ (e.g. the perfect and pluperfect of transitive verbs) and *willen* ‘will’ or *wurðen* ‘to become’, to express future meaning (Fulk 2012: 101).

Probably connected to the loss of inflections, word order patterns became less flexible during the Middle English period, the usual order being SVO. However, this order could change for stylistic reasons (Smith 2022: 95). Middle English still exhibits V2 in many texts, although this phenomenon is frequently disregarded in others (Fulk 2012: 111; cf. Fischer et al. 2000: 129-137 on the loss of V2 in English, and Trips 2002 on the Scandinavian influence). Middle English inherited from Old English a series of subjectless and impersonal verbal constructions, which are often found with a personal pronoun as an object and may lack an explicit subject or have as their subject an inanimate noun or a so-called “dummy subject”, like *hit*. As the word order in Middle English becomes more fixed in a SVO structure, the use of dummy subjects in such constructions grows increasingly frequent (Fulke 2012: 104). Such impersonal constructions are still found in Middle English, above all with experiential verbs (cf. sections 3.3.2.2 and 3.3.3.3). These constructions saw an extended use during the Middle English period, a development typically attributed to the influence of French (Smith 2022: 94). In Middle English, referential null subjects are common when the subject would be a pronoun referring to a clear antecedent, or when the subject would merely be a place-filler in an impersonal construction (Fulk 2012: 96). As in Old English, clauses are negated with the particle *ne*, added immediately before the finite verb, though not as systematically as in Old English (Fulk 2012: 105). Multiple negation (“negative concord”) is the norm in Middle English: Jespersen (1917: 4) describes a series of developments in Middle English negation, known as “Jespersen's cycle,” where the Old English pattern of placing *ne* before the verb was reinforced by adding the emphatic *noht* after the verb. This reinforcement made the preposed and unstressed *ne* redundant, leading to its gradual omission.

Between Old and late Middle English times, stylistic developments allowed writers to choose between the older paratactic style, characteristic of Old English, and a new hypotactic style, which appears to have been introduced to English through contact with French. For instance, Chaucer's writing was primarily hypotactic, featuring quite complex subordination. However, some writers, like Malory, seem to have deliberately maintained the older paratactic style as a marker of traditional values. (Smith 2022: 98).

3.2. Middle English verb selection

The selection of verbal counterparts for the PaVeDa meaning follows the criteria presented above (in section 1.3). The complete list containing PaVeDa meanings, and their Middle English translation

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equivalents, together with the frequency of occurrence in the prose and poetry reference corpora is shown in Table 15, which also shows Old English cognates when possible.

PaVeDa Meaning ⁸	Old English Verb	Middle English Verb	Frequency in the reference corpus ⁹	
			Prose	Poetry
ASK FOR	axian	asken	244	18
BEAT	beatan	beten	30	16
BE DRY	a-drugian	drien ¹⁰	17	0
BE HUNGRY	hyngran	hungren	16*	5*
BE SAD	/	dröupnen	1*	0*
BOIL	/	boillen	14	1
BOIL (tr)	/	boillen	<i>14</i>	<i>1</i>
BREAK	brecan	breken	118	25
BRING	bringan	bringen	340	120
BUILD (1)	timbran	timbren	9*	1*
BUILD (2)	/	bilden	56	1
BURN	/	brennen	167	40
BURN (tr)	/	brennen	<i>167</i>	<i>40</i>
CARRY (1)	beran	beren	306	65
CARRY (2)	/	carien	9*	0*
CLIMB	/	climben	22*	1*
COOK	/	coken	0**	0**
COUGH	/	coughen	0**	0**
COVER	/	coveren	36	1
CUT	/	cuten	24	0

⁸ Meanings marked by [+] do not belong to the original ValPaL list, but have been added as semantic proxies.

⁹ The PPCME2 and PCMEP subsets are described in sections 2.3. and 4.1.1. The verbs marked with * and ** were found out of the reference corpora, because no other alternative, present in the reference corpora, was judged acceptable. * indicates that these occurrences are taken from the entire PPCME2 and PCMEP, when less the 10 occurrences were found in the subsets, whereas ** indicates that all the occurrences are from the *Middle English Dictionary* (MED). When the same verb instantiates different meaning (i.e. in the case of labile verbs) the frequencies refer to the lemma, not to the meaning. The frequencies highlighted in italics are thus not added to the total.

¹⁰ Actually, *drien* generally means ‘become dry’, rather than ‘be dry’. However, this is the closest verbal counterpart I found.

DIE	/	dien	351	16
DIG	/	diggen	4*	0*
DRESS	scrydan	shriden	12	5
EAT	etan	eten	190	29
FEAR	/	feren	16*	1*
FEEL COLD	/	colden	4*	3*
FEEL PAIN	acan	aken	13*	2*
FILL	fyllan	fillen	42	3
FOLLOW	folgian	folwen	209	14
FRIGHTEN	/	skerren	2*	0*
GIVE	gyfan	yeven	802	101
GO	gan	gon	500	41
GRIND	grindan	grinden	44*	0*
HEAR	hyran	heren	375	59
HELP	helpan	helpen	175	39
HIDE	hydan	hiden	29	45
HIT	/	hitten	6*	9*
HUG	clyppan	clippen	6	0
HUNT (FOR) [+]	huntian	hunten	6	8
JUMP	hleapan	lepen	21	9
KILL	cwellan	killen	147*	3*
KNOW	cnawan	knouen	360	24
LAUGH	hlyhhan	laughen	10	2
LEAVE	læfan	leven	138	7
LIKE	lician	liken	74	14
LIVE	lifian	liven	222	27
LOAD	hladan	laden	4*	0*
LOOK AT	locian	loken	139	32
MEET	metan	meten	107	12
NAME	namnian	nemnen	56	3
PEEL	/	pilen	4*	0*
PLAY	plegan	pleien	15	7
POUR	/	pouren	4*	1*

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PUSH	/	pushen	0**	0**
PUT	/	putten	301	11
RAIN	rignan	reinen	14*	1*
ROLL	/	rollen	0**	0**
RUN	yrnan	rennen	76	26
SAY	secgan	seien	3774	387
SCREAM	/	scremen	1*	0*
SEARCH FOR (1)	secan	sechen	139	34
SEARCH FOR (2)	/	serchen	12	0
SEE	seon	sen	698	172
SEND	sendan	senden	375	49
SHAVE	/	shaven	19*	4*
SHOUT AT	/	shouten	0**	0**
SHOW	/	sheuen	221	18
SING	singan	singen	95	97
SINK	sincan	sinken	14	4
SINK (tr)	sencan	sinken	14	4
SIT DOWN	sittan	sitten	126	85
SMELL	/	smellen	28*	3*
STEAL	stelan	stelen	16	5
TAKE (1)	niman	nimen	91	58
TAKE (2)	/	taken	828	51
TALK (1)	sprecan	speken	550	93
TALK (2)	/	talken	17	3
TEACH (1)	læran	leren	119	20
TEACH (2)	tæcan	techen	61	32
TEAR	teran	teren	9*	6*
TELL	tellan	tellen	432	65
THINK	þencan	thinken	191	65
THROW	/	throuen	34*	14*
TIE (1)	tigan	teien	15	1
TIE (2)	bindan	binden	93	26
TOUCH	/	touchen	29	0

WASH	wascan	washen	62	7
WINK[+]	wincian	winken	13	0
WIPE	wipian	wipen	2*	0*

Table 15: Middle English translational equivalents and their frequencies

It is important to note that, when the *Middle English Dictionary* (*MED*) mentioned alternations not found in the reference corpora, these were added as well to the PaVeDa database. Given the inherent diachronic nature of this project, as with Old English (cf. section 3.2) the “continuity of attestation” criterion has almost always prevailed on the other criteria mentioned in section 1.3. This is the reason why, even though some verbs were not found in the reference corpora, they were still added to the database, using data from the *Middle English Dictionary* (*MED*). An exception to this is the verb *frighten*, which was particularly infrequent in Middle English (the *MED* only cites 6 examples), and thus *skerren* was preferred (with the *MED* citing 19 examples).¹¹ Concerning the alternation between FEAR and FRIGHTEN, Van Gelderen (2014: 106) claims that “until the late 14th century, the verb *faeran* means ‘to frighten’”, however Zimmermann (2024: 13) shows that the change in argument structure, and thus in meaning, begins far earlier than 1400.¹² For this reason, I selected *feren* as counterpart of FEAR, with a “causal” alternation for those occurrences meaning ‘frighten’ (cf. section 3.4.3.1).

When possible, both OE and PDE forms were considered in the selection of Middle English verbal counterparts, for the sake of diachronic comparison: this frequently resulted in the choice of two different forms in Middle English, one corresponding to the OE (Germanic) form,¹³ the other corresponding to the contemporary form. This is the case, for example, of BUILD, for which both *timbren* (< OE *timbrian*) and *bilden* (> PDE *build*) were considered, or CARRY, for which both *beren* (< OE *beran*) and *carien* (> PDE *carry*) were chosen. Always for the sake of comparison, the chosen translational equivalent of DRESS is *shriden* (< OE *scrydan*) and not *clothen*, since this latter (OE *clapian*) was not added to the Old English database. The verb *dressen* did not actually correspond to the PDE meaning, as it most frequently meant ‘to position’ or ‘to address’, developing the meaning of ‘wear a piece of clothing’ only later (according to the *Oxford English*

¹¹ Frighten: https://quod.lib.umich.edu/m/middle-english-dictionary/dictionary/MED17744/track?counter=1&search_id=4241078. Skerren: https://quod.lib.umich.edu/m/middle-english-dictionary/dictionary/MED40651/track?counter=1&search_id=4241078.

¹² “The emergence of the new meaning took place during a poorly attested period of the English language, perhaps as early as the beginning of the 13th century.” (Zimmermann 2024: 38).

¹³ Thus, allowing the comparison of Middle English data not only within the history of English, but also with other Old Germanic languages added to the PaVeDa database, namely, at the moment, Gothic, Old High German and Old Norse.

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Dictionary, the first attestation of the verb *dress* with the contemporary meaning ‘to clothe, array’ is found in Late Middle English, around 1413).¹⁴

It is important to note when two different, but related meanings had two OE counterparts, only one single verb corresponds to both meanings in Middle English: this is the case of BOIL and BOIL(tr), which were respectively instantiated by *weallan* and *wyllan* in Old English, but they both correspond *boillen* (a French loanword) in Middle English. The same happens with and with BURN and BURN(tr), respectively *byrnan* and *bærnan*, corresponding to Middle English *brennen*, and SINK and SINK(tr), respectively *sincan* and *sencan*, which in Middle English have merged in the forms *sincken* and *brennen*, showing lability. These verbs have been added as separate entries in the database; however, only the most frequent meaning shows alternations, the other one only the basic frame (which correspond either to the non-causal or causal alternation in the other meaning of the pair, cf. section 3.4.3.1, on the causal vs non-causal alternation). As with Old English (section 2.2) all the derived or more abstract meanings, not corresponding to the PaVeDa meanings, have not been taken into account in the analysis. This is the case, for example, of the occurrences of CARRY (1) *beren*, meaning ‘to produce’, or the occurrences of THINK *thinken* meaning ‘to seem’.¹⁵

3.3. Middle English valency patterns

The aim of this section is to provide an overview of Middle English valency patterns. This section follows the same structure of the Old English chapter (cf. section 2.4), i.e. the different valency classes are described in order of increasing argument slots, starting with the zerovalent verbs, and ending with three-place verbs. Following the criteria used in the ValPaL and PaVeDa projects (cf. section 1.3, case marking, agreement, and passivisation were considered to classify verbs into different valency classes. Moreover, the analysis considers the *Aktionsart* (Vendler 1967) of the different verbs,¹⁶ as summarised in Table 16.

	Valency				
<i>Aktionsart</i>	Zero-valent	One-place	Two-place	Three-place	Total
Accomplishment		2	15	10	25
Achievement		4	10	4	18

¹⁴ cf. III. To clothe, array. https://www.oed.com/dictionary/dress_v?tab=meaning_and_use#5980723

¹⁵ Note that OE *þencan* ‘to think’ and *þincan* ‘to seem’ merged in ME *thinken*, creating the well-discussed “*methinks*” forms (cf. among others Palander-Collin 1998 and Wischer 2003)

¹⁶ *Aktionsart* labels have been assigned based on the basic coding frame selected for each verb.

Activity	1	13	19	3	34
State		4	5		9
Total	1	23	49	17	90

Table 16: Middle English verbs classified for valency class and Aktionsart.

3.3.1. Zero-valent verbs

As in Old English, the only verb of the PaVeDa sample featuring a zero-valent frame is the Middle English weather verb RAIN *reinen*. It is mainly found with the expletive pronoun *it*, as in (215), however one occurrence is found apparently without the expletive *it*, shown in (216), but examples without *it* are extremely rare in Middle English (Visser 1963: 4; van Kemenade 1995: 127).

- (215) *and þen hit rayned so gretly forty dayes*
 and then 3SG.NOM.N rain.IND.PRET so greatly forty day.PL
and forty nyghtys
 and forty night.PL
 “and then it rained so much forty days and forty nights.” (CMMIRK-M34,72.1934)

- (216) *and he besohte at gode þat naht*
 and 3SG.NOM.M request.IND.PRET at God(M).DAT.SG that NEG
ne scolde reinin
 NEG shall.SBJV.PRET.3SG rain.INF
 “and he requested from God that it would not rain, [to chastise the people.]”
 (CMVICES1-M1,143.1768)

- (217) *and in his tyme it raynede bloode*
 and in POSS.3SG.M time 3SG.NOM.N rain.IND.PRET blood
 “and in his time, it rained blood” (CMBRUT3-M3,21.622)

- (218) *Heuene was yclosed, That no*
 Heaven be.IND.PRET.3SG close.PTCP.PST that NEG
reyne reynede.
 rain rain.IND.PRET
 “the Heaven was closed, so that no rain rained”
 (c1400(?a1387)PPI.C(Hnt HM 137)16.270)

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Note, however, that *naht* is tagged as negation in the PPCME2, but it could also be interpreted as the pronoun meaning ‘nothing’, making this an occurrence with the addition of an object-like argument, similar to the one in (217), or of a subject-like one, as in (218) (cf. instrument to subject alternation in section 3.4.1.3). Moreover, an intentional agent could be added to the frame, but differently from Old English (cf. section 2.3.1), it is generally done through an unmarked causal alternation, as in (219), i.e. a causer is added without an explicit mark on the verb, e.g. the auxiliaries *leten*, *don* or *geren* (Fulk 2012: 107). Indeed, in my corpus, only one out of the five causal occurrences shows the causative auxiliary *leten*, in (220).

- (219) *And he rained to hem manna*
and 3SG.NOM.M rain.IND.PRET to 3PL.ACC manna
for to ete
for to eat.INF
“and he made rain manna for them to eat” (CMEARLPS-M2,95.4128)

- (220) *he let hem reine manne*
3SG.NOM.M let.IND.PRET 3PL.ACC rain.INF manna
to bi-liue.
to livelihood
“he made rain manna for them as livelihood.” (CMTRINIT-MX1,99.1326)

As mentioned for Old English (section 2.3.1), the term “impersonal” has been used in English historical grammars to indicate both zero-valent weather verbs and verbs with non-canonical (i.e. non-nominative) subjects, mainly experiential verbs, which however are not zero-valent. For this reason, these verbs will not be discussed in this section but in the next ones (cf. oblique objects in section 3.3.2.2).

3.3.2. One-place verbs

3.3.2.1. Nominative subjects

As in Old English, in one-place verbs, the single argument typically serves as the subject and, if pronominal, is marked by the nominative, instantiating the [NOM-SUBJ] construction, as shown in example (221), where the pronoun *they* (in the nominative) bears the syntactic function of subject.

- (221) *and therewith they ran togiders*
 and therewith 3PL.NOM run.IND.PRET together
 “and therewith they ran together” (CMMALORY-M4,39.1276)

In my sample, 23 verbs feature a monovalent frame, of which 22 instantiate the [NOM-SUBJ] construction (the single exception is BE HUNGRY *hungren*, see section 3.3.2.2). Among one-place stative predicates there are BE HUNGRY *hungren*, BE SAD *droupnen* and FEEL PAIN *aken*, whereas among accomplishments are found BE(COME) DRY *drien*, and SINK *sincken*. The majority of monovalent verbs (9/19) are activities: HUNT *hunten*, LAUGH *laughen*, LIVE *liven*, PLAY *pleien*, RUN *rennen*, SCREAM *scremen*, SHOUT AT *shouten*, SING *singen*, TALK (1) *speken* and TALK (2) *talken*. Lastly, achievements featuring the [NOM-SUBJ] construction are COUGH *coughen*, DIE *dien*, SIT (DOWN) *sitten*, and WINK *winken*.

In terms of semantics, the single argument of a one-place verb is typically an agent. However, for the experiential verbs BE SAD *droupnen* and FEEL PAIN *aken*, this argument instead takes on the roles of experiencer and stimulus, respectively, as in (222) and (223).

- (222) *for hire loue y droupne ant dare*
 for POSS.3SG.F love 1SG.NOM be_sad.IND.PRS and falter.IND.PRS
 “For her love I droop and falter” (a1350 Ichot a burde in boure (Hrl 2253)80)

- (223) *þenne akeð his heorte*
 then ache.IND.PRS.3SG POSS.3SG.M heart
 “Then his heart aches.” (CMTRINIT-MX1,207.2873)

FEEL PAIN *aken* is frequently constructed in an intransitive pattern. In this construction, the syntactic subject is the aching body part, i.e. the stimulus. When present the experiencer may be encoded with a possessive determiner depending on the noun indicating the stimulus. However, in earlier texts (M1-M2), external possessors are still found. In these occurrences, the experiencer is encoded in the oblique case, thus moving outside of the NP encoding the stimulus, as in (224). Middle

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English experiencers are typically encoded as the agents of prototypical transitive verbs, i.e. in the nominative case when pronominal. However, exceptions exist, particularly with “impersonal” verbs. (cf. section 3.3.2.2).

- (224) *His* *heaved* *him* *acph*
 POSS.3SG.M head 3SG.ACC.M ache.IND.PRS.3SG
 “His head hurts (him)” (CMVICES1-M1,91.1075)

Several of the previously mentioned verbs also permit additional optional prepositional complements with various encodings. Motion verbs such as RUN *rennen*, SINK *sinken* and SIT (DOWN) *sitten* enable the expression of spatial arguments, such as direction, through various prepositional phrases or spatial adverbs, as in (225)-(227). In these cases, the same prepositional phrases are used to encode both inanimate and animate goals.

- (225) *pei* *rennen* *to* *the* *townes*
 3PL.NOM ran.IND.PRS.PL to DET town.PL
 “[And when the spies see any Christian men come upon them,] they run to the towns”
 (CMMANDEV-M3,84.2118)

- (226) *And in* *to* *þat* *see* *sonken* *the* *v* *cytees*
 and in to DET sea sink.IND.PRET.PL DET five city.PL
 “and the five cities sank into that sea” (CMMANDEV-M3,67.1690)

- (227) *And it* *sytteth* *in* *a* *chayere* *of* *gold*
 and 3SG.NOM.N sit.IND.PRS.3SG in one chair of gold
full *nobely* *arrayed*
 full nobly array.PTCP.PST
 “and it sits in a chair of gold, full nobly arrayed” (CMMANDEV-M3,115.2833)

Other one-place verbs which allow the insertion of an optional prepositional complement are LIVE *liven* and LAUGH *laughen*. As in Old English, LIVE *liven* can be found in monovalent frames, e.g. in (228), or with a spatial PP headed by the preposition *in* (thus changing its *Aktionsart* from state verb to activity verb), as in (229).

(228) *Tel vs whepyr we schale lyve or dye,*
 tell.IMP 1PL.ACC whether 1PL.NOM shall live.INF or die.INF
 “Tell us whether we shall live or die” (CMSIEGE-M4,87.530)

(229) *and zitte þe Britons supposen þat he*
 and yet DET Briton.PL suppose.IND.PRS.PL that 3SG.NOM.M
leueþ in a-nopere lande
 live.IND.PRS.3SG in another land
 “The Bretons still believe he lives in another land” (CMBRUT3-M3,90.2722)

Concerning LAUGH *laughen*, it can add a further argument through a PP headed by the preposition *at*, to encode the “Directed Nonverbal Expression” alternation (cf. Old English, section 3.3.2, and PDE in PaVeDa¹⁷), i.e. the expression of the person laughed at, as in (230).

(230) *and laugheth at his folye.*
 and laugh.IND.PRS.3SG at POSS.3SG.M folly
 “and [he] laughs at his folly” (CMCTMELI-M3,236.C1.741)

Concerning the verbs corresponding to TALK, i.e. *talken* and *speken*, frequencies are not indicative of the basic frame (as in Old English, cf. section 3.3.2). Indeed, out of the total 643 occurrences of *speken*, it is found 228 times in a monovalent frame ((231)), 245 times with a prepositional T-argument, i.e. the “topic-about” alternation as in (232), and 63 with a prepositionless non-cognate/kindred T-argument ((233)), 68 times with a R-like argument ((233)) and 20 in a ditransitive frame ((234)).

(231) *Than kyng Arthure spake fyrste*
 then king Arthur speak.IND.PRET first
 “Then king Arthur spoke first” (CMMALORY-M4,630.3604)

(232) *Now I haue spoken of bawme*
 now 1SG.NOM have.IND.PRS speak.PTCP.PST of balm
 “Now I have spoken about the balm” (CMMANDEV-M3,33.841)

¹⁷ “A verb depicting a non-verbal expressive act takes an additional argument designating the “target” of the expressive act, e.g. She smiled/frowned/laughed at him.” (<https://paveda.unipv.it/alternations/3434180796>)

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(233) *and Y speke in the world these thingis*
 and 1SG.NOM speak.IND.PRS in DET world DEM thing.PL
 “and I say these things in the world” (CMNTEST-M3,8,40J.790)

(234) *But now wol I speke to yow of the conseil*
 but now will 1SG.NOM speak.INF to 2PL.ACC of DET advice
 “But now I want to speak to you about the advice [which was given to you by the men of law and the wise folk]” (CMNTEST-M3,8,20J.762)

The same can be said for *talken*, for which 8 occurrences are monovalent ((235)), 9 occurrences have a prepositional T-argument ((236)) and 2 show a R-like argument ((237)).

(235) *And as they talked thus [...]*
 and as 3PL.NOM talk.IND.PRET thus
 “And as they were talking in this manner, [one came with the king's horse]”
 (CMMALORY-M4,35.1110)

(236) *yf any man sayde, or tolde, or talkyd*
 if any man say.IND.PRET or tell.IND.PRET or talk.IND.PRET
of suche gaderyng
 of such gathering
 “if any man said or told or talked about such gathering” (CMGREGOR-M4,210.1886)

(237) *Bot hinde Iohn of Coupland, a wight man in wede,*
 but noble John of Copeland one brave man in armour
talked to David,
 talk.IND.PRET to David
 “but the noble John of Copeland, a brave man in armour, talked to David”
 (LaurMinot.[Poem_9],32.38.532)

With both verbs, if the R-like argument can be said certainly to be optional, one may argue that the bivalent frame is just as frequent as the monovalent one. However, as with Old English, I chose to be consistent with PDE (Goddard 2013), in which T and R are considered frequent but optional.

3.3.2.2. Oblique subjects

This section deals with the so-called “impersonal” verbs, showing a non-nominative subject. As in Old English, these verbs are mainly experiential verbs, i.e. verbs indicating action with an impact on a person (namely the experiencer). Though inheriting many “impersonal” verbs from Old English, in Middle English the inventory of “impersonals” expands, possibly due to the French influence (Smith 2022: 94). Among one-place verbs, the sole verb from my PaVeDa sample instantiating a non-nominative subject is BE HUNGRY *hungren* (< OE *hyngran*, cf. section 2.3.2.2). Concerning BE(COME) COLD (OE *calan*, ME *colden*), which was discussed among one-place verbs with an oblique subject in Old English (cf. section 2.3.2.2), it is not easy to determine its basic frame. Indeed, ME *colden* mainly means ‘to make something cold’, but it can also be used intransitively to mean ‘to become cold’.¹⁸ However, a better verbal counterpart has not been found. Due to the low number of occurrences in my corpus (7 occurrences in total, among which only two mean ‘be cold’ and other two mean ‘become cold’), no clear basic pattern was attested. In any case, though showing a non-nominative experiencer, it also features a nominative stimulus (as e.g. LIKE, cf. sections 2.3.3.3 and 3.3.3.3): for this reason, I decided to discuss *colden* among two-place verbs.

Concerning BE HUNGRY *hungren*, it inherits the oblique subject pattern from Old English, as in (238), however from the M3 period (1350-1420) personal occurrences, i.e. with a nominative experiencer, as in (239), were attested.

- (238) *þet him nefre eft ne hungreð.*
 that 3SG.ACC.M never again NEG be_hungry.PRS.3SG
 “The man who thus fasts Christ shall give him such meat that he will never again hunger.”
 (CMLAMBX1-MX1,37.482)

- (239) *he that cometh to me, schal*
 3SG.NOM.M REL come.PRS.3SG to 1SG.ACC shall.PRS.3SG
not hungur
 NEG be_hungry.INF
 “The one who comes to me shall never be hungry” (CMNTEST-M3,6,20J.509)

¹⁸ Cf. MED https://quod.lib.umich.edu/m/middle-english-dictionary/dictionary/MED8372/track?counter=1&search_id=4444372

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It is true that in example (239) the choice of the nominative may be due to the relative clause. However, when expanding the reference corpus and analyse all the occurrences of the entire PPCME2 and PCMEP, clearer attestation of the personal pattern are found, as in (240). Moreover, one earlier attestation ((241)) of a personal pattern is possibly found already in M1 (1150-1250). However, the lack of inflection hinders a certain interpretation of it as a true nominative. It is true though that in texts of the twelfth century (and even as late as the thirteenth) a dative singular form of the possessive is still found, e.g. *mire*, *pire* (Fulk 2012: 66), so the form *þin* in example (241) might be interpreted as a nominative. Moreover, the corresponding Latin passage is “*Si esurierit inimicus tuus ciba illum*”: thus, the nominative might be due to the influence of Latin.

(240) <i>Whon</i>	<i>þou</i>	<i>hungrest,</i>	<i>he</i>
When	2SG.NOM	be_hungry.IND.PRS.3SG	3SG.NOM.M
<i>fedep</i>	<i>þe,</i>		
feed.IND.PRS.3SG	2SG.ACC		

“When you are hungry, he feeds you” (CMEDVERN-M3,243.136)

(241) <i>ʒef þin</i>	<i>foa</i>	<i>hungreð</i>	<i>fed</i>	<i>him</i>
if POSS.2SG	enemy	be_hungry.PRS.3SG	feed.IMP	3SG.ACC.M

“if your enemy is hungry, feed him” (CMANCRIW-2-M1,II.297.865)

When performing a logistic regression analysis on both Old and Middle English data, as represented in Figure 11, it is visible that the change from an impersonal to a personal pattern seems to happen quite early. Indeed, the model shows that for every one-year advance in time the log-odds of finding nominative experiencer with the verb BE HUNGRY *hyngnan/hungren* increase by 0.0105, and it predicts the start of the change in 1088, thus at the end of the Old English period.

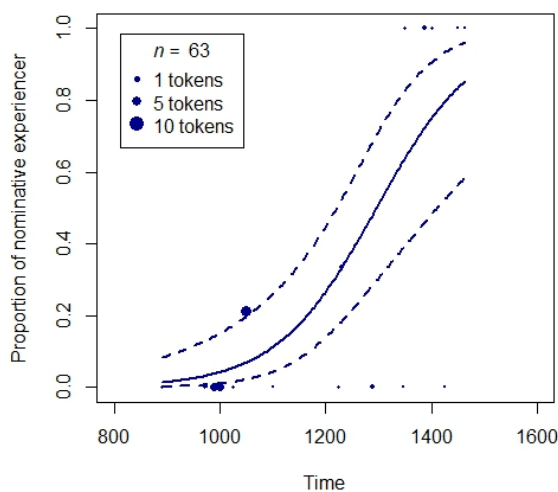


Figure 11: Development of the nominative experiencer of the meaning BE HUNGRY from Old to Middle English.

In order to include more data and thus to maximise the precision of the prediction, this analysis has been carried out on the entire YCOE, YCOEP, PPCME2 and PCMEP treebanks, not only on the reference samples. However, though representative and satisfying in size for many purposes, these treebanks do not contain every text in Old or Middle English. Therefore, some earlier personal occurrences found, for example, in earlier Old English texts (e.g. in the *Lindisfarne Gospels*, as mentioned in section 3.3.2.2), which are not present in the YCOE corpus, could not be considered in the analysis. For this reason, the change may be dated even before than 1088.

Visser (1963: 29-31) argues for a threefold cause of the decay of these “impersonal” patterns in the history of English: a) the decay of such verbs themselves, which fell into disuse either before or during Middle English (e.g. OE FEEL COLD *calan*). However, this is not the case of *hungren*; b) the simultaneous occurrence of two rival constructions, namely an impersonal type with *it* and a ‘personal type’; c) the decay of inflectional endings, which caused the word before such verbs to no longer show its exact syntactical function through its form, as in example (241) above.

Consequently, this word was mistakenly considered the subject and was eventually replaced by a nominative pronoun. However, Allen (1995: 293) points out that although “the loss of case distinctions played an important role in the general introduction of nominative Experiencers, case-marking ambiguity cannot possibly be behind every instance of development of nominative Experiencers”. Indeed, she demonstrates that “the introduction of nominative pronominal Experiencers was not a direct consequence of the loss of nominal case distinctions” (Allen 1995:

307), arguing instead that the decline of this construction can be understood to have started with a simple decrease in usage, influenced only partly by the same factors that led to the introduction of a new option, i.e. loss of morphological case distinctions (Allen 1995: 325).

3.3.3. Two-place verbs

As for Old English, two-place verbs are the most prevalent class also in Middle English, with 48 verbs out of a total of 86. They most commonly exhibit the [NOM,ACC] construction, where, when in their pronominal form, the first A-like argument is in the nominative case and the second P-like argument is in the accusative case. These verbs demonstrate significant variability in the inherent semantic properties of their arguments (e.g., animacy) and their aspectual characteristics. States (e.g., KNOW *knouen*), activities (e.g., BOIL *boillen*), accomplishments (e.g., EAT *eten*), and achievements (e.g., CUT *cutten*) are all represented in my corpus with this construction.

In the following sections, I will first discuss prototypically transitive verbs, which denote events where an agent intentionally causes a change of state or position in a non-intentional patient. Then, I will focus on non-prototypically transitive verbs that feature progressively less-affected P-like arguments (section 3.3.3.2) and verbs with less-affected A-like participants, or in other words, experiential verbs (section 3.3.3.3).

3.3.3.1. Prototypically transitive verbs

As discussed for Old English (section 2.3.3.1), the verb *kill* is at the core of the transitivity prototype (Hopper & Thompson 1980; Tsunoda 1985), thus the frame of *kill* is taken as the mode for the transitive frame. As Old English (and many other IE languages) KILL *killen* and other transitive verbs instantiate the [NOM,ACC]¹⁹ construction, i.e. with an agent in the nominative (being the syntactic subject) and a patient in the accusative (being the syntactic direct object). It is important to remember, however, that this case differentiation is visible only with pronouns, since nominal inflection is lost already at the beginning of the Middle English period. Example (242) shows the transitive pattern with nominal arguments, whereas example (243) shows the with pronominal arguments.

¹⁹ It would probably be better to call it [NOM,OBL] construction, in which OBL stands for “oblique case”. However, since the ValPaL database of PDE marked the second non-nominative argument of two-place verbs as “-acc”, I decided to use the term “accusative”, for the sake of comparison.

- (242) *This Godwyn killid Edward broþir*
 DEM Godwin kill.IND.PRET Edward brother
 “This Godwin killed Edward’s brother” (CMCAPCHR-M4,101.2133)

- (243) *therfor he killide hem in wildirnesse*
 therefore 3SG.NOM.M kill.IND.PRET 3PL.ACC in wilderness
 “therefore he killed them in wilderness” (CMOTEST-M3,14,1N.644)

Out of the 49 verb featuring a two-place frame, 45 instantiate the [NOM,ACC] construction, as shown in Table 17. These can be categorized into different groups: i) prototypically transitive verbs, like KILL (*killen*), as illustrated in (242) and (243) above; ii) non-prototypically transitive verbs, indicating events with no change of state or affectedness of the patient, such as LEAVE (*leven*), as shown in (244) below; iii) experiential verbs related to bodily sensations, cognition, or emotion, where the experiencer is in the nominative case and the stimulus in the accusative case, like SEE *sen*, as in (245) below.

- (244) *þat zere þe Danes lefte Norþhumberlond*
 DEM year DET Dane.PL leave.IND.PRET Northumberland
 “in that year, the Danes left Northumberland” (CMPOLYCH-M3,VI,339.2494)

- (245) *þat shal þu wit þin eyne sen*
 DEM shall 2SG.NOM with POSS.2SG eye see.INF
 “you shall see that with your eye” (Havelok,39.1273.673)

PaVeDa meaning ²⁰	Old English verb	Basic coding frame
BEAT	beten	1-nom V.subj[1] 2-acc (with+3)
BOIL (tr)	boillen	1-nom V.subj[1] 2-acc
BREAK	breken	1-nom V.subj[1] 2-acc
BUILD (1)	timbren	1-nom V.subj[1] 2-acc
BUILD (2)	bilden	1-nom V.subj[1] 2-acc (with+3)
BURN (tr)	brennen	1-nom V.subj[1] 2-acc
COOK	coken	1-nom V.subj[1] 2-acc

²⁰ The verbs marked by * are not found with the transitive pattern in Old English.

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COVER	coveren	1-nom V.subj[1] 2-acc (with+3)
CUT	cutten	1-nom V.subj[1] 2-acc (with+3)
DIG	diggen	1-nom V.subj[1] 2-acc
DRESS	shriden	1-nom V.subj[1] 2-acc (with+3)
EAT	eten	1-nom V.subj[1] 2-acc
FEEL COLD*	colden	1-nom V.subj[1] 2-acc
FILL	fillen	1-nom V.subj[1] 2-acc (with+3)
FOLLOW*	folwen	1-nom V.subj[1] 2-acc
FRIGHTEN	skerren	1-nom V.subj[1] 2-acc
GRIND	grinden	1-nom V.subj[1] 2-acc
HEAR	heren	1-nom V.subj[1] 2-acc
HELP*	helpen	1-nom V.subj[1] 2-acc
HIDE	hiden	1-nom V.subj[1] 2-acc
HIT	hitten	1-nom V.subj[1] 2-acc (with+3)
HUG	clippen	1-nom V.subj[1] 2-acc
KILL	killen	1-nom V.subj[1] 2-acc
KNOW	knouen	1-nom V.subj[1] 2-acc
LEAVE	leven	1-nom V.subj[1] 2-acc
LOAD	laden	1-nom V.subj[1] 4-acc
MEET	meten	1-nom V.subj[1] 2-acc
PEEL	pilen	1-nom V.subj[1] 2-acc
PUSH	pushen	1-nom V.subj[1] 2-acc
ROLL (tr)	rollen	1-nom V.subj[1] 2-acc
SEARCH FOR (1)	<u>sechen</u>	1-nom V.subj[1] 3-acc
SEARCH FOR (2)	serchen	1-nom V.subj[1] 2-acc (for+3)
SEE	sen	1-nom V.subj[1] 2-acc
SHAVE	shaven	1-nom V.subj[1] 2-acc
SINK (tr)	sinken	1-nom V.subj[1] 2-acc
SMELL	smellen	1-nom V.subj[1] 2-acc
STEAL	stelen	1-nom V.subj[1] 2-acc
TAKE (1)	nimen	1-nom V.subj[1] 2-acc
TAKE (2)	taken	1-nom V.subj[1] 2-acc
TEAR	teren	1-nom V.subj[1] 2-acc

THINK	thinken	1-nom V.subj[1] 2-acc
TIE	binden	1-nom V.subj[1] 2-acc
TOUCH*	touchen	1-nom V.subj[1] 2-acc (with+3)
WASH	washen	1-nom V.subj[1] 2-acc
WIPE	wipen	1-nom V.subj[1] 2-acc

Table 17: Middle English verbs featuring the [NOM,ACC] construction in their basic pattern.

Once again comparing this list with Aldai & Wichmann (2018: 269) hierarchy for transitive coding, the first 20 meanings on their scale, highlighted in bold in Table 17, are all encoded with the transitive frame, i.e. [NOM,ACC] construction, in Middle English. Three verbs, found in the transitive pattern in Old English, are not present in Table 17: of these, TELL adds a third R-like argument which appeared only occasionally in Old English. The other two, i.e. HUNT and WINK, are generally found in a one-place frame: HUNT *hunten* can add the ‘hunted thing’ through a PP headed by *for* or *after*, though it is not frequent in my sample (only 2 occurrences out of 14), whereas an accusative (pronominal) second argument is found only in poetry (only twice in the sample). Concerning WINK *winken*, it is never found with an explicit ‘winking instrument’ (i.e. the eye).

On the other hand, FEEL COLD *colden*, FOLLOW *folwen*, HELP *helpen*, TOUCH *touchen*, which did not instantiate the transitive pattern in Old English, feature the [NOM,ACC] construction in Middle English.

Once again referring to Haspelmath (2015b), we can determine the “transitivity prominence” of a language. This concept is defined as “the extent to which they make use of transitive encoding” (Haspelmath 2015b: 131, 139), which is calculated by dividing the number of transitive entries by the total number of entries in the dataset. A pattern is deemed transitive if its two arguments are coded similarly to the arguments of the verb *break*, representing the “breaker” and the “broken thing” micro-roles (Haspelmath 2015b: 136), which corresponds to the [NOM,ACC] construction in Middle English. As shown in Table 17, the Middle English verbs featuring the [NOM,ACC] construction are 45 out of a total of 90. This means that the transitivity prominence of Middle English is 0.50, virtually the same as Old English (0.49, cf. section 2.3.3.1).

Considering the loss of case marking, one might expect a generalisation of the transitive pattern and an increase in the transitivity prominence of English in time. However, it is important to consider that it is **during** Middle English that “impersonal patterns” are gradually replaced with personal (transitive) patterns. For this reason, if one calculated the transitivity prominence of **Late** Middle

English (M3/M4, i.e. 1350-1500), one should add to Table 17 also LIKE *liken* (cf. section 3.3.3.3); with this addition, transitivity prominence would increase to 0.51.

3.3.3.2. Verbs with less affected P-like participants

Differently from Old English (cf. section 2.3.3.2), non-prototypically transitive verbs with less-affected P-like arguments, i.e. FOLLOW *folwen* and HELP *helpen*, which exhibited case alternation of the second argument, generalise the transitive pattern, i.e. the [NOM,ACC] construction, as shown in (246) and (247). Marginally, the verb *folwen* is found with a prepositional second argument (cf. conative alternation in section 3.4.1.1), headed by either *on* or *after* (both found once in my sample), exemplified in (248).

(246) *Sir, I have followed that beste longe*
 Sir 1SG.NOM have.IND.PRS.1SG follow.PTCP.PST DEM beast long
 “Sir, I have followed that beast for a long time” (CMMALORY-M4,33.1051)

(247) *sir Percivall his syster holpe that lady*
 sir Percival POSS.3SG.M sister help.IND.PRET.3SG DEM lady
with hir blood
 with POSS.3SG.F blood
 “[And as it is said after in the Sangreal, that] Sir Percival's sister helped that lady with her blood” (CMMALORY-M4,62.2054)

(248) *And allwayes kyng Pellam folowed afftir hym.*
 and always king Pellam follow.IND.PRET.3SG after 3SG.ACC.M
 “and King Pellam always followed after him” (CMMALORY-M4,64.2136)

Two-place motion verbs do not instantiate the [NOM,ACC] construction. Instead, they are found with argumental or quasi-argumental prepositional phrases, encoding direction, path, or source. As for Old English (cf. section 2.3.3.2), Middle English data frequency confirms the status of the location and posture verbs SIT DOWN *sitten*, and LIVE *liven* as basically one-place verbs, with possible argument insertion. On the other hand, verbs as CLIMB *climben*, GO *gon*, and JUMP *lepen* are considered two-place verb, with the direction part of the basic pattern, being encoded by several PPs and spatial adverbs, the most frequent of which are the PPs headed by *to* or *on*, as in (249), (250) and (251).

- (249) *and with myght and grete force he clambe*
 and with power and great strength 3SG.NOM.M climb.IND.PRET.3SG
up to the faucon
 up to the falcon
 “and he climbed up to the falcon with power and great strength.”
 (CMMALORY-M4,205.3337)

- (250) *And from this Ile of Rodes men gon*
 and from DEM island of Rhodes man.PL go.IND.PRS.PL
to Cypre
 to Cyprus
 “and from this island, Rhodes, men go to Cyprus” (CMMANDEV-M3,16.364)

- (251) *they leped on smale hakeneyes*
 3PL.NOM jump.IND.PRET on small hackney_horse.PL
 “they jumped on their small hackney horses” (CMMALORY-M4,18.536)

Differently from Old English, the transfer verbs *CARRY carien* and *POUR pouren* are never found without a third argument expressing the direction of movement in my sample. It is true though that both *carien* and *pouren* have a French origin, thus they cannot be directly compared with their Old English counterparts, *beran* and *geotan*. The same can be said for *PUSH pushen*, which – on the contrary – is less frequently found with a third argument (cf. OE *scufan*, section 2.3.3.2).

3.3.3.3. Verbs with less affected A-like participants

This section will examine non-prototypically transitive verbs, which involve less-affected participants, such as an experiencer (an animate participant able to experience a situation) and a stimulus (a participants triggering or causing an experiential situation). In Middle English, experiencers tend to be encoded as the agents of prototypical transitives, i.e. in the nominative, with some exceptions, e.g. the verb *LIKE liken* or other so-called “impersonal” verbs.

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In my corpus, two-place experiential verbs are i) cognition verbs: KNOW *knouen* and THINK *thinken*; ii) perception verbs: FEEL COLD *colden*, HEAR *heren*, LOOK AT *loken*, SEE *sen*, SMELL *smellen* and TOUCH *touchen*; iii) emotions verb: FEAR *feren*, FRIGHTEN *skerren*, and LIKE *liken*.

Both cognition and perception verbs, with the exception of FEEL COLD *colden* (which I will discuss together with LIKE *liken* below in this section), tend to consistently feature the a basic [NOM,ACC] construction, i.e. the experiencer encoded in the nominative and the stimulus in the accusative, with the exception of LOOK AT *loken*, generally appearing with a prepositional stimulus. Examples (252) (258) show the basic frame of each verb:

(252) *Sir, I know the kyng well*
 Sir 1SG.NOM know.IND.PRS.1SG DET king well
 “Sir, I know the king well” (CMMALORY-M4,44.1439)

(253) *Therefore thynke nat the contrary*
 therefore think.IMP.SG NEG DET contrary
 “therefore, do not think the contrary” (CMMALORY-M4,49.1612)

(254) *Ryght so he herde a grete noyse of an horse*
 Right so 3SG.NOM.M hear.IND.PRET one great noise of one horse
 “He immediately heard a great noise coming from a horse” (CMMALORY-M4,59.1966)

(255) *þat shal þu wit þin eyne sen*
 DEM shall 2SG.NOM with POSS.2SG eye see.INF
 “you shall see that with your eye” (Havelok,39.1273.673)

(256) *[...] ony swet erdly thyng þat sche smellyd be-for*
 [...] any sweet earthly thing REL 3SG.NOM.F smell.IND.PRET before
 “[it was sweeter - it seemd to her - than] any earthly sweet thing that she smelled before”
 (CMKEMPE-M4,87.1972)

(257) *And towched his woundys with sir Gylbardys swerde*
 and touch.IND.PRET POSS.3SG.M wound.PL with Sir Gilbert.GEN sword
 “and [he] touched his wounds with Sir Gilbert's sword” (CMMALORY-M4,204.3302)

- (258) *I* *shal* *þrist* *ut* *þi* *rith* *eye* *þat* *þou*
 1SG.NOM shall thrust out POSS.2SG right eye REL 2SG.NOM
lokes *with* *on* *me*
 look.IND.PRS.2SG with on 1SG.ACC
 “I shall take your right eye out, with which you look at me” (Havelok,77.2727.1253)

Prepositional second arguments are also found with the verbs KNOW *knouen*, HEAR *heren*, and THINK *thinken* in the “topic-about” alternation (cf. section 3.4.1.6). Moreover, and SEE *sen*, SMELL *smellen* and THINK *thinken* are also found with other PPs, indicating a lower degree of affectedness of the stimulus, as in (259)-(261) (cf. conative alternation, section 3.4.1.1). Interestingly, all these prepositions have spatial meanings and apply to both animate and inanimate participants in roles such as direction/goal or recipient. As in Old English (among other IE languages, cf. section 2.3.3.3), the coding of the stimulus as goal/direction suggests a parallel between verbs of seeing/looking and motion verbs, indicating that sight can be directed towards or away from the stimulus. On the other hand, LOOK AT *loken* allows a direct object stimulus (i.e. [NOM,ACC] construction, as non-basic frame, as shown in (262).

- (259) *and se* [...] *to* *the* *north* *and* *south*, *to* *the* *eest* *and* *west*
 and see.IMP.SG [...] to DET north and south to DET east and west
 “Look around [from where you are], to the north and south, to the east and west”
 (CMOTEST-M3,13,1G.468)

- (260) *she* *smelled* *at* *hys* *feete* *and*
 3SG.NOM.F smell.IND.PRET at POSS.3SG.M foot.PL and
at *hys* *hondis*
 at POSS.3SG.M hand.PL
 “she smelled at his feet and hands” ((a1470) Malory Wks.(Win-C)501/35)

- (261) *leve* *me* *som* *tokyn* *that* *I* *may* *thynke*
 leave.IMP 1SG.ACC some sign that 1SG.NOM may think.INF
on *you*
 on 2PL.ACC
 “leave me some sign, so that I may think of you” (CMMALORY-M4,641.3966)

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- (262) [...] *mote loke þe bookes of his maister Alcuinus*
 [...] might look.INF DET book.PL of POSS.3SG.M master Alcuin
 “[But who wants to see more of Charle's life,] he can look the book of his master Alcuin”
 (CMPOLYCH-M3,VI,265.1924)

Lastly, it must be mentioned that SMELL *smellen* consistently features a non-causal pattern, as in (263) (cf. section 3.4.3.1), i.e. what Klein (1998: 65-66) calls descriptive use of *stincan* in Old English (cf. section 2.3.3.3). Contrary to Old English, in which this alternation seemed marginal, non-causal patterns are much more frequent (11 examples out of the 31 total occurrences).

- (263) *for it is wel smellynge*
 because 3SG.NOM.N be.IND.PRS.3SG well smell.PTCP.PRS
 “because it smells so good [that the smell of his body should not grieve men that went forby.]” (CMMANDEV-M3,6.104)

I will now turn to the emotion verbs FEAR *feren*, FRIGHTEN *skerren* and LIKE *liken*. Whereas FRIGHTEN *skerren* features the [NOM,ACC] construction, as in (264), the basic frame of FEAR *feren* has the experiencer in the nominative and a prepositional stimulus, usually encoded with a PP headed by *of*, as shown in (265). Marginally (only one occurrence out of the 17 of my sample), FEAR *feren* allows the [NOM,ACC] construction, encoding the stimulus as a direct object, as in (266). Moreover, it also allows (indirect) reflexive occurrences,²¹ which in my sample are found mainly when the stimulus is omitted ((267)) or expressed by a non-NP complement ((268)).

- (264) *He wile himm skerren mare*
 3SG.NOM.M would 3SG.ACC.M frighten.INF more
 “He would frighten him more” (CMORM-M1,I,132.1120)

- (265) *We fors not his frendship, ne fere of his hate.*
 1PL.NOM force.IND.PRS.PL NEG POSS.3SG.M friendship NEG
 fear.IND.PRS.PL of POSS.3SG.M hate

²¹ Zimmermann (2024: 9) shows that middle-reflexives of *feren* gradually increased from the 14th century to the mid-16th century. However, their use subsequently declined, becoming marginal and ultimately disappearing by the early 17th century.

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respectively with a non-nominative and a nominative experiencer, the former from a M1 text, the latter from a M4 text.

(269) *þis is min loue sune þet*
 DEM be.IND.PRS.3SG POSS.1SG beloved son REL
me wel likeð.
 1SG.ACC well like.IND.PRS.3SG

“This is my beloved son, who pleases me much” (CMLAMB1-M1,141.279)

(270) *I lyke bettir the swerde*
 1SG.NOM like.IND.PRS.1SG better DET sword

“I like the sword better” (CMMALORY-M4,43.1405)

When performing a logistic regression analysis on both Old and Middle English data,²³ as represented in Figure 12, it is visible that the change from an impersonal to a personal pattern seems to happen later than it did with BE HUNGRY *hungren*. Indeed, the model shows that for every one-year advance in time the log-odds of finding nominative experiencer with the verb LIKE *liken* increase by 0.0072, and it predicts the start of the change in 1305.

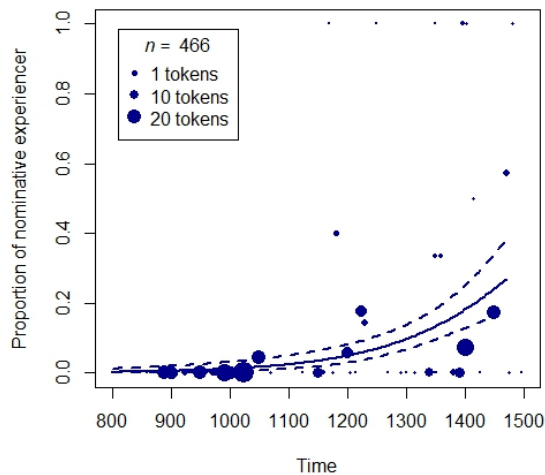


Figure 12: Development of the nominative experiencer of the meaning LIKE from Old to Middle English.

²³ The data have been collected from the entire YCOE, YCOEP, PPCME2 and PCMEP, not only from the reference subsets of texts described in sections 3.1.2 and 4.1.2.

Note that, though marginally, personal occurrences are already found in some M1 Early Middle English texts, as in (271). On the other hand, impersonal occurrences are still found in M4 Late Middle English texts, as in (272).

(271) *ðe* *ʒie* *micel* *ʒitsið,* *and*
 REL 2PL.NOM much desired.IND.PRS.PL and
luwieð *and* *likeð*
 love.IND.PRS.PL and like.IND.PRS.PL

“[because of the great care that you have for your great possessions] which you much desire, and love, and like” (CMVICES1-M1,69.766)

(272) *and* *than* *every knyght* *toke* *the* *way* *that*
 and then every knight take.IND.PRET DET way REL
hym *lyked* *beste.*
 3SG.ACC.M like.IND.PRET best

“and then every knight took the way he preferred.”(CMMALORY-M4,638.3853)

On the causes of this change, Allen (1995: 111) argues that “[i]t seems unlikely, then, that the trend towards ‘reanalysis’ of these experiencers as nominative in ME was caused primarily by a lack of evidence for the case marking of Experiencer”. Indeed, she claims that the former object was reinterpreted as a subject, since the experiencer was in the preverbal position, which was by then typically occupied by the subject. This occurred despite the presence of examples with pronouns that clearly showed non-nominative case marking (Allen 1995: 158). Indeed, Allen (1995: 329) argues that *like* has developed a subject experiencer, contrary to *please*, which retained an object experiencer, because of a different degree of the responsibility of the emotion attributed to the stimulus (in Allen’s words “Target of Emotion”). This argument would be better interpreted as a theme for *like*, but as a cause for *please*. The same [ACC,NOM] construction is found with the verb FEEL COLD *colden*, which features a “feeling cold locus” in the nominative, taking the role of stimulus, and an optional experiencer in the non-nominative case, as in (273).

(273) *him* *coldep* *his* *mup*
 3SG.ACC.M feel_cold.PRS.3SG 3SG.GEN.M mouth

“He feels cold in his mouth” (BodySoul,22.1.20.FragA).

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Given the low number of attestations of this verb (a total of 7 occurrences in the whole PPCME2 and PCMEP) and the fact that *colden* does not derive directly from Old English *calan*, it is not possible to track changes in its argument structure.

However, if one compares the development of a nominative experiencer with the verb BE HUNGRY *hungren* and with LIKE *liken*, one may wonder which are the reasons behind such a great difference in the rate of change. When analysing the process of personalisation of certain Latin verbs, Fedriani argues that “the lexical semantics of individual verbs can influence their morphosyntactic evolution up to a certain extent.” (Fedriani 2013: 203) and that “beside inherent participant-based properties such as animacy, also relational event-based properties such as **agentivity**, **conscious instigation** and **control** may influence the formal coding of a given verb-specific role, accelerate its syntactic reinterpretation and lead to constructional changes” (Fedriani 2013: 204, bold added). Figure 13 illustrates how these parameters influence the rate of change of the Latin verb she analysed.

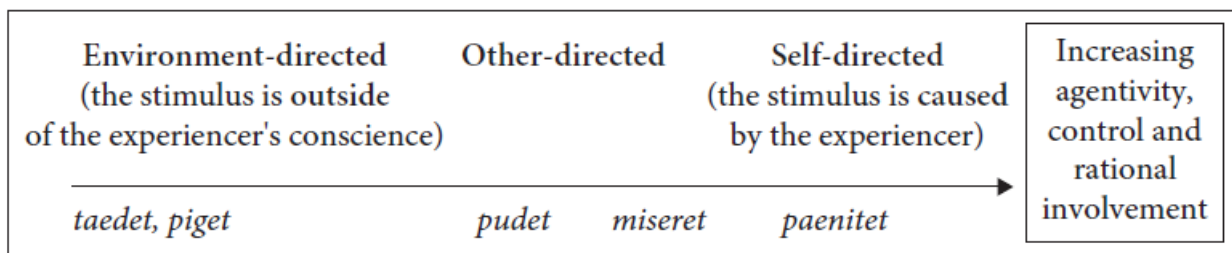


Figure 13: Semantic characterization of the pudet-type verbs (Fedriani 2013: 215)

Unfortunately, this model of change does not seem to agree with my data: indeed, following Fedriani’s theory, LIKE *liken* (which should be “other-directed”) should change before BE HUNGRY *hungren* (“environment directed”).

Mereu & Piunno (2024: 28), in their analysis of Italian communication verbs, “hypothesize that the verb’s micro-constructions are determined by the prominence that each frame element has for its frame configuration”. Following this hypothesis, one might interpret both the experiencer of BE HUNGRY *hungren* as more prominent in the frame than it is the experiencer of LIKE *liken*, and the feeling of hunger as more prominent to the experiencer than the feeling of liking/pleasure. However, further research is needed in this field, analysing the rate of change of other experiential verbs, in order to prove or disprove what here remains a hypothesis.

3.3.4. Three-place verbs

As for Old English (cf. section 2.3.4), three-place verbs are verbs that can take three different arguments and can be categorized into two groups: (i) those that involve three referential arguments, and (ii) those that have two distinct referential arguments along with a third predicative complement. To the former group belong ASK FOR *asken*, BRING *bringen*, CARRY *carien*, GIVE *yeven*, POUR *pouren*, PUT *putten*, SAY *seien*, SEND *senden*, TEACH (1) *leren*, TEACH (2) *techen*, TELL *tellen* and THROW *throuen*, whereas the only representative of the latter is NAME *nemnen*. Examples (274)-(275) show respectively an example of i) with the verb GIVE *yeven* and an example of ii) with NAME *nemnen*.

(274) & þo 3af Brute al þat cuntre to Coryn
 and then give.IND.PRET.3SG Brut all DEM country to Coryn
 “Then Brut gave the whole country to Coryn” (CMBRUT3-M3,11.286)

(275) Sume næmmeð þone cæstel Magdalum
 some name.IND.PRS.PL DET.ACC town Magdala
 “Some name the city Magdala” (CMKENTHO-M1,135.44)

Verbs of the first type are many and not homogeneous in their syntactic encoding of arguments. Both cross-linguistically and within English studies much attention has been devoted to the “ditransitive construction”, defined by Malchukov et al. (2010: 2) as verbs with an agent argument (A), a recipient-like argument (R) and a theme argument (T). Ditransitive constructions typically refer to events where the theme (T) is transferred from the agent (A) to the recipient (R). This transfer can be possessive and tangible (like *give*), or abstract (like *offer*). Additionally, the term ditransitive also applies to verbs indicating “cognitive transfer” (such as *teach*), where the third argument functions as an R-like argument, rather than a strict recipient.

When pronominal, Middle English A-arguments are marked in the nominative case, while the T-argument is marked in the non-nominative case. The coding of R-like arguments shows less consistency, as these can be marked either by a second prepositionless argument (in the non-nominative case when pronominal), or by a prepositional phrase, headed by different prepositions. If in Old English, the alternation between prepositionless dative and PP to encode the third R-argument was not systematic (cf. section 2.4.1.2), it is in Middle English that the so-called “dative

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alternation” (cf. section 3.4.1.2) as it is known for PDE started to emerge (Zehentner 2019: 8-9). This means that both indirect alignment and neutral alignment (in Haspelmath’s (2015a: 22) terms) are attested, the former in what in the literature (e.g. Zehentner 2018: 150) is known as POC (“prepositional object construction”, as in (276)), the latter called DOC (“double object construction”, as in (277)). It must be noted that, the choice of the basic frame has been made on frequency: concrete transfer verbs, i.e. BRING *bringen*, CARRY (1) *beren*, CARRY (2) *carien*, GIVE *yeven*, POUR *pouren*, PUT *putten*, SEND *senden* and THROW *throuen*, together with two “cognitive transfer” verbs, namely SAY *seien* and SHOW *sheuen* feature a basic POC, allowing a DOC as dative alternation. On the other hand, the other verbs of “cognitive transfer”, ASK FOR *asken*, TEACH (1) *leren*, TEACH (2) *techen* and TELL *tellen* feature a basic DOC, also allowing POCs as alternation.

(276) *he* *caried* *hem* *to* *Constantinople*
 3SG.NOM carry.IND.PRET 3PL.ACC to Constantinople
 “he carried them [the images] to Constantinople” (CMCAPCHR-M4,69.1106)

(277) *And þere* *he* *taughte* *his* *disciples*
 and there 3SG.NOM.M teach.IND.PRET POSS.3SG.M disciple.PL
the *PATER* *NOSTER*
 DET Pater Noster
 “And there he taught his disciples the Pater Noster” (CMMANDEV-M3,64.1591)

Concerning the scope of the DOC, Zehentner (2018: 151) reminds that in Old English, a wider range of verbs were used in the construction, conveying a more generalized meaning of “indirect affectedness”. Apart from transfer and related meanings, this abstract sense also encompassed meanings such as dispossession, or pure benefaction/malefaction (cf. Figure 6 in section 2.3.4). However, over time, the concept of transfer has become more prominent, and several meanings that were more peripheral to this core concept have gradually disappeared.

Some semantic restrictions characterise the participants of prototypical transfer verbs: as for Old English (cf. section 2.3.4) both the A and R arguments must be animate, while the T argument should be inanimate. However, verbs such as BRING *bringen*, CARRY (1) *beren*, CARRY (2) *carien* or SEND *senden* often feature inanimate recipients (with a semantic role of direction/goal) and animate themes. Contrary to Old English, when in these instances the R argument is consistently expressed by the prepositional phrase “to + dative”, Middle English can show both POC and DOC, regardless

of the animacy of R. Compare example (278) and (279), the former showing a prototypical transfer event, and the latter with an animate theme and an inanimate recipient.

(278) *And þerfore Pope John the .xxij. sende*
 and therefore Pope John DET 22 send.IND.PRET
lettres to hem
 letter.PL to 3PL.ACC

“And therefore Pope John XXII sent letters to them” (CMMANDEV-M3,11.224)

(279) *þai sent anoþere grete lorde into þis lande*
 3PL.NOM send.IND.PRET another great lord into DEM land

“they sent another great lord into this land” (CMBRUT3-M3,38.1187)

A short note must be made on the choice of the preposition in POCs: following PaVeDa’s guidelines, the database reports only one possible preposition in the frame, namely the most frequent. For this reason the basic frame of three-place verbs featuring basic POCs either have “1-nom V.subj[1] 2-acc to+3” or “1-nom V.subj[1] 2-acc in+3”, the latter featured only by *POUR pouren* and *PUT putten*. However, other prepositions are also well-attested, e.g. *at, of, into, til*.

Lastly, some consideration on R passivisation can shed light on the status of the R argument. According to Allen (1995: 389-415), the emergence of the R passive was not a direct result of the loss of case endings in Middle English. Instead, it was associated with a reanalysis of grammatical relations. This reanalysis did not involve treating the fronted indirect object as a subject. Rather, it likely involved reinterpreting the bare indirect object in active sentences as a direct object.²⁴

3.4. Middle English valency alternations

3.4.1. Direct case vs PP alternations

In these alternations, a prepositionless non-nominative case is replaced by a prepositional phrase. With the exception of the “to-resultative” alternation, these strategies all involve valency rearranging,

²⁴ Note, however, that the corpus-based study by Trips & Stein (2018) shows that Recipient passives are relatively numerous in the *Parsed Corpus of Early English Correspondence* (PCEEC, Taylor et al. 2006), although they appear unexpectedly with verbs of French origin first. However, recipient passives are absent from French grammar.

meaning they do not alter the number of arguments but instead modify their encoding. For the sake of comparison, especially within the history of English, I have used the same names for the alternations as those chosen by Goddard (2013) for his PDE database whenever possible. This section is organized alphabetically, starting with the conative alternation (3.4.1.1), followed by a discussion of the well-known dative alternation (3.4.1.2). Section 3.4.1.3 addresses instrumental subjects and objects, while section 3.4.1.4 focuses on the partitive. Finally, I will discuss the to-resultative, the sole valency-augmenting alternation in this group (3.4.1.5), and the topic-about alternation (3.4.1.6).

3.4.1.1. Conative

Similarly to Old English, the conative alternation for Middle English is defined as “A canonically transitive verb, usually implying physical affect, via motion and contact, appears without a direct object, but the expected direct object appears in a PP”.²⁵ The implication is that the P (or P-like) argument is encoded by the PP is less affected and involved than when encoded with the prepositionless non-nominative case.

Though in PDE the conative alternation is found only with the preposition *at* (Levin 1993: 43), Middle English still allows a variety of prepositions, namely *at*, *after*, *on*, *with*, and *to*. Consistently with Levin’s (1993: 43) data on “verbs of contact by impact”, Middle English BEAT *beten* and HIT *hitten* allow the conative alternation, with P argument expressed by the PP *on*+2, as in examples (280) and (281).

(280) *and sytthen he bete on the basyn*
 and afterwards 3SG.NOM.M beat.IND.PRET on DET basin
 “and then he beat on the basin with the butt of his spear so hard with all his might till the bottom fell out” (CMMALORY-M4,190.2751)

(281) *Ʒe seueþ hitteþ on hym*
 DET seventh hit.IND.PRS.3SG on 3SG.ACC.M
 “The seventh hits on him” (SiegeJerusa,70.1200.836)

²⁵ <https://paveda.unipv.it/alternations/13542966230>.

Another verb allowing the substitution of the direct object through a PP, though not a verb of contact, is meet *meten*, whose basic frame features the [NOM,ACC] construction, but is also found with a second argument encoded by the PP *with*+2, once again implying a lower degree of affectedness (and maybe volitionality in this case) of this argument. Compare examples (282) and (283), respectively showing the verb MEET *meten* in its basic frame and in the conative alternation.

- (282) *And so Arthure mette them ten*
 and so Arthur meet.IND.PRET 3PL.ACC ten
myle oute of London
 mile out of London
 “And so Arthur met them ten miles out of London” (CMMALORY-M4,17.508)

- (283) *Sir, wher shall I mete with you?*
 Sir where shall 1SG.NOM meet.IND.PRS with 2PL.ACC
 “Sir, where shall I meet with you?” (CMMALORY-M4,49.1629)

As mentioned in section 3.3.3.3, concerning experiential verbs, the verbs, THINK *thinken* SEE *sen*, SMELL *smellen* allow the encoding of the stimulus through a PP, headed by a variety of prepositions, as for example in (284), (285) and (286) (cf. also examples (259), (260) and (261) above). In fact, it is with this kind of verbs that Levin’s (1993: 43) concept of “attempted action” seems most fitting, as the stimulus is less affected and thus may cause on a partial perception of the experiencer. Remarkably, the verb touch *touchen* is not found in the conative alternation, consistently with PDE, but differently from Old English (cf. example (81) in section 2.4.1.1).

- (284) *So that hi sege in the see*
 so that 3SG.ACC.M see.SBJV.PRS.3SG in DET sea
 “so that he looked in the sea” (StBrendan,21.461.416)

- (285) *we smellep aver a faynt batayle,*
 1PL.NOM smell.IND.PRS.PL over one false battle
 “we smell a false battle” (CMAELR3-M23,31.145)

- (286) *hertly þenkyng oppon þe ladies fairnesse*
 fervently think.PTCP.PRS upon DET lady.GEN fairness

“[the king went to his bed] fervently thinking of the lady’s fairness”
(CMBRUT3-M3,115.3496)

Lastly, a further verb which does not involve contact in its meaning, but nonetheless allows a conative alternation is FOLLOW *folwen* (as in Old English, cf. example (82) in section 2.4.1.1), which can be found with a second argument expressed with a PP, headed by *after* or *on*, as in (287) (but also (248) above in section 3.3.3.2).

(287) *and folowed on hym fersely.*
and follow.IND.PRET on 3SG.ACC.M fiercely
“[Then King Ban was wroth with him,] and followed on him fiercely”
(CMMALORY-M4,26.793)

3.4.1.2. Dative alternation

With the term “dative alternation” is here intended the alternation in the encoding of a recipient-like argument, which can be expressed either with a simple non-nominative case (< OE dative) or with a prepositional phrase.²⁶ It is commonly thought that PP-patterns experienced a significant rise throughout the Middle English period, potentially beginning as early as late Old English. This development is generally believed to encompass three distinct sub-changes: a) increase of the type frequency of prepositions in OE; b) expansion of the range of use of individual prepositions; c) increase in the proportional frequency of PPs already existing as variants of nominal constructions (Zehentner 2019: 89, and the literature cited).

Among the verbs of my sample, this alternation is found with communication and (both concrete and abstract) transfer verbs, i.e. BRING *bringen*, CARRY (1) *beren*, GIVE *yeven*, SAY *seien*, SEND *senden*, SHOW *sheuen*, TALK (1) *speken*, TEACH (2) *techen* and TELL *tellen*. Of these, five verbs already allowed a “dative alternation” already in Old English (cf. section 2.4.1.2), as shown in Table 18.

PaVeDa Meaning	Old English Verb	Basic Frame	Dative Alternation	Middle English Verb	Basic Frame	Dative Alternation
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²⁶ <https://paveda.unipv.it/alternations/13542966240>.

BRING	<i>bringan</i>	DOC	POC	<i>bringen</i>	POC	DOC
CARRY	<i>beran</i>	DOC	POC	<i>beren</i>	POC	DOC
SAY	<i>secgan</i>	DOC	POC	<i>seien</i>	POC	DOC
SEND	<i>sendan</i>	POC	DOC	<i>senden</i>	POC	DOC
TALK	<i>sprecan</i>	mono (POC)	DOC	<i>speken</i>	mono (POC)	DOC

Table 18: Verbs featuring the dative alternation both in Old and Middle English

Consistently with Zehentner (2019: 89, among others), there is an increase of prepositional constructions, so much that three of the five above-mentioned verbs show an inversion of patterns: whereas they featured a DOC construction, as basic (i.e. more frequent) pattern, in Old English, they feature a basic POC in Middle English. Compare, for instance, examples (288)-(291), showing BRING's basic and derived patterns, both in Old and Middle English.

(288) OE *bringan*: basic frame (1-nom V.subj[1] 2-acc 3-dat)

þisan *Gode* *we* *offrunga*
 DEM.DAT.SG.M God(M).DAT.SG 1PL.NOM offering(F).ACC.PL
gelome *bringað*
 often bring.IND.PRS.PL
 “to this God we frequently bring offerings”
 (cosevensl,LS_34_[SevenSleepers]:153.110)

(289) OE *bringan*: dative alternation (1-nom V.subj[1] 2-acc to 3-dat)

ða *brohte* *Moyses* *ðæs*
 then bring.IND.PRET.3SG Moyses(M).NOM.SG DET.GEN.SG.N
folces *word* *to* *Drihtne*
 folk(N).GEN.SG word(N).ACC.SG to Lord(M).DAT.SG
 “So Moses brought their answer back to the Lord.” (cootest,Exod:19.8.3133)

(290) ME *bringen*: basic frame (1-nom V.subj[1] 2-acc to+3)

for *he* *brought* *it* *to* *me*
 because 3SG.NOM.M bring.IND.PRET 3SG.ACC.N to 1SG.ACC
 “because he brought it to me” (CMMALORY-M4,9.236)

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(291) ME *bringen*: dative alternation (1-nom V.subj[1] 2-acc 3-acc)

and brought hym the body of oure Lorde
 and bring.IND.PRET 3SG.ACC.M DET body of POSS.1PL Lord

“[And there came a white dove] and brought him the body of our Lord”

(CMEDMUND-M4,168.147)

Moreover, other verbs appear in the dative alternation in Middle English, namely GIVE *yeven*, SHOW *sheuen*, TEACH (2) *techen* and TELL *tellen*, which did not allow it in Old English. If GIVE *yeven* and SHOW *sheuen* feature a basic POC in Middle English (differently from their Old English counterparts), TEACH (2) *techen* and TELL *tellen* show a basic DOC. Compare the basic frames of Old English ((292)) and Middle English ((293)) and the Middle English dative alternation ((294)) of GIVE:

(292) OE GIVE *gyfan*: basic frame (1-nom V.subj[1] 2-acc 3-dat)

þonne gyfað hi him wif
 then give.IND.PRS.PL 3PL.NOM 3SG.DAT.M woman(N).ACC.SG

“[And if anyone visits them] they give him a woman [before they let him go.]”

(comarvel,Marv:30.2.148)

(293) ME GIVE *yeven*: basic frame (1-nom V.subj[1] 2-acc to+3)

& þo ʒaf Brute al þat cuntre to Coryn
 and then give.IND.PRET Brut all DEM country to Coryn

“Then Brut gave the whole country to Coryn” (CMBRUT3-M3,11.286)

(294) ME GIVE *yeven*: dative alternation (1-nom V.subj[1] 2-acc 3-acc)

and ʒaf his wif oon deel, and his
 and give.IND.PRET POSS.3SG.M wife one part and POSS.3SG.M

children anoþer,

child.PL another

“and [he] gave one part to his wife, another to his children”

(CMPOLYCH-M3,VI,171.1203)

Concerning the verb TALK (1) *speken*, it has already been discussed in section 3.3.2.1 that its basic frame of the verb is not immediately recognisable: I opted to classify it as a one-place verb with

optional second (P) and third (R) arguments, which means the latter does not appear in the basic structure. However, because it is often expressed through a prepositional phrase (typically headed by *to*, but also by other prepositions), the dative alternation includes a simple dative third argument, as shown in (295).

- (295) *and preyeth for hem that speke*
 and pray.IMP.PL for 3PL.ACC REL speak.IND.PRS.PL
yow harm
 2PL.ACC harm
 “and pray for them that speak you harm” (CMCTPARS-M3,304.C2.665)

Despite the low number of occurrences of the dative alternation with TALK (1) *speken* (x3), it is still possible to confirm the link between the dative alternation and ditransitive verbs (cf. Zehentner 2019), as two of the three occurrences show also a second T argument. Moreover, the fact that TELL *tellen* (< OE *tellan*) is more frequently found in a three-place frame in Middle English than in Old English, and that features the dative alternation in Middle but not in Old English further supports this link.

Zehentner (2019: 6) also highlights that the nature of the two arguments of ditransitive verbs is related to passivization. In PDE’s double object constructions, it is acceptable to passivize the recipient, whereas the theme cannot be the subject of a passive clause. Conversely, when the recipient is introduced by *to*, it is perfectly grammatical to passivize the theme. In fact, differently from Old English (cf. section 3.4.1.2), some of the verbs allowing the dative alternation, namely GIVE *yeven* and TEACH (2) *techen*, allow the passivisation of the R argument, though marginally. However, also TEACH (1) *leren* allows R-passivisation, though it is never found with a prepositional R in my corpus sample.

Finally, it must be noted that if in Old English it is not always easy to distinguish between a “dative alternation” and a “benefactive alternation” (Broccias & Torre 2020: 170-171, cf. sections 2.4.1.2 and 2.4.2.1), in Middle English the two constructions start to differentiate, though the DOC was still used with a wide range of verb classes, including those involving dispossession, as well as in contexts of pure benefaction or malefaction. However, the DOC could alternate with *to*-POC (instead of *for*-POC), even in contexts that are now considered benefactive. (Broccias & Torre 2020: 179-180). It is only at the end of the Middle English period that attraction would happen

between the DOC and *for*-POC, developing a purely benefactive meaning (Broccias & Torre 2020: 186-188).

3.4.1.3. Instrument to subject and to object

This paragraph discusses two types of rearranging alternations, where the instrument (which is typically a common adjunct) is elevated to either the subject or the object of the verb. As a result, it is expressed, respectively, in the nominative and non-nominative direct cases, instead of the prepositional phrase *with*+3. I have already discussed in section 2.4.1.3 (on Old English) the terminology used in the ValPaL/PaVeDa projects when dealing with these alternations. The choice of “instrumental subject” and “instrumental object” is the same for Middle English, for the sake of diachronic comparison through the three stages of English present in the databases. Thus, the definition of “instrumental subject” is the same for both Old and Middle English: “A transitive verb that normally takes an agent and an optional instrument, means or medium appears with the instrument or means as subject”.²⁷ Compare examples (296) - (297), which show respectively the basic frame and the instrumental subject alternation for the verbs HELP *helpan* and examples (298)-(299) with SEE *sen*.

(296) *that sir Percivall his syster holpe that lady*
 that Sir Percival POSS.3SG.M sister help.IND.PRET DEM lady
with hir blood
 with POSS.3SG.F blood

“[And as it telleth after in the Sangreal,] that Sir Percival’s sister helped that lady with her blood” (CMMALORY-M4,62.2054)

(297) *but hir bloode holpe nat the lady.*
 but POSS.3SG.F blood help.IND.PRET NEG DET lady

“but her blood did not help the lady” (CMMALORY-M4,62.2050)

(298) *Pat shal þu wit þin eyne sen*
 DEM shall 2SG.NOM with 2SG.GEN eye see.INF

“you shall see that with your eye” (Havelok,39.1273.673)

²⁷ <https://paveda.unipv.it/alternations/13542966248>.

- (299) *Nan eorðliche ehe ne mei hit seon*
 none earthly eye NEG may 3SG.ACC.N see.INF
 “No earthly eye can see it” (CMKATHE-M1,41.342)

Verbs featuring this alternation are mainly two-place verbs, but other classes are also found, as is the case of RAIN *reinen*, TALK (2) *speken*, SAY *seien* and TELL *tell*. Verbs allowing “instrumental subjects” are listed in Table 19, together with the instruments attested in my sample as subjects.

PaVeDa Meaning	Middle English verb	Instrument found as Subject ²⁸
BURN (tr)	<i>brennen</i>	<i>fir</i> ‘fire’
COVER	<i>coveren</i>	<i>targe</i> ‘shield’
GRIND	<i>grinden</i>	<i>milne</i> ‘mill’*
HELP	<i>helpen</i>	<i>blod</i> ‘blood’
HIT	<i>hitten</i>	<i>ston</i> ‘stones’
HEAR	<i>heren</i>	<i>ere</i> ‘ear’
LOOK AT	<i>loken</i>	<i>eie</i> ‘eye’
RAIN	<i>reinen</i>	<i>rein</i> ‘rain’*
SAY	<i>seien</i>	<i>bok</i> ‘book’, <i>gospel</i> ‘gospel’, <i>letter</i> ‘letter’, <i>scripture</i> ‘scripture’, <i>tale</i> ‘tale’, <i>voyce</i> ‘voice’
SEE	<i>sen</i>	<i>eie</i> ‘eye’
TALK	<i>speken</i>	<i>herte</i> ‘heart’, <i>mup</i> ‘mouth’,
TELL	<i>tellen</i>	<i>fame</i> ‘rumor’, <i>herte</i> ‘heart’, <i>tale</i> ‘tale’, <i>tonge</i> ‘tongue’
TOUCH	<i>touchen</i>	<i>swerde</i> ‘sword’, <i>honde</i> ‘hand’

Table 19: Middle English verbs featuring instrumental subjects

The second alternation discussed in this paragraph is the “instrumental object”, defined in the Middle English PaVeDa database as “Two-place verbs taking optional instruments, generally expressed by the PP with+3 allow for an alternative construction in which the instrument receives direct object encoding”,²⁹ which the ValPaL database of PDE (Goddard 2013) associates only with the verb *tie*. However, just as in Old English (cf. section 2.4.1.3) I have not found any occurrence of

²⁸ Noun marked by * have been found among MED examples.

²⁹ <https://paveda.unipv.it/alternations/13542966246>.

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the kind with the verbs TIE (1) *teien* and TIE (2) *binden*. Nonetheless, this alternation is found with the verbs BUILD *bilden*, FILL *fillen* and HIT *hitten*, though marginally (one occurrence for each verb). Examples (300)-(305) show both basic frames and “instrumental object” alternations with these three verbs.

- (300) BUILD *bilden*, basic frame: 1-nom V.subj[1] 2-acc

he *bulde* *an* *abbay* *by* *þe* *see*
3SG.NOM.M build.IND.PRET one abbey by DET sea

“[then, helped by the king,] he built an abbey by the sea, [in a castle called Cunbrisburg]”
(CMPOLYCH-M3,VI,9.50)

- (301) BUILD *bilden*, derived frame: 1-nom V.subj[1] 3-acc³⁰ into+2

And *the* *Lord* *God* *bildide* *the* *rib* [...]
and DET Lord God build.IND.PRET DET rib
in=to ***a*** ***woman***
into one woman

“and the Lord God shaped [lit. built] the rib, [which he had taken from Adam,] into a woman” (CMOTEST-M3,2,20G.124)

- (302) FILL *fillen*, basic frame: 1-nom V.subj[1] 2-acc (with+3)

Fille *ze* *the* *pottis* ***with*** ***watir***.
fill.IMP 2PL.NOM DET pot.PL with water

“Fill the jars with water” (CMNTEST-M3,2,1J.128)

- (303) FILL *fillen*, derived frame: 1-nom V.subj[1] 3-acc³¹ for+2

God *took* *oon* *of* *hise* *ribbis*, *and* *fillide*
God take.IND.PRET one of POSS.3SG.M rib.PL and fill.IND.PRET
fleisch *for* *it*.
flesh for 3SG.ACC.N

“God took one of the man’s ribs and then closed up the place with flesh [lit. he filled flesh].” (CMOTEST-M3,2,20G.123)

³⁰ 3 has the microrole “building material”.

³¹ 3 has the microrole “filling material”.

(304) HIT *hitten*, basic frame: 1-nom V.subj[1] 2-acc (with+3)

And hutte Salome with his spere
 and hit.IND.PRET Salome with POSS.3SG.M spear

“and [he] hit Salome with his spear” (Alisaunder,103.2447.[Part_1].[Chap_10].1433)

(305) HIT *hitten*, derived frame: 1-nom V.subj[1] 3-acc³² upon+2

and hutte half his stroke upon þe clerkeys arme
 and hit.IND.PRET half POSS.3SG.M stroke upon DET clerk.GEN arm

“and [he] hit half his stroke on the clerk's arm” (CMMIRK-M34,42.1225)

3.4.1.4. Partitive

As already mentioned for Old English (section 2.4.1.4), partitives are defined as constructions that may express the proportional relation of a subset to a superset (Seržant 2021: 881). To convey a true partitive meaning, the whole (superset) must be specific rather than vague or general. That means that the partitive construction indicates partial affectedness, referring to either parts of specific entities or an indefinite quantity of a non-specific mass entity. In Middle English, the second argument of transitive and ditransitive verbs can be encoded with the PP *of*+2 to express partitive meaning. Differently from Old English, the Middle English genitive was not commonly used in partitive constructions, though some examples are still found in M1 texts (Allen 2008: 163-165), but no example is present in my corpus. In my sample, the partitive alternation is featured by the consumption verb EAT *eten*, as in (306) and the verbs of transfer BRING *bringen*, as in (307), CARRY (2) *carien*, GIVE *yeven*, SEND *senden*, TAKE (1) *nimen* and TAKE (2) *taken*, as in (308).

(306) *If ony man ete of this breed, he schal*
 If any man eat.SBJV.PRS of DEM bread 3SG.NOM.M shall
lyue withouten ende.
 live.INF without end

“if anyone eats some of this bread, he shall live forever” (CMNTEST-M3,6,40J.537)

(307) *and brynge þe to vs of the*
 and bring.IMP.PL 2PL.NOM to 1PL.ACC of DET

³² 3 has the microrole “hitting instrument”.

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fruytis of that lond.
fruit.PL of DEM land

“and bring us some of the fruit of that land” (CMOTEST-M3,13,20N.586)

(308) *also thei token of pumgarnadis and*
also 3PL.NOM take.IND.PRET.PL of pomegranate.PL and
of the figis of that place
of DET fig.PL of DEM place

“and they took some of the pomegranates and some of the figs from that place [that is called Valley of Eshkol]” (CMOTEST-M3,13,20N.594)

Note that, as in Old English (cf. section 2.4.1.4), there could be some ambiguous interpretations of the PP *of*+2 also in Middle English, as it could also encode the source, as in (309). Indeed, the *of*-PP found in example (310) could be interpreted either as the source (‘eat from it what suffices’) or as a partitive (‘eat the part of it that suffices’).

(309) *Ete thou of ech tre of paradis*
eat.IMP.SG 2SG.NOM of each tree of Paradise

“eat from every tree in Paradise” (CMOTEST-M3,2,1G.111)

(310) *If thou hast founden hony, ete*
If 2SG.NOM have.IND.PRS.2SG find.PTCP.PST honey eat.IMP.SG
of it that suffiseth
of 3SG.ACC.N REL suffice.IND.PRS.3SG

“If you found honey, eat of it what suffices” (CMCTMELI-M3,229.C2.480)

3.4.1.5. Into-resultative

This is the only instance of a valency augmenting alternation in this section. In the PaVeDa database of Middle English, it is defined as: “[a] transitive verb appears with an into-phrase describing the product or outcome”³³ and is found with the verbs BURN (tr) *brennen*, CUT *cutten*, GRIND *grinden*, TAKE (1) *nimen*, TAKE (2) *taken* and TEAR *teren*. Once again similarly to Old English (cf. section

³³ <https://paveda.unipv.it/alternations/13542966247>.

2.4.1.5) but differently from PDE, the presence of the instrument coded as the direct object is not mandatory, as visible in example (311). I used the name “into-resultative” to be consistent with Goddard’s for PDE,³⁴ though *into* is not the only preposition used to encode this further argument, as *to* and *in* are also found, as in (312) and (313).

(311) *and þerwiþ cotte his þrote, and þe body*
 and therewith cut.IND.PRET POSS.3SG.M throat and DET body
also into smale pecis.
 also into small piece.PL

“and therewith he cut his throat and also the body into small pieces”
 (CMBRUT3-M3,22.655)

(312) *and gryne it to pouder,*
 and grind.IMP 3SG.ACC.N to powder

“and grind it into powder” (CMREYNES-M4,173.259)

(313) *but whoso breketh hem or cutteth*
 but whoso break.IND.PRS.3SG 3PL.ACC or cut.IND.PRS.3SG
hem in two
 3PL.ACC in two

“but whoso breaks them or cuts them in two, [he shall find within them coals and cinders]” (CMMANDEV-M3,67.1688)

As in Old English (section 2.4.1.5) the verbs of taking *nimen* and *taken* show occurrences of a different nature, as the PP expresses the outcome of the general event, not of the actual taking. Indeed, it expressed the change in status of the patient in respect to the agent. Note that, in this case, the PP is almost exclusively headed by the preposition *to* (with the sole exception in my corpus of example (317)), even in later texts, as shown in (314) and (315). Unlike Old English, this construction is never found with an external possessor in the dative, expressing the beneficiary of the action (mostly the agent itself). When it is expressed, it is found as a (genitive) possessive determiner or with a further PP, as respectively in (316) and (317).

³⁴ “A transitive verb implying a material instrument/means appears with the instrument/means as direct object and an into-phrase describing the product or outcome, e.g. He tied the ribbon into a bow. This could perhaps be seen as an instance of the Instrumental Object alternation, with an into-resultative phrase in place of a locative (compare: He tied the ribbon around the parcel).” <https://paveda.unipv.it/alternations/3556751189>.

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(314) *Siððen þa nam he þes kynges*
 afterwards then take.IND.PRET.3SG 3SG.NOM.M DET.GEN.SG king.GEN.SG
wifes swuster of France to wife
 wife.GEN.SG sister of France to wife
 “Afterwards he took the sister of the French king’s wife as his wife”
 (CMPETERB-M1,48.206)

(315) *he toke the lady to wife*
 3SG.NOM.M take.IND.PRET DET lady to wife
 “he took the lady as his wife” (CMMANDEV-M3,90.2259)

(316) *she wol take to hir housbonde*
 3SG.NOM.F will.IND.PRS take.INF to POSS.3SG.F husband
 “[she may choose of a thousand men which] she will take to her husband”
 (CMCTMELI-M3,232.C2.607)

(317) *Y schulde take hir in to wife to me*
 1SG.NOM shall.SBJV.PRET take.INF 3SG.ACC.F in to wife to me
 “[Why did you say, ‘She is my sister,’ so that] I took her to be my wife?”
 (CMOTEST-M3,12,1G.431)

3.4.1.6. Topic-about

To conclude this section, I will discuss the “topic-about” alternation, as defined in the PaVeDa database of Middle English: “Verbs of cognition, emotion and communication can sometimes add a “topic” argument marked by the PP of+2 or be/bi+2”.³⁵ This alternation occurs when the T-argument of transitive and ditransitive verbs (with the exception of the one-place verb SING *singen*), which is typically encoded with the non-nominative case in the basic pattern, is instead expressed by a prepositional phrase, mostly introduced by the preposition *of* ‘about’, or less commonly by *be/bi* ‘about’ and its variant *embe* ‘about’, mainly in earlier texts. As in Old English, the preposition “about” (*abouten*)³⁶ is not used in Middle English in the same contexts as in PDE, nonetheless I

³⁵ <https://paveda.unipv.it/alternations/13542966226>.

³⁶ Cf. MED Dictionary: <https://quod.lib.umich.edu/m/middle-english-dictionary/dictionary/MED162/track?counter=3>.

decided to keep the name “topic-about” chosen by Goddard (2013) for the sake of comparison. The verbs found in my sample in this alternation are ASK FOR *asken*, HEAR *heren*, KNOW *knouen*, SAY *seien*, SING *singen*, TALK (1) *spreken*, TALK (2) *talken*, TEACH (2) *techen*, TELL *tell* and THINK *thinken*. Examples (318) and (319) show occurrences with both *of*- and *embe*-PP³⁷ expressing the “conveyed content” argument. Differently from Old English, in which this alternation is also found with the verb SEARCH FOR *secan* (cf. example (111) in section 2.4.1.6), with the meaning “seek information about somebody or something”, this never happens in Middle English.

- (318) *the aungel seyde to the schepperdes of the
 DET angel say.IND.PRET to DET shepherd.PL of DET
 birthe of crist
 birth of Christ*

“[and in the way to Jerusalem half a mile from Bethlehem is a church, where] the angel said to the shepherds of the birth of Christ.” (CMMANDEV-M3,47.1183)

- (319) *and for ði hit is ðe strengere
 and for DET.INS 3SG.NOM.N be.IND.PRS.3SG DET stronger
 embe hem to spekene.
 about 3PL.ACC to speak.INF*

“and therefore it is the stronger to speak about them” (CMVICES1-M1,53.582)

3.4.2. Middle English uncoded alternations

This section mirrors the section 3.4.2 on Old English, covering Middle English uncoded alternations, i.e. those not marked on the verb by affixes, clitics, or auxiliaries. I will begin by discussing the benefactive/malefactive alternation in section 3.4.2.1. Next, I will move on to alternations related to body parts in section 3.4.2.2. Following this, I will cover the insertion of cognate or kindred arguments in section 3.4.2.3 and object omissions in section 3.4.2.4. Finally, I will conclude this section with a discussion of reflexive and reciprocal alternations in section 3.4.2.5.

3.4.2.1. Benefactive/Malefactive

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The aim of this section is to discuss the “benefactive alternation” in Middle English, together with its opposite, i.e. the “malefactive alternation”, and then the so-called “quasi-benefactive-accompaniment with” alternation. In the PaVeDa database of Middle English, I defined the benefactive alternation as follows “[e]ither a transitive or an intransitive verb takes an additional argument in the non-nominative case in a PP headed by the prepositions *for/to*, designating a person when benefited from the action”.³⁸ Already from the definition, it still in Middle English, the benefactive alternation and the dative alternation were not always distinguishable (Broccias & Torre 2020: 170-171). Indeed, the crystallisation of *for* as the prototypical preposition to encode beneficiaries can be dated only after Middle English (Zehentner & Traugott 2020: 170). The verbs found with a beneficiary, either expressed by a DOC or a POC (*to/for*) are BUILD (1) *bilden*, DIE *dien*, GIVE *yeven*, SEARCH FOR *serchen*, SING *singen* and TALK (2) *talken*. The derived coding frame of this alternation vary from verb to verb, as they show different frequencies of attestation. Generally, the *for*-PP is the most frequently attested, however the three different coding strategies can be all found with the same verb. Compare, for instance, examples (320), (321) and (322), which show respectively a *for*-POC, a *to*-POC, and a DOC.

(320) *oft* *ich* *singe* *uor* *hom*
 often 1SG.NOM sing.IND.PRS.1SG for 3PL.ACC
 “I often sing for them” (OwlNight,48.540.316)

(321) *Lauerd,* *I* *sing* *to* *þe*
 Lord 1SG.NOM sing.IND.PRS.1SG to 2SG.ACC
 “Lord, I sing to you” (CMBENRUL-M3,19.656)

(322) *ah* *ich* *heom* *singe*
 but 1SG.NOM 3PL.ACC sing.IND.PRS.1SG
 “but I sing for them” (OwlNight,106.1264.701)

The beneficiary may also be co-referential with the subject (referred to as an “indirect reflexive”), found in my sample with the verbs BUILD (2) *bilden*, TAKE (1) *nimen* and TAKE (2) *taken*. However, this will be addressed in section 3.4.2.5, which discusses reflexive and reciprocal alternation.

³⁸ <https://paveda.unipv.it/alternations/13542966245>.

An alternation that is similar yet semantically opposite is the malefactive, which I have defined in the PaVeDa database of Middle English as “A verb depicting an event which could be bad for someone (other than the subject) gains an argument in the non-nominative case designating another person who is negatively affected (cfr. PDE English, Goddard 2013)”.³⁹ This alternation is really marginal though, as the sole verb of my sample clearly allowing a “malefactive alternation” is BUILD (1) *timbren*, as shown in (323), the only occurrence in my corpus. However, the dative alternation of TALK (1) *spreken* may often convey a malefactive meaning, as shown in example (295) in section 3.4.1.2. The *for*-PP is also found in one malefactive-like occurrence, shown in (324), where however it encodes a negative outcome (the shame) and not the maleficiary himself. The same text contains one similar occurrence ((325)), in which the *for*-PP is present, but the recipient/maleficiary is encoded in the non-nominative case – and not as possessive pronoun – in a construction that can be interpreted as a “external possessor” (cf. section 3.4.2.2), if compared to the one in example (324).

(323) *for teone ne for tintreohe þt ze me*
 for pain NEG for torture that 2PL.NOM 1SG.ACC
mahe timbrin
 may build.INF

“[nor will I praise or glorify your filthy idols — which are vessels of the Fiend —] for any pain or torture that you may contrive.” (CMJULIA-M1,101.98)

(324) *seis tu þis for mine shome?*
 say.IND.PRS.2SG 2SG.NOM DEM for POSS.1SG shame

“do you say this for my shame?” (OwlNight,90.1075.599)

(325) *al þat þu me seist for schame*
 all REL 2SG.NOM 1SG.ACC say.IND.PRS.2SG for shame

“everything you say to disgrace me” (OwlNight,108.1284.707)

Another alternation involving a beneficiary-like argument is what Goddard (2013) refers to as the “quasi-benefactive-accompaniment with”⁴⁰ alternation, found with verbs of transfer. The same

³⁹ <https://paveda.unipv.it/alternations/13542966243>.

⁴⁰ “Verbs like carry, bring and take can add a plain, i.e. non-reflexive preposition co-referential with the subject in a with-phrase; e.g. I took my brother with me, He brought his racquet with him. The implication is that the subject *could benefit*

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alternation is also found in Middle English (and in Old English, cf. “quasi benefactive accompaniment *mid*” in section 2.4.2.1), and is defined as follows:

“Verbs like *beren*, *bringen*, *nimen* and *taken* can add a plain, i.e. non-reflexive preposition co-referential with the subject in a *with*-phrase. In verbs like *sendan*, this further argument is co-referential with the patient, i.e. the person being sent somewhere. The implication is that the subject (or object in the case of *senden*) could benefit from the presence of the person or thing, e.g. as company, as equipment. (cf. Goddard 2013 in Present Day English)”⁴¹

Thus, this alternation is featured by the verbs BRING *bringen*, CARRY (1) *beren*, SEND *senden*, TAKE (1) *nimen* and TAKE (2) *taken*. For all except SEND *senden*, the added prepositional argument is co-referential with the subject, indicating that the agent benefits from the action of bringing, carrying, or taking something, as illustrated in example (326). However, with SEND *senden*, the beneficiary is expressed solely in the *with*-PP, and is not co-referential with the agent, i.e. the sender, as shown in example (327).

(326) *and brought an horse with her that*
 and bring.IND.PRET one horse with 3SG.ACC REL
was inkly black.
 be.IND.PRET.3SG completely black
 “and brought with her a horse that was completely black.” (CMMALORY-M4,663.4714)

(327) *and sente Adrian þe abbot wiþ hym*
 and send.IND.PRET Adrian DET abbot with 3SG.ACC.M
forþo helpe hym
 to help.INF 3SG.ACC.M
 “and [he] sent the abbot Adrian with him to help him” (CMPOLYCH-M3,VI,117.809)

Lastly, it should be noted that distinguishing between beneficiaries, when encoded by DOCs or *to*-POCs, and recipients is not always straightforward. For example, the *to*-PP in (321) can be interpreted either as a beneficiary (i.e. ‘I sing for you’), but also as a simple addressee (i.e. ‘I sing to you’). Moreover, the verb LEAVE *leven* can also add a third argument to indicate the person to

from the presence of the person or thing, e.g. as company, as equipment. There is no standard name for this construction, cf. Levin (1993: 104).” (italics added) <https://paveda.unipv.it/alternations/3781545521>.

⁴¹ <https://paveda.unipv.it/alternations/13542966239>.

whom something is left. This person might benefit from what is left (as potentially in example (328), where the brother may benefit from the abbey), but this is not always the case (as likely in example (329), in which the heritage must be challenged, and thus it is probably not something from which the addresses would benefit). Consequently, this verb is not classified among those featuring the benefactive alternation, but rather those allowing an “object insertion (R).” This aligns with Traugott’s (2020: 566) claim that the origin of the benefactive alternation lies in an “intended recipient.”

(328) *Furseus lefte þat abbay to his broþer Fullanus*
 Furseus leave.IND.PRET DEM abbey to POSS.3SG.M brother Fullanus
 “Furseus left the abbey to his broher Fullanus” (CMPOLYCH-M3,VI,13.86)

(329) *the heritage þat oure fader lafte vs*
 DET heritage REL POSS.1PL father leave.IND.PRET 1PL.ACC
 “[And if we be right children of Christ, we ought for to challenge] the heritage, that our Father left us, [and do it out of heathen men’s hands.]” (CMMANDEV-M3,2.28)

3.4.2.2. Body part alternations

This section focuses on alternations involving body parts. Following a brief overview of the canonical expression of inalienable possession, I will explore three specific alternations: the “external possessor”, the “locus of personal contact”, and the “assisting body part” alternations. As in Old English (section 2.4.2.2), in Middle English inalienable possession is conveyed using a genitive modifier, typically a possessive adjective, which establishes a dependency relationship with the possessed body part. This can be seen in (330), where the verb FEEL PAIN *aken* appears with a nominative stimulus—indicating the hurting body part—and the experiencer is marked with a possessive.

(330) *þenne akeð his heorte*
 then ache.IND.PRS.3SG POSS.3SG.M heart
 “Then his heart aches” (CMTRINIT-MX1,207.2873)

Concerning the so-called “external possessor” alternation, Allen (2019: 181-183) notes that dative external possessors were already uncommon in Early Middle English and argues that their decline

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began in the Old English period (Allen 2019: 229), possibly due to a Celtic influence. Indeed, only the verb BREAK *breken*, FEEL PAIN *aken* and TIE (2) *binden*, respectively shown in (331) and (332), are found with external possessors in my sample. Examples of external possessor constructions with a possessive, thus apparently encoding twice the possessor, are also found in Middle English (cf. Old English, example (124) in section 3.4.2.2), as visible in (333)

(331) *Ich habbe iblend men &*
 1PL.NOM have.IND.PRS.1SG blind.PTCP.PST man.PL and
ibroken ham þe schuldren
 break.PTCP.PST 3PL.ACC DET shoulder.PL
 “I have blinded men and broken their shoulders” (CMJULIA-M1,114.301)

(332) *Þet heaued me akþ.*
 DET head 1SG.ACC ache.IND.PRS.3SG
 “My head aches” (CMAYENBI-M2,51.900)

(333) *þine banes akeð þe.*
 POSS.2SG bone.PL ache.IND.PRS 2SG.ACC
 “your bones hurt” (CMHALI-M1,151.326)

Consistently with Allen’s (2019: 222) claim that, between M1 and M2 (i.e. late XIII century), English grammar underwent a change that made it impossible to generate DEPs (i.e. dative external possessors), most occurrences in my sample are from M1 and M2 texts, with the exception of two occurrences from M3 texts, shown in (334) and (335).

(334) *and bounde him Hondes and feete,*
 and bind.IND.PRET 3SG.ACC.M hand.PL and foot.PL
 “[the Britons took him] and bound his hands and feet.” (CMBRUT3-M3,39.1194)

(335) *or bereth hym on hond thyng*
 or carry.IND.PRS.3SG 3SG.ACC.M on hand thing
that is fals
 REL be.IND.PRS.3SG false

“[And sometimes grouching arises from Envy, when one discovers a man's harm that was private] or deludes someone about a thing that is false. [lit. bears in his hand]”

(CMCTPARS-M3,304.C1.630)

Similarly to the “external possessor”, the “locus of personal contact” alternation involves a non-nominative possessor. However, the body part is not encoded in the direct case, but with a PP. This alternation, found only with the verb of contact HIT *hitten*, is defined in the PaVeDa database as follows:

“A transitive verb implying affect caused by physical contact with a body-part takes an NP designating a person as its direct object, and the locus of contact with that person's body appears in a prepositional phrase with the adpositions on or in. Levin (1993) termed this Body-Part Possessor Ascension. It generally implies a "feel" component, either on behalf of the affected person or as part of the agent's intention.”⁴²

Differently from Old English (cf. section 2.4.2.2), the “external possessor” and the “locus of personal contact” alternations cannot be differentiated based on case marking: indeed, in both cases a non-nominative possessor is present. The difference lies in the presence of a PP encoding the body part involved, as in (336), which in the “external possessor” is coded as a direct object.

(336) *where a knyte [...] hitte Herry þe kyng*
 where one knight [...] hit.IND.PRET Henry DET king
on þe hed twyes
 on DET head twice

“where a knight [of the French side called William Crisping] hit the king Henry twice on the head.” (CMCAPCHR-M4,105.2260)

Remarkably, whereas in Old English the verb TIE (2) *bindan* is found in the “locus of personal contact” alternation, Middle English TIE (2) *binden* is never found with PPs encoding the bound body part. Instead, occurrences of the kind can be considered “external possessor”. Compare example (128), from the Old English sample, reported here in (337), and example (334), reported again in (338), from the Middle English sample. In Old English, the tied body

⁴² <https://paveda.unipv.it/alternations/13542966257>.

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part was encoded in the simple dative, which would correspond in this case to a prepositional argument; however, due to case loss, the Middle English *hondes and feete* ‘hand and feet’ cannot be interpreted here as such.

(337) *Bindað hine handum & fotum*
 bind.IMP.PL 3SG.ACC.M hand(F).DAT.PL and foot(M).DAT.PL
 “bind him by the hands and the feet” (cocathom1,ÆCHom_I,_35:476.22.6917)

(338) *and bounde him Hondes and feete,*
 and bind.IND.PRET 3SG.ACC.M hand.PL and foot.PL
 “[the Britons took him] and bound his hands and feet.” (CMBRUT3-M3,39.1194)

Lastly, I will conclude this section by introducing a third body-part-related alternation, known as “assisting body part” alternation, defined in the Middle English PaVeDa database as “[a] transitive verb involving bodily motion takes a PP with preposition on or over and a body-part designating the locus on contact (cfr Goddard 2013 for Present Day English).”⁴³ It is featured by the transfer verbs BRING *bringen*, CARRY (1) *beren*, TAKE (1) *nimen* and TAKE (2) *taken*. Examples (339) and (340) show the PPs headed by *on* and *in*, encoding the body part used to transport the T-argument, respectively with the verbs BRING *bringen*, and TAKE (1) *nimen*.

(339) *and brought wylde gyese in hys honde.*
 and bring.IND.PRET wild goose.PL in POSS.3SG.M hand
 “and [he] brought wild geese in his hand” (CMMALORY-M4,30.934)

(340) *He nom his on child*
 3SG.NOM.M take.IND.PRET POSS.3SG.M one child
on his arm
 on POSS.3SG arm
 “He took his only child on his arm” (StEustace,214.139.83)

3.4.2.3. Cognate/kindred arguments

⁴³ <https://paveda.unipv.it/alternations/13542966238>.

As mentioned in section 2.4.2.3 on Old English, cognate object constructions pair a typically intransitive verb with a direct object NP, whose head noun is the nominalization of the verb's event or state (Jones 1988: 89). This means the object is etymologically and semantically related to the verb. Visser (1963: 413) notes that cognate objects can also accompany transitive verbs. In contrast, kindred objects are nouns only semantically related to the verb (Visser 1963: 413). With one-place verbs, cognate and kindred object insertions augment valency. However, with two- or three-place verbs, they do not increase valency. Since PaVeDa guidelines require a single “alternation class” for alternations regardless of the verb, I have labelled cognate/kindred objects as “valency-augmenting”. Visser (1963: 415) reminds that cognate objects become more frequent during the Middle English period than they were in Old English. However, in my sample, Middle English verbs found with cognate or kindred arguments are almost the same than those found in Old English (cf. section 2.4.2.3). These are DIE *dien*, DRESS *shriden*, GIVE *yeven*, GO *gon*, LIVE *liven*, NAME *nemnen*, PLAY *pleien*, SEE *sen*, SING *singen*, TALK (1) *speken*, TEACH (1) *leren*, TEACH (2) *techen*, TELL *tellen*, THINK *thinken*. The verb LIVE *liven* allows to exemplify a cognate object insertion, i.e. the insertion of an etymologically related object, as in (341), where *lif* ‘live’ is related to *leue* ‘live’. On the other hand, a kindred object is present in (342), where the direct object *loore* ‘teaching’ is not etymologically, but only semantically related to the verb *techeth* ‘teaches’.

- (341) *and in grete anguisshe and sorwe he shal*
 and in great anguish and sorrow 3SG.NOM.M shall
leue al his lif.
 live.INF all POSS.3SG.M life
 “and he shall live all his life in great anxiety and sorrow” (CMBRUT3-M3,74.2240)

- (342) *after the loore that techeth us Senek*
 after DET teaching REL teach.IND.PRS.3SG 1PL.ACC Seneca
 “[Moderation in weeping should be considered] in the light of the lore that Seneca teaches us” (CMCTMELI-M3,217.C1b.27)

Whereas Old English allowed dative cognate objects, these are not recognisable anymore in Middle English, due to case syncretism. Instances similar to the one in example (136) (in section 2.4.2.3), are found in Middle English both with a direct object and a PP, as is the case, respectively, of examples (343) and (344), showing occurrences of the verb DIE *dien*. Other prepositional cognate/kindred

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arguments have also been found with other verbs, e.g. TALK (1) *speken* and think *thinken*, as shown in (345).

(343) *for I shall dye a shamefull dethe*
 because 1SG.NOM shall die.INF one shameful death
 “because I shall die of a shameful death” (CMMALORY-M4,35.1108)

(344) *Bettre it is to dye of bitter*
 better 3SG.NOM.N be.IND.PRS.3SG to die.INF of bitter
deeth than for to lyven in swich wise
 death than for to live.INF in such wise
 “Better it is to die of bitter death than to live in such a way” (CMCTMELI-M3,233.C1.623)

(345) *ne mid unðeaufulle spaches specinde, ne mid*
 NEG with ill-mannered speech.PL speak.PTCP.PRS NEG with
fule þowtes þenkinde
 foul thought.PL think.PTCP.PST
 “[that she reigns, with no kind of lechery, working with limbs,] nor speaking with ill-mannered speeches, nor thinking with foul thoughts” (CMVICES1-M1,131.1605)

It should be noted that both Jones (1988) and Lavidas (2014: 44) have shown that this alternation primarily occurs with “activity verbs”, i.e. atelic verbs, such as PLAY *pleien* or TALK (1) *speken*. However, it is also found with accomplishments and achievements in my sample. Furthermore, Lavidas (2013: 86-101) has shown that the emergence of “activity/event-noun cognate constructions” in the history of English is linked to the grammaticalization of the (non)progressive aspect.

3.4.2.4. Object omission and object insertion

This paragraph will first address the reduction of valency through object omission, followed by an exploration of valency augmentation via object insertion. The former is defined in the Middle English PaVeDa database as “[a] canonically transitive verb appears in this derived pattern without an overt object, usually implying a specific kind of expected object.”⁴⁴ In this section, I will examine the P

⁴⁴ <https://paveda.unipv.it/alternations/13542966229>. Cf. also object omission (R) / (T) / (both) for the definition of object omissions with three-place verbs.

and R arguments of transitive and ditransitive verbs, with a particular focus on those coded in the prepositionless non-nominative case. As mentioned for Old English (cf. section 2.4.2.4), it is crucial to differentiate between “null objects with an indefinite (or no) antecedent in the discourse” (Lavidas 2013: 71), i.e. object omission as a detransitivizing strategy, and the so-called “referential null objects”, i.e. “null objects with a **specific** referent introduced in the preceding discourse” (Lavidas 2013: 71, emphasis in the original), in spite of the fact that they are accounted for under the same label “null objects” in the literature (e.g. Croft 2001: 276). While Old English permitted the use of referential null objects, this possibility disappeared as the language evolved. In Modern English, referential objects must now be expressed through an anaphoric pronoun. In particular, Lavidas (2013: 75) empirically supports Visser’s (1963: 525) claim that referential null objects were still possible in Middle English, but they become rare in the XVI century and disappear subsequently. On the other hand, object omission in this context acts as a valency-decreasing mechanism, allowing typically transitive and ditransitive verbs to convey intransitive events. Table 20 shows the transitive verb of my sample found with object omission, where the meanings not found in Old English with this alternation are highlighted in bold.⁴⁵

PaVeDa Meaning	ME verb	Basic coding frame	Derived coding frame
BEAT	beten	1-nom V.subj[1] 2-acc (with+3)	1-nom V.subj[1]
BREAK	breken	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
BUILD	bilden	1-nom V.subj[1] 2-acc (with+3)	1-nom V.subj[1]
BURN (tr)	brennen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
DIG	diggen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
EAT	eten	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
FEAR	feren	1-nom V.subj[1] of+2	1-nom V.subj[1]
FOLLOW	folwen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
GRIND	grinden	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
HEAR	heren	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
HELP	helpen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
KILL	killen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
KNOW	knouen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]

⁴⁵ On the other hand, the meanings found with an object omission in Old English but not in Middle English are CUT (1) *ceorfan*, HIT *slean*, HUNT (FOR) *huntian*, LOAD *hladan*, TEAR (2) *slitan*, TELL *tellan*, THINK *þencan*, and BIND (2) *bindan*

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LEAVE	leven	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
LOOK AT	loken	1-nom V.subj[1] on+2 (with+3)	1-nom V.subj[1]
SEARCH FOR (1)	sechen	1-nom V.subj[1] 2-acc (for+3)	1-nom V.subj[1]
SEARCH FOR (2)	serchen	1-nom V.subj[1] 2-acc (for+3)	1-nom V.subj[1]
SEE	sen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
SHAVE (a body part/person)	shaven	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
SMELL	smellen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
STEAL	stelen	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
THINK	thinken	1-nom V.subj[1] 2-acc	1-nom V.subj[1]
THROW	throuen	1-nom V.subj[1] 2-acc to+3	1-nom V.subj[1]

Table 20: Middle English two-place verbs allowing object omission

Once again, as in Old English (section 2.4.2.4), it is possible to take the meaning EAT (OE *etan* > ME *eten*) as a good example of the shift in focus, and thus the change in the *Aktionsart* of the verb, implied by the object omission alternation. Compare examples (346) and (347), where the action is conceptualised first as an accomplishment (with the verb in the basic frame), and then as an activity (with the object omission).

(346) *wee eten flessch on the dayes*
 IPL.NOM eat.IND.PRS.PL flesh on DET day.PL
before Asschwednesday
 before Ash_Wednesday

“[And they say that we sin, when] we eat meat on the days before Ash Wednesday”
 (CMMANDEV-M3,13.261)

(347) *When þe Kyng hade eten he*
 when DET king have.IND.PRET eat.PTCP.PST 3SG.NOM.M
toke þe lady by þe hande
 take.IND.PRET DET lady by DET hand

“After the king had eaten, he took the lady by the hand.” (CMBRUT3-M3,103.3120)

In the case of ditransitive verbs, both the omission of one participant (either T or R) or of both participants is allowed, making respectively the verb bivalent or monovalent. Table 21 shows ditransitive verbs allowing P/R omissions.

PaVeDa Meaning	OE Verb	T Omission	R Omission	T and R Omission
ASK FOR	asken	✓	✓	✓
BRING	bringen	/	✓	/
CARRY (1)	beren	/	✓	
GIVE	yeven	✓	✓	✓
NAME	nemnen	✓	/	/
SAY	seien	✓	✓	✓
SEND	senden	✓	✓	✓
SHOW	sheuen	✓	✓	✓
TEACH (1)	leren	✓	✓	/
TEACH (2)	techen	✓	✓	✓
TELL	tellen	✓	✓	✓

Table 21: Three-place verbs allowing T/R object omission

Differently from Old English (cf. Table 10 in section 2.4.2.4), there is no significant difference in the omission of either theme or recipient. Due to the different nature as three-place verb of NAME *nemnen* (cf. section 3.3.4), it is the sole verb allowing the omission of the second argument (i.e. the name) but not of the third one (i.e. the named entity). Concerning the transfer verbs BRING *bringen* and CARRY (1) *beren*, they allow only the recipient omission, probably because the P-argument is too affected (thus too salient in the event frame) to be omitted. It is remarkable, though, that the other transfer verbs, namely GIVE *yeven* and SEND *senden*, allow the omission of both T and R arguments, also simultaneously, behaving like the verbs of cognitive transfer ASK FOR *asken*, SAY *seien*, SHOW *sheuen*, TEACH (1) *leren*, TEACH (2) *techen* and TELL *tellen*. Of these, TEACH (1) *leren* has never been found in my sample with the omission of both T and R, but this could also be due to the corpus itself (cf. OE *læran* in example (142) in section 3.4.3.4). Consider the verb TEACH (2) *techen* in examples (348), (349) and (350), showing the omission of T, the omission of R, and the omission of both arguments respectively.

(348) *as taughte thobie his sone*

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as teach.IND.PRET Tobias POSS.3SG.M s on
 “[and prepare yourself with the aim that he give you advice and comfort,] as Tobias taught his son” (CMCTMELI-M3,222.C1.187)

(349) *and tauzte þe scole of chivalrye as he*
 as teach.IND.PRET DET school of chivalry as 3SG.NOM.M
hadde i-learned in Fraunce
 have.IND.PRET learn.PTCP.PST in France
 “and [he] taught the school of chivalry as he had learnt in France”
 (CMPOLYCH-M3,VI,275.2008)

(350) *Jhesus spak these wordis in the*
tresorie,
 Jesus speak.IND.PRET DEM.PL word.PL in DET treasury
techyng in the temple
 teach.PTCP.PRS in DET temple
 “Jesus spoke these words while teaching in the temple courts”
 (CMNTEST-M3,8,20J.743)

On the other hand, zero- or monovalent verbs can add a further P- or R-like argument, either encoded in the prepositionless non-nominative case or with PPs. Verbs in my sample adding a P-like argument are HUNT (FOR) *hunten*, as in (351) or (352), RAIN *reinen*, as in (217) reported here in (353) and TALK (1) *speken*, as in (354). The decision to interpret these instances as alternations rather than as the basic frame, with an optional object omission, is based on frequency: out of the 13 occurrences of HUNT (FOR) *hunten* only four show a bivalent pattern; out of the 12 occurrences of RAIN *reinen* three are found with a second P-like argument, whereas TALK (1) *speken* has only 35 occurrences of the kind out of the 643 total occurrences.

(351) *as it were forto hunt for hert and*
 as 3SG.NOM.N be.SBJV.PRET.3SG to hunt.INF for stag and
hynde and opere wilde bestes
 hind and other.PL wild.PL beast.PL
 “[He secretly decided, in his heart of hearts, to go to Devonshire and] as if it was to hunt stags and hinds and other wild animals” (CMBRUT3-M3,114.3480)

- (352) *He us honteth ase hound*
 3SG.NOM.M 1PL.ACC hunt.IND.PRS.3SG as hound
hare doh on hulle
 hare do.IND.PRS.3SG on hill
 “He hunts us as the hound hunt the hare on the hill” (Husbandman,152.57.58.[Stanza_5])

- (353) *and in his tyme it raynede bloode*
 and in POSS.3SG.M time 3SG.NOM.N rain.IND.PRET blood
 “and in his time it rained blood” (CMBRUT3-M3,21.622)

- (354) *a man that haue spoken to you treuthe*
 one man REL have.IND.PRS speak.PTCP.PST to 2PL.ACC truth
 “[But now you try to kill me,] a man that has told you the truth, [which I have heard of God]” (CMNTEST-M3,8,40J.790)

A recipient-like argument can also be added to one-place and two-place verbs and can be encoded either in the non-nominative case or with a prepositional phrase headed by various prepositions (mainly *to*). The decision not to include this additional argument in the basic frame is again based on frequency (see, for example, the discussion on TALK in section 3.3.2.1). The verbs that permit this insertion are LEAVE *leven* (355), SHOUT *shouten*, TALK (1) *speken* and TALK (2) *talken* (356).

- (355) *the heritage þat oure fader lafte vs*
 DET heritage REL POSS.1PL father leave.IND.PRET 1PL.ACC
 “[And if we be right children of Christ, we ought for to challenge] the heritage, that our Father left us, [and do it out of heathen men’s hands.]” (CMMANDEV-M3,2.28)

- (356) *he spake to þe kyng in this maner*
 3SG.NOM.M speak.IND.PRET to DET king in DEM manner
 “he [Merlin] spoke to the king in this manner” (CMBRUT3-M3,57.1675)

3.4.2.5. Reflexive and reciprocal

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This section will focus on the argument-identifying alternations in the PaVeDa project, specifically the reflexive and reciprocal alternations. I will begin by discussing the concepts of “direct” and “indirect” reflexives, followed by an examination of the “understood reflexive object”. Finally, I will illustrate the reciprocal alternation to conclude this section. For a definition of reflexive see Geniušienė (1987: 27) reported in section 2.4.2.5.

As for Old English, no specific reflexive pronouns are found in Middle English, in which the reflexive function was fulfilled by personal pronouns in the non-nominative case (Fulk 2012: 94-95). The adjective *self* was employed to add emphasis, and it was only in Early Modern English that X-*self* forms were used systematically to mark co-referentiality (Sinar 2006: 172). Since Middle English reflexives and reciprocals can be considered “non-specialized reflexives” (Zúñiga & Kittilä 2019: 197) they are accounted for among uncoded alternations (just as Old English, cf. section 2.4.2.5). In the PaVeDa database, I distinguished between “direct” and “indirect” reflexives. The direct reflexive involves a P-like participant co-referential with the subject. On the other hand, the indirect reflexive involves a participant co-referential with the subject, typically functioning as a recipient or beneficiary. Differently from Old English, it is not possible to distinguish these two alternations on the basis of case marking, since in both cases the co-referential second or third argument can be marked by the non-nominative case.⁴⁶ While reflexives semantically merge participants, syntactically they are not typically considered a valency-decreasing mechanism. Specifically, in Middle English, the direct reflexive is an argument-identifying alternation, whereas the indirect reflexive is a valency-augmenting strategy.

The verbs of my sample found in the “direct reflexive” alternation are BRING *bringen*, BURN (tr) *brennen*, DRESS *shriden*, FEAR *feren*, FILL *fillen*, GIVE *yefen*, HELP *helpen*, HIDE *hidden*, KNOW *knouen*, PUT *putten*, SEE *sen*, SHOW *sheuen*, SIT DOWN *sitten*, TAKE (2) *taken*, THINK *thinken* and WASH *washen*. On the other hand, verbs of my sample allowing the “indirect reflexive” alternation are BUILD (1) *timbren*, FILL *fillen*, PLAY *pleien*, RUN *rennen*, SAY *seien*, TAKE (1) *nimen*, TAKE (2) *taken* and THINK *thinken*. Compare examples (357) and (358), where the verb TAKE (2) *taken* is found, respectively, with a co-referential patient and beneficiary.

(357) & *toc* ***him-seolf*** *bi* *þe* *top*
and take.IND.PRET 3SG.ACC.M.REFL by DET top

⁴⁶ However, the R-like argument can also be marked by PPs (cf. sections 4.4.1.2 and 4.4.2.1).

“[When the reeve saw this, he tore his clothes] and grabbed himself by the hair”
(CMJULIA-M1,123.485)

(358) *And so thys lady Lyle of Avylion toke*
and so DEM lady Lile of Avelion take.IND.PRET
hir this swerde
3SG.ACC.F.REFL DEM sword

“And so this Lady Lile of Avelion took for her this sword” (CMMALORY-M4,50.1655)

Note, however, that PLAY *pleien* found with an indirect reflexive object, as in (359), rather means ‘to amuse oneself’ and that the co-referential argument of RUN *rennen* cannot be interpreted neither as a recipient nor as a beneficiary, as shown in (360). When found with fill *fillen*, it is the instrument to be co-referential with the subject, as in (361).

(359) *he for his desport is*
3SG.NOM.M for POSS.3SG.M pleasure be.IND.PRS.3SG
went into the feeldes hem to pleye.
wend.PTCP.PST into DET fiel.PL 3SG.ACC.M.REFL to play
“[Upon one day it happened that] he for his pleasure went into the fields to amuse himself.” (CMCTMELI-M3,217.C1b.6)

(360) *And orn him faste upon this water*
and run.IND.PRET 3SG.ACC.M.REFL fast upon DEM water
to this grisliche fure
to DEM horrible fire
“and [he] run upon this water to this horrible fire.” (StBrendan,23.501.456)

(361) *and fulde hem of him seluen*
and fill.IND.PRET 3PL.ACC of 3SG.ACC.M.REFL self
“and he filled them with himself” (CMTRINIT-MX1,119.1610)

Particular attention can be devoted to the verb of grooming WASH *washen*, which - consistently with Old English data (cf. section 2.4.2.5) - allows both “direct reflexive” and the so-called “understood

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reflexive object” alternation⁴⁷ (i.e. “implicit reflexive” in Zúñiga & Kittilä’s (2019: 196) terms). In the latter, a one-argument clause is commonly interpreted as reflexive. Differently from PDE, where an explicit reflexive with verbs of grooming is considered “odd” (Goddard 2013),⁴⁸ Middle English WASH *washen* still shows a preference for the “direct reflexive”: out of the 14 reflexive occurrences, only five showed an “understood reflexive object”. However, it must be mentioned that the majority (4 out of 5) of “understood reflexive object” occurrences are found in the New Testament (an M3 text), as in (362). Despite this, “direct reflexive” occurrences are found also in later texts, as example (363) from the Brut (still an M3 text) shows.

(362) *and* *Y* *wasschide*
 and 1SG.NOM wash.IND.PRET
 “[he put clay on my eyes] and I washed [and I saw]” (CMNTEST-M3,9,1J.882)⁴⁹

(363) *& þan* *wosshen* *ham* *þerwiþ*
 and then wash.IND.PRET.PL 3PL.ACC.REFL therewith
 “and then [they] washed themselves therewith” (CMBRUT3-M3,61.1815)

The “understood reflexive object” alternation has also marginally been found with the verb HIDE *hiden*, as shown in (364). As mentioned for the Old English verb SHOW (3) *æt-eowan* (cf. section 3.4.2.5), the distinction between non-causal interpretations and “understood reflexive objects” is not immediate. This is also the case for ME HIDE *hidden*, for which examples similar to (364) may be interpreted not only as an implicit reflexive, but also as non-causal occurrences (cf. section 3.4.3.1 below). Indeed, Goddard (2013), in his database of PDE, does not add the “understood reflexive object” to the alternations featured by *hide*, but he mentions the “Causative-Inchoative” alternation (comparable to OE and ME “non-causal”, cf. sections 2.4.3.2 and 3.4.3.1).⁵⁰ Both reflexive and non-causal constructions lack an external agent to initiate the event. Typically, the primary

⁴⁷ “Some verbs (mainly ‘caring for the body’ verbs, but not only), whose primary frame is transitive, frequently without any overt object or the pronoun expressing co-referentiality with a reflexive implication.” <https://paveda.unipv.it/alternations/13542966256>.

⁴⁸ “Verbs like wash and dress and other verbs of “caring for the body”, whose primary frame is transitive, frequently appear without any overt object (in a nonbasic frame), with the implication that the subject washes, dresses, etc., him or herself (Levin 1993: 35f). Notice though that an explicit reflexive is either **odd** (e.g. She dressed herself - implies that usually someone else does it) or anomalous (e.g. She flossed herself).” (bold added) <https://paveda.unipv.it/alternations/3532288527>.

⁴⁹ Compare this with example (152) in section 3.4.2.5.

⁵⁰ “A verb occurs freely in both transitive and intransitive frames, e.g. break and burn. It is difficult to establish either frame as the primary one. Sometimes I was unsure whether to assign a verb to the Ambitransitive or whether to define a more specific alternation.” <https://paveda.unipv.it/alternations/3546393642>.

distinction between reflexives and non-causals lies in the element of control (see e.g. Ježek 2003 on Italian). However, my sample does not show enough clear occurrences to argue for a non-causal interpretation, and since the action of hiding oneself is generally quite intentional, and not spontaneous (as could be the case of BREAK), I decided to classify this kind of occurrences as “understood reflexive object”.

- (364) *Hides* *and* *helis* *als* *hende,* *For* *ge*
 hide.IMP and cover.IMP as quickly because 2PL.NOM
er *cast* *in* *care*
 be.IND.PRS.PL cast.PTCP.PST in sorrow
 “hide and cover [yourselves] as quickly as possible, because you are cast in sorrow”
 (LaurMinot.[Poem_6],18.18.296)

Finally, I will conclude this section discussing the reciprocal alternation, i.e. when “the two nuclear arguments A and P acting on each other and being both agent and patient” (Cennamo 2015: 453). Vezzosi (2015: 185) uses the term “mutual” to indicate such situations. She reminded that a general restructuring of co-reference marking took place during the Middle English: indeed, the state of affairs in PDE “is not reconstructable historically and is the outcome of a diachronic development beginning during the ME period” Vezzosi (2015: 183). Middle English allowed both reciprocal anaphors (i.e. reflexive pronoun and bi-partite quantifier of the kind of *each other*) and non-anaphoric elements (i.e. intransitive constructions or sociative adverbs, as *together*) to express reciprocity (Vezzosi 2015: 184). As it inherited some of the strategies for encoding mutual situations, the ME reciprocal system was at least partly consistent with that of OE (Vezzosi 2015: 191, cf. also section 2.4.2.5 above). Indeed, as in Old English, reciprocals expressed by the reflexive pronouns could be intensified by the adjective *self*, though marginally (Vezzosi 2015: 197 shows that only 2% of the occurrences of *self* are found in reciprocal contexts). What is new in the Middle English period is the establishment of the bipartite quantifier *each other* over other variants as *either/every other* (cf. Vezzosi 2015: 200-207).

The verbs of my sample found in the reciprocal alternation are GIVE *yeven*, HELP *helpen*, HUG *clippen*, LOOK AT *loken*, MEET *meten*, SAY *seien*, SEE *sen* and TEACH (1) *leren*. Consider examples (365), (366) and (367), showing respectively a pronominal reciprocal, the bipartite construction and the sociative adverb, with the verb MEET *meten*.

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(365) & in þis batail **ham** mette Cattedren and Horn
 and in DEM battle 3PL.ACC.REFL meet.IND.PRET Cattedren and Horn
 “Cattedren and Horn met each other in this battle” (CMBRUT3-M3,53.1565)

(366) *When* **ane** *metis* **a-nopir**
 when one meet.IND.PRS.3SG another
 “when one meets the other”(CMBENRUL-M3,41.1312)

(367) *This* *is* *the* *cytee* *where* *the* *.ijj.*
 DEM be.IND.PRS.3SG DET city where DET three
kynges *metten* ***togedre***
 king.PL meet.IND.PRET.PL together
 “This is the city where the three kings met together [when they went to seek our Lord in Bethlehem to worship him and to present him with gold, incense, and myrrh.]”
 (CMMANDEV-M3,100.2421)

However, occurrences of a possible “understood **reciprocal** object” alternation have been found, consistently with Vezzosi’s (2015: 187) claim that “if the predicate itself encodes a mutual situation [...] there is conceptually only one event [...] the language will tend to use the simplest reciprocal device”, i.e. zero-marking. Indeed, she shows an increase of such constructions when there is “no doubling of roles” (Vezzosi 2015: 197). Verbs found in such contexts are the lexical reciprocals HUG *clippen* (found once in my corpus) and MEET *meten* (found 12 times), as in (368).

(368) *and* *thenne* *all* *the* *barons* *shold* *mete*
 and then all DET baron.PL shall.IND.PRET meet.INF
there *ageyne*
 there again
 “and then all the Barons should meet there again” (CMMALORY-M4,10.281)

Despite the higher number of occurrences in Middle English than in Old English, I have not judged them enough to create a separate alternation. Also, to be consistent with the Old English database, I

decided to include these within the “understood reflexive object”, changing only the derived coding frame.⁵¹

3.4.3. Middle English coded alternations

This section deals with coded alternations in Middle English, i.e. those alternations that are marked on the verb by means of affixes, clitics, or auxiliaries. On the model of the paragraph on Old English, I will begin this section discussing the causal vs non-causal alternation (3.4.3.1), followed by a discussion of the passive (3.4.3.2), and the so-called “*Man*”-alternation will conclude the section (3.4.3.3). However, I have not added a section on the applicative alternation, as I did for Old English (section 2.4.3.1), since no examples have been found in my corpus. As I have avoided prefixed verbs, consistently with PaVeDa’s guidelines, the *be-* prefix was excluded from the analysis, although still present in Middle English (for a thorough discussion on the scopes and evolution of the prefix, cf. Petré 2005, 2006 and the literature cited therein). What I labelled “uncoded applicative” for Old English, because of the presence of a possible coded *ge*-applicative, have been considered among object insertions (cf. section 3.4.2.4) in Middle English, due to the fact that no other coded applicatives were found.

3.4.3.1. Causal vs non-causal alternations

This section aims to detail the different encodings of the causal/non-causal alternation in Middle English. Firstly, I will examine labile verbs, which are particularly prominent in English compared to other languages. Subsequently, I will concentrate on marked causal constructions, specifically the periphrases *maken/don/geren* + infinitive.

As reminded in section 2.4.3.2, labile verbs are defined as verbs encoding both causal and non-causal event in the same verbs, without any morphological marking. Remarkably, despite being marginally present already in Old English, the number of labile verbs significantly increases in Early Middle English (1150-1300, cf. Ingham 2020; McMillion 2006). According to Ingham (2020), the increase of labile verbs in Middle English may be due to the massive French influence of the period, which would be not only lexical but also structural. Indeed, both Old English and Old French exhibited lability: whereas in the history of English lability increases, French develops new

⁵¹ Actual understood reflexive objects are encoded with the frame 1=2-nom V.subj[1=2], whereas understood reciprocal objects are found in the 1/2-nom V.subj[1/2] frame.

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strategies to encode causality, i.e. the use of the reflexive middle. However, Old French - specifically Anglo-Norman - still exhibited a high degree of lability (Ingham 2020: 448). Ingham (2020) demonstrates a remarkable increase in lability during the Middle English period: fewer than 20% of the native verbs from Old English within the semantic domains of change-of-state and change-of-position were labile. However, by Middle English, two-thirds of these verbs were recorded as labile, alongside an even higher proportion of labile verbs in these semantic areas introduced through French borrowings. On the other hand, García García and Ruiz Narbona (2021) claim that the origin of lability is to find in the Early Old English period (if not during the transition from common Germanic), and the influence of French on Middle English would not be so pervasive. In a recent study, García García (2023) showed that there is a significant link between the increase of labile verbs and the transition to a fixed word order in Early Middle English. Indeed, her data suggest that lability is a reliable predictor of the VO order, showing how labile verbs anticipated the trend towards a fixed VO order, which will become the norm for all verb types by 1400 (García García 2023: 1255-1256).

Since a basic framework for labile verbs cannot be established based on morphological simplicity, frequency was used as the criterion. This excludes verbs like BOIL (tr) *boillen*, BURN (tr) *brennen*, and ROLL (tr) *rollen*, SINK (tr) *sincken*, which were already considered as two separate meanings in ValPaL. In these cases, the verb was repeated as the counterpart of the intransitive (non-causal) meaning only in the basic usages. The alternations, including the non-causal one, were added only to the transitive counterpart. Other than that, those verbs found more frequently in a two-place pattern show a “non-causal” alternation, whereas those found more frequently in a one-place frame have a “causal” alternation.

Zero- or one-place verbs found in an unmarked causal alternation are BE DRY *drien*, FEAR *feren*,⁵² KNOW *knouen*, and RAIN *reinen* (on this verb cf. example (219) in section 3.3.1). Compare examples (369) and (370), showing respectively the basic frame and the casual alternation of BE DRY *drien*.

(369)	<i>And</i>	<i>þanne</i>	<i>it</i>	<i>dryede</i>
	and	then	3SG.NOM.N	dry.IND.PRET

⁵² Cf. section 3.2 and 3.3.3.3 for the decision of considering *feren* the translation equivalent of FEAR, despite it being frequently used with causal meaning. Moreover, cf. Zimmermann 2024 on the evolution from a basic causal meaning to a basic non-causal meaning.

“[And they say that it has been there since the beginning of the world, and was sometimes green and bare leaves, unto the time that our Lord died on the cross,] and then it dried: [and so did all the trees that were then in the world.]” (CMMANDEV-M3,44.1109)

(370) & *dry* *þam* *in* *the* *sonne* *or* *in* *þe* *wynde*
 and dry.IMP DEM in DET sun or in DET wind
 “and dry it in the sun or in the wind” (CMTHORN-MX4,72.573)

On the other hand, other than the above-mentioned BOIL (tr) *boillen*, BURN (tr) *brennen*, and ROLL (tr) *rollen*, SINK (tr) *sincken*, two-place verbs found in a non-causal frame are BREAK *breken*, LEAVE *leven*, PEEL *pilen*, SHOW *sheuen*, SMELL *smellen* and TEACH (1) *leren*. Examples (371) and (372) show respectively a transitive basic frame and a non-causal derived alternation of the verb BREAK *breken*.

(371) & *anone* *þai* *breken* *þe* *brige*
 and immediately 3PL.NOM break.IND.PRET.PL DET bridge
 “They immediately broke the [wooden] bridge” (CMBRUT3-M3,218.3898)

(372) *Bursten* *hire* *bondes*, & *breken* *alle* *clane*.
 burst.IND.PRET.PL POSS.3SG.F bond.PL and break.IND.PRET.PL all completely
 “Her bonds burst and broke up completely” (CMJULIA-M1,118.377)

Remarkably, different from Old English (cf. section 2.4.3.2), BREAK develops lability in Middle English, consistently with García García & Ingham (2023), who show an increase in lability with *destroy*-verbs in this period, due to contact with Anglo-French.⁵³

As already hinted in section 3.4.2.5 for Middle English,⁵⁴ reflexive and non-causal meanings may overlap. If for the meaning HIDE *hiden*, given a higher degree of intentionality, I decided to consider such intransitive occurrences as “understood reflexive object”, similar occurrences of the verb SHOW *sheuen* are labelled as “non-causal”, since they most often mean “to appear”, lacking control

⁵³ “The absence or near-absence of lability in Old English *destroy*-verbs and its greater type-frequency in Anglo-French strongly suggest the determining influence of the latter on the occurrence of lability in Middle English *destroy*-verbs. Given the data from Old and Middle English, the most likely hypothesis seems to us to be that lability in ME *destroy*-verbs was a short-term tendency brought to life by Anglo-French models, which did not last after the main period of influence, as there were no Old English exemplars on which to sustain it.” García García & Ingham (2023)

⁵⁴ Cf. also sections 3.4.2.5 and 3.4.3.2 for Old English.

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and volitionality, as in (373). A non-causal meaning can also be expressed through the passive (cf. non-causal passives in section 3.4.3.2), as in (374).

(373) *the walles schewen zit*
 DET wall.PL show.IND.PRS.PL yet
 “The walls are still visible, [but it is not all inhabited]” (CMMANDEV-M3,100.2430)

(374) *was shewid there a lyke miracle*
 be.IND.PRET.3SG show.PTCP.PST there one similar miracle
 “a similar miracle appeared there” (CMEDMUND-M4,170.202)

Another way to express causality is through “factitive” periphrasis, which involves a valency-increasing alternation achieved by combining two predicates (see Cennamo 2015: 448 on Italian). In the PaVeDa database of Middle English, this is referred to as “marked causal” and is defined as follows: “A ‘causer’ participant is added to the valency: it triggers agreement on the auxiliary verb (*maken/don/geren*) and the main verb is in the infinitive. The subject of the basic frame (either A or S) is now expressed in the non-nominative case”.⁵⁵ These constructions are akin to the Modern English *maken* construction. While not especially common, *don* is found in causative constructions as early as Old English, whereas *maken* was a relatively rare verb during that time (Royster 1922). As *maken* began to be used in causative constructions during the transition from Old to Middle English, there was a period of overlap where both *don* and *maken* appeared in similar contexts (Moretti 2022: 166). However, Moretti (2022) showed that, initially, there was a clear distinction between these two verbs: *maken* was more frequently used with infinitives that required an agentive subject (one performing the action), while *don* was used with non-agentive subjects. Nevertheless, by the end of the thirteenth century, *maken* had taken over and replaced *don* in non-agentive contexts as well. Though the verb *leten* (< OE *lætan*) could still have causative meaning in Middle English (Fulk 2012: 107, Iglesias Rábade 2008: 111), it could also have a “permissive” meaning. For this reason, occurrences of the kind have not been labelled “marked causal”.

The verbs of my sample found in the “marked causal” alternation are BE HUNGRY *hungren*, BOIL (tr) *boillen*, BREAK *breken*, BRING *bringen*, BUILD (2) *bilden*, BURN (tr) *brennen*, CARRY (1) *beren*, CUT *cutten*, DIE *dien*, EAT *eten*, FEEL PAIN *aken*, FILL *fillen*, GO *gon*, JUMP *lepen*, KNOW *knouen*, LAUGH

⁵⁵ <https://paveda.unipv.it/alternations/13542966234>.

laughen, LIVE *liven*, LOOK AT *loken*, PEEL *pilen*, PUT *putten*, RAIN *reinen*, RUN *rennen*, SEARCH (1) *sechen*, SEARCH (2) *serchen*, SEE *sen*, SHAVE *shaven*, SING *singen*, SINK *sincken*, SIT DOWN *sitten*, TALK (1) *spreken*, TELL *tellen*, THINK *thinken* and TIE (2) *binden*. Examples (375), (376) and (377) show instances of the three auxiliaries used to convey causal meaning, the most frequent of which being *maken*.

(375) *he* *made* *hem* *bulde* *meny booldes*
 3SG.NOM.M make.IND.PRET 3PL.ACC build.INF many building.PL
 “he made them build many buildings” (CMPOLYCH-M3,VI,169.1193)

(376) *he* *doð* *men* *hungren*
 3SG.NOM.M do.IND.PRS.3SG man.PL be_hungry.INF
and *hauen* *ðrist*
 and have.INF thirst
 “He makes men be hungry and thirsty” (Bestiary,302.17.544.[Whale_Significance])

(377) *Gare* *þam boyle* *welle*
 make.IMP DEM boil.INF well
 “Make that boil well” (CMTHORN-MX4,73.607)

3.4.3.2. Passive

The passive voice is defined by Zúñiga & Kittilä (2019: 82-83) passive as “a voice with a subject P and an adjunct A”, with the characteristics already stated in section 3.4.3.3. In Middle English, the passive voice is encoded by an analytic pattern formed by the auxiliary *ben* ‘to be’, but, especially in the earlier period, the auxiliary could be *wurðen* ‘to become’ (< OE *weorþan*, cf. Fulk 2012: 105). During the Middle English (ME) period, the usage of *weorðan* persists, but it begins to decline early on, and by the late fourteenth century (see Petré & Cuyckens 2009: 355).⁵⁶ Whereas in OE the agent was most frequently encoded by a *fram*+dat. prepositional phrase, in ME the most common preposition used in these contexts is *þurh*, though several others are also attested (Fulk 2012: 99).⁵⁷ Consider example (378), in which the verb know *knouen* is found in the passive voice and the agent is expressed by the PP headed by *with*.

⁵⁶ On the loss of OE *weorþan* > ME *wurðen*, cf. also Petré & Cuyckens (2008) and Petré (2010).

⁵⁷ On the establishment of ‘by’ in Modern English, cf. Fraser (1987).

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- (378) *For this Walgar was wel knowen*
 because DEM Walgar be.IND.PRET.3SG well know.PTCP.PST
wip þe Kyng
 with DET king

“because this Walgar was well known by the king” (CMBRUT3-M3,121.3682)

Of the 45 verbs featuring the transitive pattern (i.e. the [NOM,ACC] construction), shown in Table 17, 35 are also found in the passive voice in my corpus sample, as visible in Table 22. Moreover, the passive alternation is also featured by the one-place verbs HUNT FOR *hunten* (379), SING *singen* (380) and TALK (1) *speken* (381), in which the second optional argument is passivized.

- (379) *Thus we beth hunted from hale to hurne,*
 thus 1PL.NOM be.IND.PRS.PL hunt.PTCP.PST from hall to corner

“Thus we are hunted from hall to corner” (Husbandman,150.35.40.[Stanza_3])

- (380) *he ordeyned þat Agnus Dei schulde*
 3SG.NOM.M order.IND.PRET that Agnus Dei shall.SBJV.PRET
be þreis i-songe in þe masse
 be.INF thrice sing.PTCP.PST in DET mass

“But he ordered that the Agnus Dei be sung three times in the mass”

(CMPOLYCH-M3,VI,155.1097)

- (381) *Wordes that been spoken discretely by*
 word.PL REL be.IND.PRS.PL speak.PTCP.PST discretely by
ordinaunce been honycombes
 ordinance be.IND.PRS.PL honeycomb.PL

“Words that are spoken discretely and properly are honeycombs”

(CMCTMELI-M3,221.C2.182)

PaVeDa meaning	Old English verb	Basic coding frame	Passive
BEAT	beten	1-nom V.subj[1] 2-acc (with+3)	✓
BOIL (tr)	boillen	1-nom V.subj[1] 2-acc	✓

BREAK	breken	1-nom V.subj[1] 2-acc	✓
BUILD (1)	timbren	1-nom V.subj[1] 2-acc	✓
BUILD (2)	bilden	1-nom V.subj[1] 2-acc (with+3)	✓
BURN (tr)	brennen	1-nom V.subj[1] 2-acc	✓
COOK	coken	1-nom V.subj[1] 2-acc	/
COVER	coveren	1-nom V.subj[1] 2-acc (with+3)	✓
CUT	cutten	1-nom V.subj[1] 2-acc (with+3)	✓
DIG	diggen	1-nom V.subj[1] 2-acc	✓
DRESS	shriden	1-nom V.subj[1] 2-acc (with+3)	/
EAT	eten	1-nom V.subj[1] 2-acc	✓
FEEL COLD	colden	1-nom V.subj[1] 2-acc	/
FILL	fillen	1-nom V.subj[1] 2-acc (with+3)	✓
FOLLOW	folwen	1-nom V.subj[1] 2-acc	✓
FRIGHTEN	skerren	1-nom V.subj[1] 2-acc	/
GRIND	grinden	1-nom V.subj[1] 2-acc	✓
HEAR	heren	1-nom V.subj[1] 2-acc	✓
HELP	helpen	1-nom V.subj[1] 2-acc	✓
HIDE	hiden	1-nom V.subj[1] 2-acc	✓
HIT	hitten	1-nom V.subj[1] 2-acc (with+3)	✓
HUG	clippen	1-nom V.subj[1] 2-acc	/
KILL	killen	1-nom V.subj[1] 2-acc	✓
KNOW	knouen	1-nom V.subj[1] 2-acc	✓
LEAVE	leven	1-nom V.subj[1] 2-acc	✓
LOAD	laden	1-nom V.subj[1] 4-acc	/
MEET	meten	1-nom V.subj[1] 2-acc	/
PEEL	pilen	1-nom V.subj[1] 2-acc	/
PUSH	pushen	1-nom V.subj[1] 2-acc	✓
ROLL (tr)	rollen	1-nom V.subj[1] 2-acc	✓
SEARCH FOR (1)	<u>sechen</u>	1-nom V.subj[1] 3-acc	✓
SEARCH FOR (2)	serchen	1-nom V.subj[1] 2-acc (for+3)	✓

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SEE	sen	1-nom V.subj[1] 2-acc	✓
SHAVE	shaven	1-nom V.subj[1] 2-acc	✓
SINK (tr)	sinken	1-nom V.subj[1] 2-acc	✓
SMELL	smellen	1-nom V.subj[1] 2-acc	/
STEAL	stelen	1-nom V.subj[1] 2-acc	✓
TAKE (1)	nimen	1-nom V.subj[1] 2-acc	✓
TAKE (2)	taken	1-nom V.subj[1] 2-acc	✓
TEAR	teren	1-nom V.subj[1] 2-acc	/
THINK	thinken	1-nom V.subj[1] 2-acc	✓
TIE	binden	1-nom V.subj[1] 2-acc	✓
TOUCH	touchen	1-nom V.subj[1] 2-acc (with+3)	✓
WASH	washen	1-nom V.subj[1] 2-acc	✓
WIPE	wipen	1-nom V.subj[1] 2-acc	✓

Table 22: Two-place transitive verbs allowing the passive alternation

Concerning three-places verb, passivisation of both T and R arguments is possible, though the former is found more frequently. T passivisation is allowed by the verbs ASK FOR *asken*, CARRY (1) *beren*, CARRY (2) *carien*, GIVE *yeven*, NAME *nemnen*, POUR *pouren*, PUT *putten*, TELL *tellen*, SEND *senden*, SHOW *sheuen* and TIE (1) *teien*. Also, when behaving as a ditransitive verb, TALK (1) *speken* also allows the passivisation of T, as shown in (381) above. On the other hand, R passivisation is less frequent and found only with the verbs GIVE *yeven*, LOAD *laden*, TEACH (1) *leren* and TEACH (2) *techen*. Different from Old English (cf. section 2.4.3.3), the only verb allowing both T and R passivisation is GIVE *yeven*, as shown in (382) and (383).

(382) *To other folke is welefulnesse iyeven unworthily*
to other folk be.IND.PRS.3SG prosperity give.PTCP.PST unworthily
“Prosperity is unworthily given to another folk” (CMBOETH-M3,454.C1.548)

(383) *for þe prioresse is geuin a mater*
because DET prioress be.IND.PRS.3SG give.PTCP.PST one matter
to be proud in þe begynnyng of hyr ordinance
to be.INF proud in DET beginning of POSS.3SG.F ordinance

“because the prioress is given a matter to be proud in the beginning of her ordinance”
(CMBENRUL-M3,43.1346)

Certain verbs, such as BRING *bringen*, SAY *seien*, SEE *sen*, SEND *senden*, and SHOW *sheuen* can be used in an “impersonal passive” construction. This means the verb appears without an explicit subject (sometimes with the expletive *hit* or *there*) and is conjugated in the passive voice, third person singular. This construction typically occurs when the subject of the active sentence represents a collective group, as for instance in (384) and (385).

(384)	<i>And</i>	<i>anone</i>	<i>there</i>	<i>was</i>	<i>brought</i>	<i>forth</i>
	and	immediately	there	be.IND.PRET.3SG	bring.PTCP.PST	forth
	<i>two</i>	<i>grete</i>	<i>sperys</i>			
	two	great	spear.PL			

“and two great spears were immediately brought forth” (CMMALORY-M4,39.1274)

(385)	<i>And</i>	<i>therefore</i>	<i>resonably</i>	<i>may</i>	<i>be</i>	<i>seyd</i>	<i>of</i>
	and	therefore	reasonably	may	be.INF	say.PTCP.PST	of
	<i>Jhesu</i>	<i>in</i>	<i>this</i>	<i>manere</i>			
	Jesus	in	DEM	manner			

“and therefore it may be reasonably said about Jesus in this manner”

(CMCTPARS-M3,294.C2.267)

Remarkably, if in Old English, the verbs found in this alternation are verbs involving a transfer of knowledge (cf. examples (199)-(202) in section 2.4.3.3), the Middle English verbs found in this construction do not only involve cognitive transfer, as SAY *seien* or SHOW *sheuen*, but also physical transfer, as BRING *bringen* or SEND *senden*.

As discussed in the Old English section (2.4.3.3), the domain of passives, reflexives and non-causals may overlap: reflexives and passives do not alter the inherent meaning or semantic valency of an event; rather, they affect the number of verbal arguments (Kittilä 2010: 360). Indeed, as in Old English, certain occurrences in Middle English exhibit non-passive (“middle”) readings, despite being grammatically passive. These instances can hardly be interpreted as prototypical passives, as defined by Zúñiga & Kittilä (2019: 82-83). Instead, a non-causal or reflexive interpretation seems more fitting. Due to the challenges in distinguishing non-causals from (understood) reflexives, as

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discussed in sections 3.4.2.5 and 3.4.3.1, the PaVeDa database of Middle English – as the one of Old English - groups these instances together and labels them as “non-causal passive”.⁵⁸ The verbs of my sample allowing this alternation are BE DRY *drien*, BREAK *breken*, HIDE *hiden*, LEAVE *leven*, MEET *meten*, SEE *sen*, SHOW *sheuen* and WASH (2) *washen*. Remarkably, except for MEET *meten*, these meanings (even if with different translational counterparts) were all found in this alternation in Old English as well.⁵⁹ Compare examples (386), (387) and (388), showing respectively a non-causal, reflexive and reciprocal interpretation of the passive.

(386) *Therfor anoon as he cesside to speke,*
 therefore immediately as 3SG.NOM.M cease.IND.PRET to speak.INF
the erthe was brokun vndur her feet
 DET earth be.IND.PRET.3SG break.PTCP.PST under POSS.3SG.F foot.PL
 “Therefore, as soon as he ceased speaking, the earth broke under her feet.”
 (CMOTEST-M3,16,20N.746)

(387) *and be thou waisschun in the watir of Siloe*
 and be.SBJV.PRS 2SG.NOM wash.PTCP.PST in DET water of Siloam
 “[and said unto him, Go,] wash in the pool of Siloam” (CMNTEST-M3,9,1J.860)

(388) *And whan they were mette they*
 and when 3PL.NOM be.IND.PRET.PL meet.PTCP.PST 3PL.NOM
put of hyr helmys
 put.IND.PRET off POSS.3PL helm.PL
 “And when they met, they took off their helms” (CMMALORY-M4,52.1718)

3.4.3.3. *Man*-alternation

As already mentioned in section 2.4.3.4 on Old English, the status of the pronoun *man* (which usually takes the form *me* in Middle English, cf. Fulk 2012: 105) is debated in the literature (cf. among others Van Bergen 2003). Despite being often discussed among passivizing strategies (e.g. in Fulk 2012:

⁵⁸ “The Proto-Indo-European mediopassive does not continue in English. However, some instances of the periphrastic passive can hardly be interpreted as such. Although morphologically identical to the passive, these occurrences allow for non-passive interpretations, i.e. reflexive-middle (cf. Cennamo 2015: 452, where she argues for a ‘reflexive-middle’ continuum) or non-causal.” <https://paveda.unipv.it/alternations/13542966232>.

⁵⁹ The only verb found in Old English and not in Middle English is PUT *settan*.

105 or Smith 2023: 93) I have already argued for Old English that *man* should be discussed separately from the periphrastic passive. Indeed, despite of it being a semantic passive, i.e. an agent demoting mechanism, it has an active form.

Verbs of my sample found with this alternation are ASK FOR *asken*, BREAK *breken*, BRING *bringen*, CARRY (1) *beren*, CLIMB *climben*, FOLLOW *folwen*, GIVE *yeven*, GO *gon*, HIDE *hiden*, HUNT (FOR) *hunten*, KNOW *knouen*, LIVE *liven*, LOOK AT *loken*, NAME *nemnen*, SAY *seien*, SEARCH FOR (1) *sechen*, SEE *sen*, SING *singen*, SIT DOWN *sitten*, SMELL *smellen*, TAKE (1) *nimen*, TALK (1) *speken*, TEACH (1) *leren*, TELL *tellen* and THINK *thinken*. Consider examples (389) and (390), where the verb BRING *bringen*, respectively found in a passive alternation and in a *man*-alternation.

(389) *When he was taken & brouzt*
 when 3SG.NOM.M be.IND.PRET.3SG take.PTCP.PST and bring.PTCP.PST
to zork, meny of þe citee were ful glade
 to York many of DET city be.IND.PRET.PL fully glad
 “When he was was captured and taken to York, many [inhabitants] of the city rejoiced”
 (CMBRUT3-M3,221.3977)

(390) *me schulde katerine bringe biuoren him*
 INDF shall.SBJV.PRET.3SG Katherine bring.INF before 3SG.ACC.M
 “[When this was so done, the emperor again commanded that] Katherine should be
 brought before him” (CMKATHE-M1,35.258)

Remarkably, all these verbs have a Germanic, more specifically Old English, origin. Thus, at least in my sample, loanwords (either Scandinavian or French) were not attested with the pronoun *man*. Figure 14 shows the occurrences of the *man*-alternation in my corpus: out of 85 occurrences, 38 are found in M1 texts (1150-1250), with a significant drop in M2 (1250-1350), in which only 16 occurrences have been found. The frequency of *man* seems to increase again in M3 (1350-1420), with 31 occurrences, to disappear completely in M4 (1420-1500). However, it must be noted that most occurrences from the M3 period are found either in the translation of the *Rule of St. Benet* (x8) or in John Trevisa’s *Polychronicon Ranulphi Higden* (x16). Given that both texts are free translations from a Latin source, one may suppose an intention to stick to a more archaic style, which could explain the significant use of this construction in these texts.

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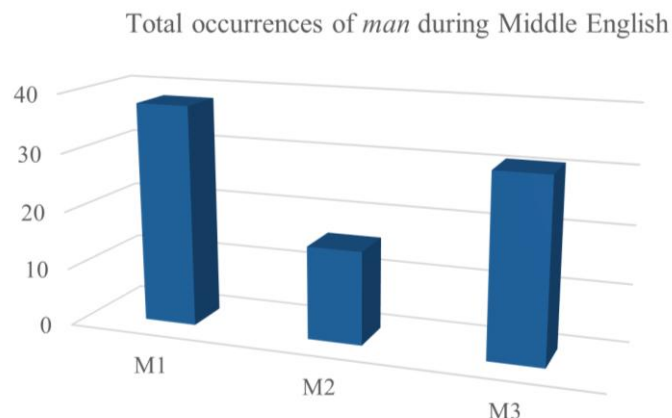


Figure 14: Occurrences of *man* across Middle English sub-periods.

That said, the absence of the construction from M4 texts witnesses to the loss of this construction in favour of *one* (cf. e.g. Rissanen 1997: 515). This loss has been widely discussed in the literature: Rissanen (1997: 520) claims that “[t]he factors leading to the loss of *me* are probably varied. This form may have been too weak for the subject position [...] and its homonymy with the first person oblique form, particularly with impersonal verbs (*me thinketh*, *me semeth*, etc.) should also be taken into account”. Moreover, Los (2002: 197-198) links the loss of *man* to the loss of V2 and to the competition between *to*-infinitives and subjunctive clauses.

Summary

This chapter explored the valency patterns and alternations of 91 Middle English verbs, corresponding to 83 PaVeDa meanings. It began with a brief introduction to the language and the reference sample (3.1), followed by a discussion on verb selection based on the PaVeDa methodology (3.2). Subsequently, it examined Middle English valency patterns organized by increasing argument slots (3.3) and addressed valency alternations (3.4).

In line with Visser’s (1963: 97-135) claim that the history of English demonstrates a rise in transitivity, my ME data showed a lower transitivity prominence than PDE; however, the value of transitivity prominence does not seem to be significantly different from OE. Concerning valency alternations, the majority is uncoded, as it happens in PDE. Regarding the basic valency orientation, there appears to be an absence of dedicated studies addressing this aspect in Middle English: though entitling her article “Valency changes in the history of English”, Elly van Gelderen (2011) focuses mainly on Old English. However, given the increase of labile verbs found in Middle English, it can be maintained that its basic valency orientation is shifting more and more towards an “indeterminate” coding (in Nichols et al.’s 2004 terms). Also, comparing the number of verbs allowing unmarked

“causal” and “non-causal” alternation, no significant trend (either transitivising nor detransitivising) can be found.⁶⁰

Middle English represents a transitional stage characterized by the erosion of inflectional morphology and the rise of analytic structures. Case syncretism and the loss of instrumental/genitive functions led to increased reliance on prepositions and fixed word order. Despite these changes, valency patterns remained broadly similar to Old English, with transitivity prominence only slightly affected. Experiential verbs began to favour nominative subjects more consistently, signalling the decline of oblique subject constructions, though remnants persisted in early Middle English.

The alignment shift towards a dominant nominative–accusative pattern marked a significant typological change, while dative subjects and genitive objects receded. Alternations persisted but underwent structural simplification: direct case vs. PP alternations (conative, dative alternation, partitive, into-resultative, topic-about) and other uncoded alternations (benefactive/malefactive, body-part alternations, cognate/kindred object insertion, object omission/insertion, reflexive and reciprocal) remained productive, whereas coded alternations were reduced, applicatives disappeared, causatives relied on periphrastic strategies (*make, let*), and passive constructions expanded. Innovations such as the rise of labile verbs, the gradual loss of the indefinite pronoun *man/me*, and the increased frequency of prepositional encoding for recipients and goals illustrate the shift toward analytic syntax. Despite these changes, Middle English aligns more closely with Old English than with Present-Day English in terms of valency orientation, suggesting that the major restructuring of argument structure occurred later. Middle English thus illustrates the shift from a morphologically governed system to a syntax-driven one, where alternations survive but are increasingly mediated by prepositions and word order rather than case morphology.

⁶⁰ If one does not consider those meanings already distinguished in the ValPaL project, namely BOIL (tr) *boillen*, BURN (tr) *brennen*, and ROLL (tr) *rollen*, SINK (tr) *sincken*, basic intransitive verbs allowing a causal alternation are four, whereas basic transitive verbs allowing a non-causal alternation are 6.

Conclusions

This dissertation has explored the valency patterns and alternations in Old and Middle English, contributing to the diachronic dimension of the Pavia Verb Database (PaVeDa) project. By systematically analysing a representative corpus of both prose and poetry, this study has provided a detailed account of how argument structure and valency alternations evolved from Old to Middle English, with particular attention to the interaction between morphosyntactic coding and semantic roles. The main aim of this project was to carry out a comprehensive and systematic analysis of the valency pattern, together with the alternations and constructions that may affect valency in Old and Middle English. Indeed, research has so far focused exclusively on particular constructions, e.g. labile verbs or impersonal constructions, both synchronically in the two separate stages, and from a diachronic point of view. The compilation of the PaVeDa databases of Old and Middle English, which complete the ValPaL database for Present-Day English (Goddard 2013) could facilitate the undertaking of more specialized investigations, both from a diachronic perspective—encompassing the earlier and contemporary stages of the language—and from a comparative perspective, e.g. with other ancient Germanic languages.

After an introductory section on the motivations and aims of this work and an overview of previous relevant studies, the first chapter of this thesis presented the theoretical framework, namely diachronic Construction Grammar (Barðdal et al 2015; Barðdal & Gildea 2015) and some methodological issues regarding the ValPaL and PaVeDa methodology applied to ancient languages and data retrieval from non-lemmatised corpora.

Chapter 2 dealt with Old English: in particular, section 2.3. presented OE valency classes in order of increasing argument slots, beginning with the zerovalent verbs, and ending with three-place verbs. The classification was based on criteria such as case marking, agreement patterns, and the applicability of passivisation. In sections 2.3.1 and 2.3.2. I showed the distinction between actual impersonal verbs (i.e. zerovalent weather verbs) and other verbs with a non-nominative subject, usually known in the literature with the misnomer “impersonal”. Particularly, section 2.3.2.1. showed earlier examples of the personalisation process which will take place throughout the Middle English period. Moving on to two-place verbs, I showed that the transitivity prominence (defined as in Haspelmath 2015b) of Old English is lower than Present-Day English (cf. section 2.3.3.1.), also because the different argument coding of less affected P-like and A-like arguments (cf. sections 2.3.3.2. and 2.3.3.3.). Finally, concerning three-place verbs, they mainly feature an indirect

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alignment, but both neutral and secundative alignment are also attested. Section 2.4. discussed Old English valency alternations, starting with those involving an alternation between direct case and PPs, followed by uncoded and coded alternations. The main result of these sections is showing the link among reflexive, non-causal and passive. Indeed, I showed that it is not always straightforward to distinguish between reflexive and non-causal situations, the main semantic difference between the two being the intentionality/spontaneity of the action. Moreover, I discussed some instances of passives which could hardly be interpreted as such, but where a non-causal or reflexive interpretation seems more fitting. Concerning the basic valency orientation of Old English, my data support García García's (2020) study, which argues that Old English seems transitivising, though leaning towards an "indeterminate" coding (Nichols et al. 2004), due to the rise of labile verbs. The analysis has shown that Old English exhibited a relatively high degree of morphological marking, with a rich case system and a variety of valency alternations, both coded and uncoded. Notably, the presence of oblique subjects, external possessors, and a range of applicative and causative constructions reflects a typologically complex system that allowed for nuanced expression of argument structure. The use of the *be-* prefix and the productivity of the *-ja* suffix in causative derivation further underscore the morphological richness of Old English.

Chapter 3 concentrated on Middle English, in particular discussing valency patterns in section 3.2. Once again, valency classes were discussed in order of increasing argument slots. In this section, I showed how the transitivity prominence of Middle English does not increase significantly compared to Old English, despite the case syncretism of accusative and dative. Moreover, although the alternation between oblique and nominative subject with some experiential verbs becomes more frequent in Middle English, this process of personalisation does not seem to affect the transitivity prominence of this stage. Finally, concerning three-place verbs, they only feature indirect alignment or alignment, whereas the secundative one was not attested in my sample. In line with the previous chapter, the following section (3.4) dealt with valency alternations in Middle English, starting with the alternations between PPs and direct case, followed by uncoded and coded alternations. In the latter group, I could not discuss the "applicative" alternation as I did for Old English: consistently with PaVeDa's guidelines, prefixed verbs were systematically excluded from the analysis; consequently, the *be-* prefix—though still attested in Middle English—was not considered. What I labelled as "uncoded applicative" in Old English—due to the possible presence of a morphologically marked *ge-* applicative—has been reclassified under object insertions in Middle English (cf. section 3.4.2.4), given the absence of other morphologically coded applicative constructions in the data. Once again, the domain of causality plays a pivotal role in the present

analysis. Notably, the rise in labile verb usage—unaccompanied by significant transitivity or detransitivising trends—marks a shift in the basic valency orientation of English from a predominantly transitivity system in Old English to a more indeterminate pattern.

The analysis has shown that Old English exhibited a relatively high degree of morphological marking, with a rich case system and a variety of valency alternations, both coded and uncoded. Notably, the presence of oblique subjects, external possessors, and a range of applicative and causal constructions reflects a typologically complex system that allowed for nuanced expression of argument structure. The use of the *be-* prefix and the productivity of the *-ja* suffix in causative derivation further underscore the morphological richness of Old English. In contrast, Middle English shows a gradual shift toward more analytic constructions, with a reduction in morphological marking and a rise in syntactic strategies such as word order and prepositional phrases. The increasing use of labile verbs and the decline of overt applicative morphology suggest a move toward less morphologically driven system. This shift aligns with broader typological changes in English, including the loss of case distinctions and the rise of fixed SVO word order. One of the key findings of this study is that, despite significant structural changes, Middle English valency patterns often align more closely with Old English than with Present-Day English. This continuity challenges the assumption of a sharp typological break and highlights the importance of diachronic data in understanding the evolution of argument structure. In sum, this dissertation not only enriches our understanding of English historical syntax but also contributes to broader discussions in typology, diachronic linguistics, and construction grammar.

The findings of this study open several promising avenues for further investigation in the field of historical linguistics and valency theory. To enhance the empirical foundation of valency analysis, future research should consider expanding the reference corpora used for both Old and Middle English. A broader corpus would improve the representativeness of the data and allow for more robust generalizations about valency behaviour across different linguistic contexts. This study is based on a core set of verb meanings taken from the PaVeDa starting list. Future research would benefit from expanding this inventory to encompass a wider array of verbal semantics, particularly those associated with the experiential domain, i.e. emotion, cognition, and perception. This would enable a more detailed classification of valency patterns and alternations, with deeper insights into the semantic bases of syntactic variation. For instance, adding more experiential verbs like BE THIRSTY (e.g., OE *þyrstan*, ME *thirsten*), which often had non-nominative subjects in Early English, might offer valuable insights why different rates of changes are attested for different verb. This

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would also build on the discussion in section 3.3.3.3 (pp. 174–178), particularly around how subject marking evolved in these kinds of constructions. A further step would be to extend this diachronic analysis forward into Early Modern and Present-Day English. This would allow a clearer picture of how valency patterns and alternations continued to develop, especially as English moved toward a more fixed word order, lost much of its case marking, and began relying more on periphrastic constructions. It could also help pinpoint when certain alternations—like the dative alternation or the rise of labile verbs—became fully grammaticalised.

The inclusion Old and Middle English also allows the comparison with the other Germanic languages, included in the PaVeDa database, both ancient and modern—like Gothic, Old High German, Old Norse, and Modern German and Modern Icelandic. A comparative perspective could highlight shared features or divergences across the Germanic family, contributing to our understanding of Proto-Germanic argument structure and broader typological generalisations. The PaVeDa project itself allows for future research: expanding the database to include more verb meanings, additional historical stages, and underrepresented languages would enhance its usefulness and scopes. Moreover, introducing a new cross-linguistic layer of annotation containing comparative concepts for valency patterns and alternations would make the database even more powerful as a research tool. Although his study has focused mainly on morpho-syntactic aspects, future studies could explore in greater detail the influence of semantic and cognitive factors on valency alternations. For instance, investigating how conceptual metaphors, event structure, and frame semantics influence argument realization could influence valency alternations and their diachronic shifts.

Future research could benefit from a more systematic integration of quantitative methods, such as statistical modelling and corpus-based frequency analysis, to assess the productivity and distribution of valency alternations over time. Additionally, the application of computational tools—such as syntactic parsers, lemmatizers, and machine learning classifiers—could enhance the scalability and replicability of valency studies, especially when dealing with large historical corpora.

Finally, it would be interesting to look at how valency patterns vary across different genres and registers—legal texts, religious writing, poetry, or theatr. Such variation may reveal important sociolinguistic and stylistic factors influencing argument structure, especially in transitional periods like Middle English.

Appendices

Appendix n. 1: Old English prose texts (date, dialect and genre).¹**OE2: 850-950**

TEXT	DIALECT	GENRE
coboeth.o2. Boethius' <i>Consolation of Philosophy</i>	West Saxon	Philosophy
cobede.o2. Bede's <i>History of the English Church</i>	West Saxon/Anglian	History
cochronA.o23. <i>Anglo- Saxon Chronicle: Ms. A (Parker Chronicle)</i>	West Saxon	History
coalex.o23. <i>Alexander's Letter to Aristotle</i>	West Saxon/Anglian	Travelogue
comarvel.o23. <i>Marvels of the East</i>	West Saxon/Anglian	Geography
cohad.o24. <i>Saint Chad</i>	West Saxon/Anglian Mercian	Biography, lives

Table 23: OE2 Old English prose texts**OE3: 950-1050**

TEXT	DIALECT	GENRE
coapollo.o3. <i>Apollonius of Tyre</i>	West Saxon	Fiction
cootest.o3. <i>Heptateuch: Genesis, Exodus, Leviticus, Numbers,</i>	West Saxon	Bible

¹ All information given here was retrieved from YCOE online manual ("Text included in the corpus": <http://penn-historical-corpora.uni-mannheim.de/ycoe/info/YcoeText.htm>). Those texts marked with * have been dated based on the manuscript date given in the manual, as no Helsinki period was provided.

Appendices

<i>Deuteronomy, Joshua, Judges</i>		
cowsgosp.o3. <i>West-Saxon Gospels</i>	West Saxon	Bible
comary. <i>Saint Mary of Egypt</i>	West Saxon	Biography, lives
cocathom1.o3. <i>Ælfric's Catholic Homilies I</i>	West Saxon	Homilies
coprefcath1.o3. <i>Ælfric's "Preface" to Catholic Homilies I</i>	West Saxon	Preface
cobenrul.o3. <i>Benedictine Rule</i>	West Saxon	Rule
cobyrtf.o3. <i>Byrhtferth's Manual</i>	West Saxon	Science
cosevensl. <i>Seven Sleepers*</i>	West Saxon	Biography, lives
coeuphr. <i>Saint Euphrosyne*</i>	West Saxon	Biography, lives
codicts.o34. <i>Distichs of Cato</i>	West Saxon	Philosophy
comargaC.o34. <i>Saint Margaret: MS CCCC 303</i>	Unknown	Biography, lives

Table 24: OE3 Old English prose texts

OE4: 1050-1150

TEXT	DIALECT	GENRE
coeust. <i>Saint Eustace and his Companions*</i>	West Saxon	Biography, lives
cochristoph. <i>Saint Christopher*</i>	Unknown	Biography, lives

corood. <i>Invention of the Cross (History of the Holy Rood-Tree)*</i>	Unknown	Biography, lives
cojames. <i>James the Greater*</i>	Unknown	Biography, lives
coneot. <i>Saint Neot*</i>	Unknown	Biography, lives
covinceB. <i>Saint Vincent (Bodley 343)*</i>	Unknown	Biography, lives
coalcuin. Alcuin's <i>De Virtutibus et Vitiis*</i>	Unknown	Religioust treatise

Table 25: OE4 Old English prose texts

Appendix 2: Old English poetry texts (date, dialect and genre).²

OE1: -850

TEXT	DIALECT	GENRE
conorthu.psd. (1) <i>Cædmon's Hymn</i> ^[2] ; (2) <i>Bede's Death Song</i> ^[3] ; (3) <i>The Leiden Riddle</i> ; (4) <i>The Ruthwell Cross</i> .	Northumbrian	Christian poem

Table 26: OE1 Old English poetry texts

OE2: 850-950

TEXT	DIALECT	GENRE
cobrunan.psd. <i>The Battle of Brunanburh</i> .	West-Saxon	Heroic poem, encomiastic poem

Table 27: OE2 Old English poetry texts

OE3: 950-1050

TEXT	DIALECT	GENRE
coandrea.psd. <i>Andreas</i> .	West-Saxon	Christian poem
cobeowul.psd. <i>Beowulf</i> .	West-Saxon	Epic, heroic poem
cochrist.psd. <i>Christ I-II-III</i> .	West-Saxon	Christian poem

² As the YCOEP corpus manual ("The Texts of the York Poetry Corpus: <https://www-users.york.ac.uk/~lang18/ptext-list.html>) does not contain detailed text information as the other corpora, date was retrieved from the manual of the Helsinki Corpus (<https://varieng.helsinki.fi/CoRD/corpora/HelsinkiCorpus/oldenglish.html>). It has to be noted that the compilers chose a cautious approach: "[a] similarly cautious attitude towards dating Old English poetry has been adopted. Apart from the pre-850 poems, *The Battle of Brunanburh* (O2), and *The Meters of Boethius* (O2/3), all verse texts have been coded OX/3. Thus no stand has been taken regarding various attempts at dating some of the Old English poems with more precision". On the other hand, genre classification is mine, based on several works, such as Crossley-Holland (1999); Saunders (2010); Magennis (2011); Francini (2017). On the problem in assigning a "dialect label" to Old English poems see e.g. Fulk (1992: 45-50). However, an attempt of dialect classification is given here, based on Sauer & Waxenberger (2017).

cocynew.psd. (1) <i>Fates of the Apostles;</i> (2) <i>Elene</i> ; (3) <i>Juliana</i>	West-Saxon	Christian hero
codream.psd. <i>The</i> <i>Dream of the Rood.</i>	West-Saxon	Christian Poem
coexeter.psd. (1) <i>The</i> <i>Wanderer</i> (2) <i>The</i> <i>Seafarer</i> ; (3) <i>Widsith</i> ; (4) <i>Fortunes of Men</i> ; (5) <i>Maxims I</i> ; (6) <i>The</i> <i>Riming Poem</i> ; (7) <i>The</i> <i>Panther</i> ; (8) <i>The</i> <i>Whale</i> ; (9) <i>The</i> <i>Partridge</i> ; (10) <i>Deor</i> (11) <i>Wulf and</i> <i>Eadwacer</i> ; (12) <i>The</i> <i>Wife's Lament.</i>	West-Saxon	Allegory, destiny, elegy, gnomic poem, heroic poem
coexodus.psd. <i>Exodus.</i>	West-Saxon	Christian poem
cogenesi.psd. <i>Genesis</i> (A)	West-Saxon	Christian poem
cokentis.psd. (1) <i>The</i> <i>Kentish Hymn</i> ; (2) <i>The</i> <i>Kentish Psalm.</i>	Kentish	Christian poem
cometboe.psd. <i>The</i> <i>Meters of Boethius.</i>	West-Saxon	Philosophy
cophoeni.psd. <i>The</i> <i>Phoenix.</i>	West-Saxon	Allegory, christian poem
coriddle.psd. <i>Riddles</i>	West-Saxon	gnomic poem

Table 28: OE3 Old English poetry texts

Appendix 3: Middle English prose texts (date, dialect and genre).³

M1: 1150–1250

TEXT	DIALECT	GENRE
cmjulia-m1. <i>St. Juliana</i>	West Midlands (AB language; northern Herefordshire/southern Shropshire)	Biography, life of saint
cmkathe-m1. <i>St. Katherine</i>	West Midlands (AB language; northern Herefordshire/southern Shropshire)	Biography, life of saint
cmmarga-m1. <i>St. Margaret</i>	West Midlands (AB language; northern Herefordshire/southern Shropshire)	Biography, life of saint
cmpeterb-m1. <i>Peterborough Chronicle</i>	East Midlands (Peterborough, Northamptonshire)	History
cmtrinit-mx1. <i>Trinity Homilies</i>	East Midlands (London), “influenced by immigration, perhaps from East Anglia” (M.L. Samuels, cited in Hill)	Homily
cmkenthom1. <i>Kentish Homilies</i>	Kentish	Homily
cmsawles-m1. <i>Sawles Warde</i>	West Midlands (AB language; northern Herefordshire/southern Shropshire)	Homily
cmlamb1-m1. / cmlambx1-mx1. <i>Lambeth Homilies</i>	West Midlands (M.L. Samuels, cited in Laing 1993: border of North Herefordshire and Shropshire)	Homily
cmvices1-m1. <i>Vices and Virtues</i>	East Midlands (M.L. Samuels, cited in Laing: Essex)	Religious treatise

Table 29: M1 Middle English prose texts.

M2: 1250–1350

TEXT	DIALECT	GENRE
cmkentse-m2. <i>Kentish Sermons</i>	Kentish	Homily

³ All information given here was retrieved from PPCME2 online manual (“Philological information”: <https://www.ling.upenn.edu/histcorpora/PPCME2-RELEASE-4/index.html>)

Table 30: M2 Middle English prose texts.**M3: 1350–1420**

TEXT	DIALECT	GENRE
cmotest-m3. <i>The Old Testament</i> (Wycliffe)	East Midlands (McIntosh et al. 1986: Buckinghamshire)	Bible
cmntest-m3. <i>The New Testament</i> (Wycliffe)	East Midlands (McIntosh et al. 1986: Buckinghamshire) (?Helsinki gives Southern)	Bible
cmhorses-m3. A Late Middle English <i>Treatise on Horses</i>	Southern (Berkshire)	Handbook, medicine
cmpolych-m3. John of Trevisa's <i>Polychronicon</i>	Southern	History
cmbrut3-m3. <i>The Brut</i> or <i>The Chronicles of England</i>	West Midlands	History
cmboeth-m3. Boethius' <i>De Consolatione Philosophiae</i> (Chaucer)	East Midlands (London)	Philosophy
cmctmeli-m3. <i>Tale of Melibee</i> (Chaucer)	East Midlands (London)	Philosophy/fiction
cmctpars-m3. <i>The Parson's Tale</i> (Chaucer)	East Midlands (London)	Religious treatise
cmbenrul-m3. <i>The Rule of St. Benet</i>	Northern	Rule

Table 31: M3 Middle English prose texts.

M4: 1420–1500

TEXT	DIALECT	GENRE
cmedmund-m4. <i>Life of St. Edmund</i>	East Midlands	Biography, life of saint
cmedthor-m34. <i>The Liber de Diversis Medicinis</i> in Thornton Ms.	Northern	Handbook, medicine
cmvices4-m34. <i>The Book of Vices and Virtues</i>	East Midlands (with Southern mix, also some connection to North)	Religious treatise
cmsiege-m4. <i>The Siege of Jerusalem</i>	West Midlands	Romance
cmmalory-m4. Malory's <i>Morte Darthur</i>	West Midlands (Warwickshire)	Romance

Table 32: M4 Middle English prose texts.

Appendix 4: Middle English poetry texts (date, dialect and genre).⁴**M1: 1150–1250**

TEXT	DIALECT	GENRE
M1b.Bestiary. <i>Bestiary</i>	East-Midlands	Bestiaries, animals, allegory, Christian doctrine
M1a.BodySoul. <i>Body and Soul</i>	Southern	Death, debate
M1b.OwlNight. <i>The Owl and the Nightingale</i>	Southern	Debate, animal debate, birds, dialogue, philosophy, love
M1a.Poema. <i>Morale Poema morale</i>	(South) East-Midlands	Moral advice, conduct of life, description of hell and paradise, lament, monition
M1b.PassionLord. <i>The Passion of Our Lord</i>	Unknown	Passion of Christ, bible, bible paraphrase, New Testament
M1a.ProvAlf. <i>The proverbs of Alfred</i>	Unknown, probably Southern	Proverbs, precepts, admonition, popular wisdom

Table 33: M1 Middle English poetry texts.**M2: 1250–1350**

TEXT	DIALECT	GENRE
M2a.TreatDreams. <i>A Metrical Treatise on Dreams</i>	Unknown	Interpretation of dreams, prognostication, treatise
M2a.Husbandman. <i>The Song of the Husbandman</i>	Unknown	Politics, complaint, satire, social protest, evils of the time, contemporary conditions, lament, taxation
M2a.Havelok. <i>Havelok the Dane</i>	Northern East Midlands	Romance, tale, Matter of England

⁴ All information given here was retrieved from PCMEP online manual (“Text information”: <https://pcmep.net/texts.php>).

Appendices

M2a.StJuliana. <i>Saint Juliana</i>	Unknown	Saint's life, hagiography, martyrdom, <i>vie</i>
M2a.StBrendan. <i>Saint Brendan</i>	Unknown	Saint's life, legend, St. Brendan, religious tale, hagiography, homily, <i>vie</i>
M2a.StEustace. <i>Saint Eustace</i>	Unknown, perhaps East-Midlands	Saint's life, saint's legend, religious tale, legend, hagiography, homily, <i>vie</i>

Table 34:: M2 Middle English poetry texts.

M3: 1350–1420

TEXT	DIALECT	GENRE
M3.BirdFoFe. <i>The Bird with Four Feathers</i>	East-Midlands	penitential poem, transitoriness of life, lamentation, monition, <i>chanson d'aventure</i>
M3.LaurMinot. 11 Poems by Laurence Minot	Northern, (Northern) East Midlands	Political propaganda, 100 Years' War, politics, Laurence Minot, King Edward III, war, epinicion, victory ode, patriotism, national pride

Table 35: M3 Middle English poetry texts.

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List of abbreviations

Glosses follow the Leipzig Glossing Rules,¹ with some adjustments. In glosses, gender is normally not indicated. Among verbal categories, indicative mood and active voice are likewise not specified.

- 1 first person
- 2 second person
- 3 third person
- ACC accusative
- DAT dative
- DEM demonstrative
- DET determiner
- F feminine
- GEN
- IMP imperative
- INF infinitive
- INFL inflected (infinitive)
- M masculine
- N neuter
- NOM nominative
- PL plural
- POSS possessive
- PRS present
- PST past
- PTCP participle
- R recipient
- REFL reflexive morpheme
- REL relative particle/pronoun
- SBJV subjunctive
- SG singular
- T theme

¹ <https://www.eva.mpg.de/lingua/resources/glossingrules.php>.

Authors and Works quoted in examples

Abbreviations for works, cited in examples, follow the corpora conventions. They can be found in the respective documentations at:

- YCOE: <http://penn-historical-corpora.uni-mannheim.de/ycoe/YcoeFiles.htm>.
- YCOEP: <https://www-users.york.ac.uk/~lang18/ptext-list.html>.
- PPCME2: <https://www.ling.upenn.edu/hist-corpora/PPCME2-RELEASE-4/index.html>.
- PCMEP: <https://www.pcmep.net/texts.php>.
- ParCorOE: <https://uploads.strikinglycdn.com/files/05c66d86-e69a-4a73-b1e9-31b54e49d100/Manual1revisado2024.pdf>.
- DOE: <https://corpus-doe-utoronto-ca.unibg.idm.oclc.org/doecorpus/#/lot>.
- MED: <https://quod.lib.umich.edu/m/middle-english-dictionary/bibliography>.

References

- Allen, C. L. (1980). Movement and deletion in Old English. *Linguistic Inquiry*, 11, 261-323
- Allen, C. L. (1995). *Case marking and reanalysis: Grammatical relations from Old to Early Modern English*. Oxford: Oxford University Press.
- Allen, C. L. (1997). Middle English case loss and the “creolization” hypothesis. *English Language and Linguistics*, 1(1), 63–89. doi:10.1017/S1360674300000368.
- Allen, C. L. (2008). *Genitives in Early English: Typology and Evidence*. Oxford: Oxford University Press.
- Allen, C. L. (2016). Typological change: investigating loss of inflection in early English. In M. Kytö & P. Pahta (Eds.) *The Cambridge Handbook of English Historical Linguistics*. (pp. 444-459). Cambridge: Cambridge University Press (Cambridge Handbooks in Language and Linguistics).
- Allen, C. L. (2019). *Dative external possessors in early English* (Vol. 39). Oxford University Press.
- Apresjan, J. D. (1969). *Èksperimental’noe issledovanie russkogo glagola* [Experimental study of the Russian verb]. Moskva: Nauka.
- Barðdal, J. (2006). Construction-specific properties of syntactic subjects in Icelandic and German. *Cognitive Linguistics*, 17(1), 39-106. <https://doi.org/10.1515/COG.2006.002>.
- Barðdal, J. (2007). The semantic and lexical range of the ditransitive construction in the history of (North) Germanic. *Functions of Language*, 14(1), 9-30.

- Barðdal, J. (2009). The development of case in Germanic. In J. Barðdal & S. L. Chelliah (Eds.), *The role of semantic, pragmatic, and discourse factors in the development of case* (pp. 123–159). Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/slcs.108.09bar>.
- Barðdal, J. (2023) *Oblique Subjects in Germanic: Their Status, History and Reconstruction*, Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783111078014>.
- Barðdal, J., & Eythórsson, T. (2003). The change that never happened: The story of oblique subjects. *Journal of Linguistics*, 39(3), 439-472.
- Barðdal, J., Gildea, S., Sommerer, L., & Smirnova, E. (Eds.). (2015). *Diachronic construction grammar*. Amsterdam, Philadelphia: John Benjamins.
- Barðdal, J., & Gildea, S. (2015). Diachronic Construction Grammar: Epistemological context, basic assumptions and historical implications. In J. Barðdal, S. Gildea, L. Sommerer, & E. Smirnova, (Eds.). *Diachronic construction grammar* (pp. 1-50). Amsterdam, Philadelphia: John Benjamins.
- Bailey, C. J. & Maroldt, K. (1977). The French lineage of English. In J. Meisel (Ed.). *Langues en contact: Pidgins, creoles* (pp. 21-53). Tübingen: TBL.
- Baugh, A. C. & Cable, T. (2013). *A History of the English Language*. London, New York: Routledge.
- Beadle, R. and Fletcher, A. J. (Eds.) (2008). *The Cambridge Companion to Medieval English Theatre*. (2nd ed.). Cambridge: Cambridge University Press (Cambridge Companions to Literature).
- Beda (1997). *The Old English version of Bede's Ecclesiastical history of the English people*. Edited by T. Miller. The early English text society. Oxford: Oxford University press.
- Bergen, B. & N. Chang. (2013). Embodied Construction Grammar. In T. Hoffmann & G. Trousdale (Eds.). *The Oxford Handbook of Construction Grammar*. (pp. 168-190). Oxford: Oxford University Press.
- Boas, H. C. & Sag, I. A. (Eds.). (2012). *Sign-Based Construction Grammar*. Stanford: CSLI Publications.
- Bosson, G. (1998). Le marquage différentiel de l'objet dans les langues d'Europe. In J. Feuillet (Ed.). *2 Actance et Valence dans les Langues de l'Europe*. (pp. 193-258). Berlin/New York: De Gruyter Mouton. <https://doi.org/10.1515/9783110804485.193>.
- Brigada Villa, L. & Giarda, M. (2023). Using modern languages to parse ancient ones: a test on Old English. In L. Beinborn, K. Goswami, S. Muradoğlu, A. Sorokin, R. Kumar, A. Shcherbakov, E. M. Ponti, R. Cotterell & E. Vylomova (Eds.). *Proceedings of the 5th Workshop on Research in Computational Linguistic Typology and Multilingual NLP* (pp. 30-41). Dubrovnik, Croatia. Association for Computational Linguistics. [10.18653/v1/2023.sigtyp-1.4](https://doi.org/10.18653/v1/2023.sigtyp-1.4).

- Broccias, C. and Torre, E. (2020). Attraction and differentiation in the history of the English dative and benefactive alternations. In C. Fedriani, & M. Napoli. (Eds.). *The Diachrony of Ditransitives*. (pp. 169-196.) Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110701371-006>.
- Brugmann, C. M. (1988). *The Syntax and Semantics of 'have' and Its Complements*. Berkeley: University of California. PhD Thesis.
- Butler, M. C. (1980). *Grammatically Motivated Subjects in Early English*. Austin: University of Texas. PhD Thesis.
- Bucci, G., & Barðdal, J. (2024). Dative subjects in Gothic: evidence from word order. *INDOGERMANISCHE FORSCHUNGEN*, 129(1), 101–147. <https://doi.org/10.1515/if-2024-0005>.
- Cennamo, M. (2015). Valency patterns in Italian. In: A. Malchukov & B. Comrie (Eds.). *Volume 1 Introducing the Framework, and Case Studies from Africa and Eurasia*. (pp. 417-482). Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110338812-017>.
- Cennamo, M., Eythórsson, T. & Barðdal, J. (2015). Semantic and (morpho)syntactic constraints on anticausativization: Evidence from Latin and Old Norse-Icelandic. *Linguistics*, 53(4), 677-729. <https://doi.org/10.1515/ling-2015-0015>
- Colman, F. (1988). Heavy arguments in Old English. In J. Anderson and N. MacLeod (Eds.). *Edinburgh Studies in the English Language 1*, 33-89.
- Cook, A. (1921). *A first book in Old English*. The Athenæum Press.
- Corona, G. (2008). Ælfric's (Un)Changing Style: Continuity of Patterns from the Catholic Homilies to the Lives of Saints. *The Journal of English and Germanic Philology*, 107(2), 169–189. <http://www.jstor.org/stable/20722611>.
- Cox, R. (1972). THE OLD ENGLISH DICTS OF CATO. *Anglia*, 90(Jahresband), 1-42. <https://doi.org/10.1515/angl.1972.1972.90.1>.
- Croft, W. (2000). *Explaining language change: An evolutionary approach*. London: Longman.
- Croft, W. (2001). *Radical Construction Grammar: Syntactic Theory in Typological Perspective*. Oxford: Oxford University Press.
- Croft, W. & Cruse, D. A. (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Crossley-Holland, K. (Ed.). (1999). *The Anglo-Saxon World: An Anthology*. Oxford University Press, USA.
- Dillon, J. (1998). *Language and Stage in Medieval and Renaissance England*. Cambridge: Cambridge University Press.
- Dixon, R. M. W. (1994). *Ergativity*. Cambridge: Cambridge University Press.

- Dixon, R. M. W. (1991). *A New Approach to English Grammar, On Semantic Principles*. Oxford: Oxford University Press.
- de Cuypere, L. 2015a. A multivariate analysis of the old English ACC + DAT double object alternation. *Corpus Linguistics and Linguistic Theory*, 11, 1–30.
- De Cuypere, L. (2015b). The Old English to-dative construction. *English Language and Linguistics*, 19(1), 1–26.
- Doane, A. N. (Ed.). (1991). *The Saxon Genesis: An Edition of the West Saxon “Genesis B” and the Old Saxon Vatican “Genesis”*. Madison: University of Wisconsin Press.
- Donohue, M. (2008). Semantic Alignment Systems: What’s what, and what’s not. In M. Donohue & S. Wichmann (Eds.), *The Typology of Semantic Alignment*, (pp. 24-75). Oxford University Press.
- Faulkner, A. & Leneghan, F. (2024). *The age of Alfred: rethinking English literary culture c. 850-950*. Turnhout: Brepols.
- Faulkner, M. (2022). *A New Literary History of the Long Twelfth Century: Language and Literature between Old and Middle English*. Cambridge: Cambridge University Press (Cambridge Studies in Medieval Literature).
- Fedriani, C. (2013). The *me pudet* construction in the history of Latin. Why and how fast non-canonical subjects come and go. In I. A. Seržant, & L. Kulikov (Eds.). *The Diachronic Typology of Non-Canonical Subjects*. [Studies in Language Companion Series 140] 2013. (pp. 203-230.) Amsterdam, Philadelphia: John Benjamins.
- Fidalgo Allo, L. (2022). The Semantic Map of «Aktionsart» and Lexical Entailment of Old English Strong Verbs. *Journal of English Studies*, 20, 59-86. <https://doi.org/10.18172/JES.5185>.
- Fillmore, C. J. (1992). Frame semantics. In The Linguistic Society of Korea (Eds.). *Linguistics in the Morning Calm*. (pp. 111-137). Seoul: Hanshin.
- Fillmore, C. J. & Kay, P. (1993). *Construction Grammar*. Ms., U.C. Berkeley.
- Fischer, O., Van Kemenade, A., Koopman, W., & Van der Wurff, W. (2000). *The syntax of early English*. Cambridge: Cambridge University Press.
- Francini, M. (2017). La letteratura anglosassone. In M. Battaglia (Ed.). *Le civiltà letterarie del Medioevo germanico* (pp. 137-276). Roma: Carocci.
- Francovich Onesti, N. & Digilio, M. R. (2004). *Breve storia della lingua inglese*. Roma: Carocci.
- Francovich Onesti, N. (2002)(2015). *Filologia germanica. Lingue e culture dei germani antichi*. Roma: Carocci.
- Fraser, T. (1987). The establishment of *by* to denote agency in English passive constructions. In A. Giacalone Ramat, O. Carruba & G. Bernini (Eds.). *Papers from the 7th International Conference on Historical Linguistics* (pp. 239-249). Amsterdam, Philadelphia: John Benjamins.

- Fulk, R. D. (1992). *A history of Old English meter*. Philadelphia: University of Pennsylvania Press.
- Fulk, R.D. (2012). *An Introduction to Middle English*. Peterborough, ON: Broadview Press
- García García, L. (2020). The basic valency orientation of Old English and the causative *ja*-formation: a synchronic and diachronic approach. *English Language and Linguistics*, 24(1), 1-25.
- García García, L. (2023). Lability and the rigidification of word order: evidence from Early Middle English. *Linguistics*, 61(5), 1233-1258.
- García García, L., & Ruiz Narbona, E. (2021). Lability in Old English verbs: Chronological and textual distribution. *Anglia*, 139(2), 283-326.
- García García, L., Ingham, R. (2023). Language Contact Effects on Verb Semantic Classes: Lability in Early English and Old French. In S. M. Pons-Sanz & L. Sylvester (Eds.). *Medieval English in a Multilingual Context*. New Approaches to English Historical Linguistics. (pp 343–375) Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-30947-2_12.
- Geniušienė, E. (1987). *The typology of reflexives*. Berlin, Boston: Mouton de Gruyter. <https://doi.org/10.1515/9783110859119>.
- Giarda, M. (2022). *Valency patterns in Old English*. Pavia: University of Pavia. Unpublished MA Thesis
- Giarda, M. (2023) *Understood reflexive object in Old English*. ICEHL-22, Book of Abstracts. Sheffield.
- Ginevra R., Biagetti E., Brigada Villa L., Giarda M. (2024). A Constructionist and Corpus-Based Approach to Formulas in Old English Poetry. *Languages*, 9(7), 237. <https://doi.org/10.3390/languages9070237>.
- Giuliani, M. (2021). *Valency patterns in Latin*. Pavia: University of Pavia. Unpublished MA Thesis
- Giuliani, M. & Zanchi, C. (2025). Contributing to a New Database on Valency Classes with Latin Data. Challenges and Perspectives. In L. Pultrová & M. Vaníková (Eds.). *Exploring Latin: Structures, Functions, Meaning: Volume I: Word. Volume II: Clause and Discourse* (pp. 263-282). Berlin, Boston: De Gruyter. <https://doi.org/10.1515/9783111332956-017>.
- Godden, M. R. (1980). Ælfric's changing vocabulary. *English Studies*, 61(3), 206–223. <https://doi.org/10.1080/00138388008598046>.
- Godden, M. R. (2007). DID KING ALFRED WRITE ANYTHING? *Medium Ævum*, 76(1), 1–23. <https://doi.org/10.2307/43632294>.
- Godden, M. R. (2009). Chapter Five. Ælfric And The Alfredian Precedents. In H. Magennis and M. Swan (Eds.). *A Companion to Ælfric*. Leiden, The Netherlands: Brill. <https://doi.org/10.1163/ej.9789004176812.i-468.32>.

- Goldberg, A. E. (1995). *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: The University of Chicago Press.
- Goldberg, A. E. (2006). *Constructions at work: The Nature of Generalization in Language*. Oxford: Oxford University Press.
- Goldberg, A. E., (2016). Constructionist Approaches, In T. Hoffmann & G. Trousdale (Eds.). *The Oxford Handbook of Construction Grammar*. (pp. 14-31) Oxford: Oxford Academic.
- Goossens, L. (1985). Framing the linguistic action scene in Old and Present-day English: OE *cweðan*, *secgan*, *sprecan* and Present-day English *speak*, *talk*, *say* and *tell* compared. In J. Fisiak (Ed.). *Papers from the VIth International Conference on Historical Linguistics, Poznań, 22–26 August 1983* (pp. 149-70). Amsterdam, Philadelphia: John Benjamins.
- Gretsch, M. (2009). Chapter Four. *Ælfric, Language And Winchester*. In H. Magennis & M. Swan (Eds.). *A Companion to Ælfric*. Leiden, The Netherlands: Brill.
<https://doi.org/10.1163/ej.9789004176812.i-468.25>
- Grimshaw, J. (1990). *Argument structure*. Cambridge, Mass: The MIT Press.
- Haspelmath, M. (1993). More on the typology of inchoative/causative verb alternations. *Causatives and transitivity* 23, 87-121. <https://doi.org/10.1075/slcs.23.05has>.
- Haspelmath, M. (2003). The geometry of grammatical meaning: semantic maps and crosslinguistic comparison. In M. Tomasello (Ed.). *The new psychology of language: Cognitive and Functional Approaches to Language Structure, Vol. 2* (pp. 211-242). Mahwah: Lawrence Erlbaum Associates Publishers.
- Haspelmath, M. (2015a). Ditransitive constructions. *Annual Review of Linguistics*, 1(1), 19-41.
- Haspelmath, M. (2015b). Transitivity prominence. In A. Malchukov, & B. Comrie (Eds.). *Volume 1 Introducing the Framework, and Case Studies from Africa and Eurasia*. (pp. 131-148). Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110338812-008>.
- Haspelmath, M. (2016). Universals of causative and anticausative verb formation and the spontaneity scale. *Lingua Posnaniensis*, 58(2), 33-63.
- Haspelmath, M., Calude, A., Spagnol, M., Narrog, H., & Bamyaci, E. (2014). Coding causal–noncausal verb alternations: A form–frequency correspondence explanation¹. *Journal of linguistics*, 50(3), 587-625.
- Hellan, L., Malchukov A. L. & Cennamo, M. (2017). *Contrastive Studies in Verbal Valency*. Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/la.237>.
- Herbst, T. & K. Gotz-Votteler. (2007). *Valency: Theoretical, Descriptive and Cognitive Issues*. Berlin: Mouton de Gruyter.

- Hill, B. (1977). The twelfth century *Conduct of Life*, formerly the *Poema Morale* or *A Moral Ode*. *Leeds Studies in English*, New Series, vol. IX, pp. 97-144.
- Hopper, P. J. & Thompson, S. A. (1980). Transitivity in grammar and discourse. *Language*, 56(2): 251-299.
- Horrocks, G. & Stavrou, M. (2010). Morphological aspect and the function and distribution of cognate objects across languages. In M. Rappaport Hovav, E. Doron & I. Sichel (Eds.). *Lexical semantics, syntax, and event structure*. (pp. 284–308). Oxford: Oxford University Press.
- Iglesias Rábade, L. (2008). *Handbook of Middle English: grammar and texts*. München: LINCOM Europa.
- Ingham, R. (2020). How contact with French drove patient-lability in English. *Transactions of the Philological Society*, 118(3), 447–467.
- Inglese, G. (2021). Anticausativization and basic valency orientation in Latin. In S. Luraghi & E. Roma (Eds.). *Valency over Time: Diachronic Perspectives on Valency Patterns and Valency Orientation* (pp. 133-168). Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110755657-005>.
- Zanchi, C. & Inglese, G. 2022. Ancient Greek valency patterns and alternations. Paper presented at the 3rd *International Colloquium on Ancient Greek Linguistics*, Universidad Autónoma de Madrid, Spain, 16-18 June 2022.
- Jackendoff, R. (1990). *Semantic Structures*. Cambridge, Mass.: MIT Press.
- Jespersen, O. (1917). *Negation in English and other languages*. Copenhagen: Host.
- Ježek, E. (2003). *Classi di Verbi tra Semantica e Sintassi* Edizioni ETS. DOI:10.1400/28226.
- Ježek, E. (2016). *The Lexicon: An Introduction*. Oxford: Oxford University Press.
- Johnson, K. P., Burns, P. J., Stewart, J., Cook, T., Besnier, C. & Mattingly, W. J. B. (2021). The Classical Language Toolkit: An NLP Framework for Pre-Modern Languages. In Ji, H., Park, J.C. & Xia R. (Eds.). *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing: System Demonstrations* (pp. 20-29). 10.18653/v1/2021.acl-demo.3.
- Jones, M. A. (1988). Cognate Objects and the Case-Filter. *Journal of Linguistics*, 24(1): 89-110.
- Kemmer, S. (1993). *The Middle Voice*. Amsterdam, Philadelphia: John Benjamins.
<https://doi.org/10.1075/tsl.23>.
- Kittilä, S. (2010). *Transitivity typology*. In J. J. Song (Ed.). *The Oxford Handbook of Linguistic Typology* (pp. 346-367). Oxford: Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780199281251.013.0018>.

- Klein, T. P. (1998). *The coarser senses in Old English, a study of the Old English verbs of tasting, smelling, touching, and perceiving*. Toronto: University of Toronto. PhD Thesis.
- Klein, T. (2022). Does Preverbal Old English *Ge-* Have Semantic or Aspectual Force?: Evidence from the *Dictionary of Old English*. *Studia Neophilologica*, 94(1), 87–104.
<https://doi.org/10.1080/00393274.2021.2025146>.
- Kulikov, L. (2009). Valency-changing categories in Indo-Aryan and Indo-European: A diachronic typological portrait of Vedic Sanskrit. In A. Saxena and Å. Viberg (eds) *Multilingualism: Proceedings of the 23rd Scandinavian Conference of Linguistics, Uppsala University 1–3 October 2008*, Acta Universitatis Upsaliensis, Studia Linguistica Upsaliensa 8. Uppsala: Uppsala Universitet.
- Lacalle Palacios, M. (2021a). Old English verbs of increasing: the semantics and syntax of change in size. *Revista de lingüística y lenguas aplicadas*, 16, 123-141.
<https://doi.org/10.4995/RLYLA.2021.14700>.
- Lacalle Palacios, M. (2021b). Old English verbs of learning: information and knowledge acquisition. *Selim: Journal of the Spanish Society for Medieval English Language and Literature = Revista de la Sociedad Española de Lengua y Literatura Inglesa Medieval*, 26, 25-56.
<https://doi.org/10.17811/SELIM.26.2021.25-56>.
- Lacalle, M. (2022a). Old English verbs of depriving: the semantics and syntax of possession transfer. *Studia Neophilologica*, 94(1), 32-58. <https://doi.org/10.1080/00393274.2021.1879672>.
- Lacalle Palacios, M. (2022b). Old English verbs of teaching and learning within the framework of Role and Reference Grammar. *SELIM 32. Book of Abstracts*, 66-67.
- Lacalle Palacios, M. (2024). Organizing the Lexicon by Means of Grammatical Behaviour: The Verbal Class of Deprive in Old English. In Martín Arista, J., & Elvira Ojanguren López, A. (Eds.) *Structuring Lexical Data and Digitising Dictionaries. Grammatical Theory, Language Processing and Databases in Historical Linguistics* (Vol. 85, pp. 264-297). Leiden, The Netherlands: Brill. https://doi.org/10.1163/9789004702660_012.
- Laing, M. (1993). *Catalogue of sources for a linguistic atlas of early medieval English*. Cambridge: D.S. Brewer.
- Laing, M. (2000). Never the twain shall meet. Early Middle English - the East-West divide. In: I. Taavitsainen, T. Nevalainen, P. Pahta & M. Rissanen (Eds.) *Placing Middle English in Context*. (pp. 97-124). Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110869514.97>.
- Lakoff, G. (1987). *Women, Fire and Dangerous Things. What Categories Reveal about the Mind*. Chicago: University of Chicago Press.

- Langacker, R. W. (1987). *Foundations of cognitive grammar: Volume I: Theoretical prerequisites*. Stanford CA: Stanford University Press.
- Langacker, R. W. (1991). *Foundations of cognitive grammar: Volume II: Descriptive application*. Stanford CA: Stanford University Press.
- Langacker, R. W. (2008). *Cognitive Grammar: A Basic Introduction*. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195331967.001.0001>.
- Lavidas, N. (2013). Null and cognate objects and changes in (in)transitivity: Evidence from the history of English. *Acta Linguistica Hungarica*, 60(1), 69-106. <https://doi.org/10.1556/aling.60.2013.1.2>.
- Lavidas, N. (2014). Cognate arguments and the Transitivity Requirement in the history of English. *Lingua Posnaniensis*, 56, 41-59.
- Lehmann, C. (2016). Latin causativization in typological perspective. In P. Poccetti (Ed.), *Latinitatis rationes. Descriptive and historical accounts for the Latin Language* (pp. 917-942). Berlin: Mouton de Gruyter.
- Levin, B. (1993). *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: University of Chicago Press.
- Levin, B. & Rappaport Hovav, M. (2005). *Argument Realization*. Cambridge: Cambridge University Press (Research Surveys in Linguistics).
- Los, B. L. J. (2002). The loss of the indefinite pronoun man: syntactic change and information structure. In T. Fanego, M. J. López-Couso & J. Pérez-Guerra (Eds.), *English Historical Syntax and Morphology* (pp. 181-202). Amsterdam, Philadelphia: John Benjamins.
- Luraghi, S. (2004). Null objects in Latin and Greek and the relevance of linguistic typology for language reconstruction. In K. Jones-Bley, M. E. Huld, A. Della Volpe & M. Robbins Dexter (Eds.), *Proceedings of the 15th Annual UCLA Indo-European conference* (pp. 234–256). Washington DC: Institute for the Study of Man.
- Luraghi, S. (2010). Adverbial Phrases. In P. Baldi & P. Cuzzolin (Eds.), *Volume 2 Constituent Syntax: Adverbial Phrases, Adverbs, Mood, Tense* (pp. 19-108). Berlin, New York: De Gruyter Mouton. <https://doi.org/10.1515/9783110215458.19>.
- Luraghi, S. (2012). Basic valency orientation and the middle voice in Hittite. *Studies in language*, 36(1), 1-32.
- Luraghi, S. (2020a). *Experiential verbs in Homeric Greek*. Leiden: Brill.
- Luraghi, S. (2020b). External possessor constructions in Indo-European. In J. Barðdal, S. Gildea & E. R. Lujan Martines (Eds.), *Reconstructing syntax* (pp. 162–196). Leiden: Brill.

- Luraghi, S., Apro시오, A. P., Zanchi, C., & Giuliani, M. (2024). Introducing PaVeDa–Pavia Verbs Database: Valency Patterns and Pattern Comparison in Ancient Indo-European Languages. In R. Sprignoli & M. Passarotti (Eds.). *Proceedings of the Third Workshop on Language Technologies for Historical and Ancient Languages (LT4HALA)@LREC-COLING-2024* (pp. 79-88). ELRA and ICCL, Torino, Italia.
- Magennis, H. (2011). *The Cambridge Introduction to Anglo-Saxon Literature*. Cambridge: Cambridge University Press.
- Malchukov, A. L. (2005). Case pattern splits, verb types and construction competition. In M. Amberber & H. de Hoop (Eds.). *Competition and variation in natural languages* (pp. 73-117). London, New York: Elsevier.
- Malchukov, A. (2015). Valency classes and alternations: Parameters of variation. In A. Malchukov & B. Comrie (Eds.). *Valency classes in the world's languages. Vol.1.* (pp. 73-130). Berlin: Mouton De Gruyter.
- Malchukov, A. & Siewierska, A. (2011). Introduction. In A. Malchukov and A. Siewierska (Eds.). *Impersonal constructions. A cross-linguistic perspective.* (pp. 1–15). Amsterdam, Philadelphia: John Benjamins.
- Malchukov, A., Haspelmath, M. & Comrie, C. (2010). Ditransitive constructions: a typological overview. In A. Malchukov, M. Haspelmath & B. Comrie (Eds.). *Studies in ditransitive constructions. A comparative handbook* (pp. 1–64). Berlin & New York: Mouton de Gruyter.
- Malchukov, A. & Comrie, B. (2015). *Valency Classes in the World's Languages*. Berlin: Mouton De Gruyter.
- Manganella, G. (1976). *L'anglosassone e il sassone antico. Grammatica*. Napoli: Liguori Editore.
- Martín Arista, J. (2012). The Old English Prefix *Ge-*: A Panchronic Reappraisal. *Australian Journal of Linguistics*, 32(4), 411–33. doi:10.1080/07268602.2012.744264.
- Mateo Mendaza, R. (2013). The old english exponent for the semantic prime TOUCH. Descriptive and methodological questions. *Australian Journal of Linguistics*, 33(4), 449-466.
<https://doi.org/10.1080/07268602.2013.857574>.
- Mateo Mendaza, R. (2016a). The Old English Exponent for the Semantic Prime MOVE*. *Australian Journal of Linguistics*, 36(4), 542-559.
<https://doi.org/10.1080/07268602.2016.1169976>.
- Mendaza, R. M. (2016b). The search for Old English semantic primes: The case of Happen. *Nordic Journal of English Studies*, 15(1), 71-99.

- Mateo Mendaza, R. (2020). Semantic primes in historical languages. The identification of the Old English exponent for DO. *Journal of English Studies*, 18, 125-151.
<https://doi.org/10.18172/JES.4467>.
- Mateo Mendaza, R. (2021). Identifying the Old English exponent for the semantic prime LIVE. *Selim: Journal of the Spanish Society for Medieval English Language and Literature = Revista de la Sociedad Española de Lengua y Literatura Inglesa Medieval*, 26, 85-107.
<https://doi.org/10.17811/SELIM.26.2021.85-107>.
- Mateo Mendaza, R. (2022). Identifying the Old English exponent of the semantic prime DIE. *SELIM 32. Book of Abstracts*, 74-75.
- Maurer, F. (1952). *Nordgermanen und Alemannen. Studien zur germanischen und frühdeutschen Sprachgeschichte, Stammes- und Volkskunde*. Bern-Munich: Francke Verlag.
- McIntosh, A., Samuels, M. L. & Benskin, M. (1986). *A Linguistic Atlas of Late Medieval English, 1350-1450 (LALME)*. Aberdeen: Aberdeen University Press / Edinburgh: Mercat Press. See also eLALME <http://www.lel.ed.ac.uk/ihd/elalme/elalme.html> (last accessed 25/11/2025).
- McMillion, A. (2006). *Labile verbs in English: Their meaning, behavior and structure*. Stockholm: Department of English, Stockholm University.
- Mereu, L., & Piunno, V. (2024). The argument structure of verbs of communication in Italian. *Lingue e linguaggio*, 23(1), 81-110.
- Middeke, K. (2022). *The Old English case system: case and argument structure construction*. Leiden: Brill.
- Miestamo, M. (2014). Partitives and negation: a cross-linguistic survey. In S. Luraghi & T. Huumo (Eds.). *Partitive Cases and Related Categories* (pp. 63-86). Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110346060.63>.
- Mitchell, B. (1985). *Old English syntax*. Oxford: Clarendon Press.
- Möhlig-Falke, R. (2012). The Early English Impersonal Construction. An Analysis of Verbal and Constructional Meaning. *English and American Studies in German*, 012(1), 4-7.
<https://doi.org/10.1515/east-2012-0004>.
- Molencki, R. (2017). Chapter 6: Syntax. In L. Brinton & A. Bergs (Eds). *Volume 2 Old English*. (pp. 100-124). Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110525304-006>
- Moretti, L. (2022). A multivariate analysis of causative do and causative make in Middle English. *Linguistics Vanguard*, 8(1), 165-176.
- Myura, A. (2015). *Middle English Verbs of Emotion and Impersonal Construction: Verb Meaning and Syntax in Diachrony* (Oxford Studies in the History of English). New York, NY: Oxford University Press.

- Næss, Å. (2007). *Prototypical Transitivity*. Amsterdam, Philadelphia: John Benjamins.
- Nichols, J, Peterson, D. A., & Barnes, J. (2004). Transitivity and detransitivising languages. *Linguistic Typology*, 8(2), 149-211.
- Ogura, M. (2008). Old English verbs of tasting with accusative/genitive/of-phrase. *Neophilologus*, 92(3), 517-522.
- Ojanguren López, A. E. (2018). Defining meanings by grammatical behaviour. The case of English verbs of inaction. *RAEL: revista electrónica de lingüística aplicada*, 17(1), 121-138.
- Ojanguren López, A. E. (2019a). Old English verbs of prohibition: grammatical behaviour and class membership. *Selim: Journal of the Spanish Society for Medieval English Language and Literature = Revista de la Sociedad Española de Lengua y Literatura Inglesa Medieval*, 24, 1-28. <https://doi.org/10.17811/SELIM.24.2019.1-28>
- Ojanguren López, A. E. (2019b). The lexical representation of English verbs of action. Complex predicates and structures. *Revista de lingüística y lenguas aplicadas*, 14, 131-140. <https://doi.org/10.4995/RLYLA.2019.11080>.
- Ojanguren López, A. E. (2020). The Semantics and Syntax of Old English End Verbs. *Atlantis: Revista de la Asociación Española de Estudios Anglo-Norteamericanos*, 42(1), 163-188. <https://doi.org/10.28914/ATLANTIS-2020-42.1.09>.
- Ojanguren López, A. E. (2022). Old English genitive deverbal nominalisations with verbs of inaction. An RRG-based study. *SELIM 32. Book of Abstracts*, 84-85.
- Orchard, A. (1995). *Pride and prodigies: studies in the monsters of the Beowulf-manuscript*. Cambridge: Brewer.
- Ottósson, K. (2013). The anticausative and related categories in the Old Germanic Languages. In F. Josephson & I. Söhrman (Eds.). *Diachronic and typological perspectives on verbs* (pp. 329-382). Amsterdam, Philadelphia: John Benjamins.
- Payne, D. & Barshi, I. (Eds.). (1999). *External Possession*. [Typological Studies in Language No. 39]. Amsterdam, Philadelphia: John Benjamins.
- Palander-Collin, M. (1998). GRAMMATICALIZATION OF “I THINK” AND “METHINKS” IN LATE MIDDLE AND EARLY MODERN ENGLISH: A Sociolinguistic Perspective. *Neophilologische Mitteilungen*, 99(4), 419-442.
- Percillier, M. (2016). Verb lemmatization and semantic verb classes in a Middle English corpus. In S. Dipper, F. Neubarth & H. Zinsmeister (Eds.). *Proceedings of the 13th Conference on Natural Language Processing (KONVENS 2016)* (pp. 209-214). Retrieved from https://www.linguistics.rub.de/konvens16/pub/26_konvensproc.pdf.

- Percillier, M. (2018). A Toolkit for lemmatising, analysing, and visualising Middle English Data. In A. U. Frank, C. Ivanovic, F. Mambrini, M. Passarotti, & C. Sporleder (Eds.). *Proceedings of the Second Workshop on Corpus-Based Research in the Humanities CRH-2* (pp. 153–160). Retrieved from <https://www.oeaw.ac.at/fileadmin/subsites/academiaecorpora/PDF/CRH2.pdf>.
- Percillier, M., & Trips, C. (2020). Lemmatising Verbs in Middle English Corpora: The Benefit of Enriching the Penn-Helsinki Parsed Corpus of Middle English 2 (PPCME2), the Parsed Corpus of Middle English Poetry (PCMEP), and A Parsed Linguistic Atlas of Early Middle English (PLAEME). In N. Calzolari, F. Béchet, P. Blache, K. Choukri, C. Cieri, T. Declerck, S. Goggi, H. Isahara, B. Maegaard, J. Mariani, H. Mazo, A. Moreno, J. Odijk & S. Piperidis *Proceedings of the 12th Language Resources and Evaluation Conference* (pp. 7170–7178). Marseille, France: European Language Resources Association. Retrieved from <https://www.aclweb.org/anthology/2020.lrec-1.886>.
- Perek, F. (2015). *Argument structure in usage-based construction grammar*. Amsterdam, Philadelphia: John Benjamins.
- Peterson, D. A. (2007). *Applicative constructions*. Oxford: Oxford University Press.
- Petré, P. (2005). *On the variables determining the life span of English prefix constructions: A case study of the two prefixes be- and to- (NHG zer-)*. Leuven: Unpublished MA thesis.
- Petré, P. (2006). The prefix be-/bi-as a marker of verbs of deception in late Old and early Middle English. *BELL: Belgian Journal of English Language and Literatures*, 4, 109-127.
- Petré, P. (2010). The functions of weorðan and its loss in the past tense in Old and Middle English. *English Language and Linguistics*, 14(3), 457–484. doi:10.1017/S1360674310000158.
- Petré, P. & Cuyckens, H. (2008). The Old English copula weorðan and its replacement in Middle English. In M. Gotti, M. Dossena, & R. Dury (Eds.). *English historical linguistics 2006, vol. 1: Historical syntax and morphology. Selected papers from ICEHL 14*. (pp. 23–48). Amsterdam, Philadelphia: John Benjamins.
- Petré, P. & Cuyckens, H. (2009). Constructional change in Old and Middle English copular constructions and its impact on the lexicon. *Folia Linguistica Historica*, 30, 311–65.
- Pielecha, S. (2014). Reflexivity in Old English. *Anglica. An International Journal of English Studies*, 23(2), 53-62.
- Pintzuk, S. (1996). Old English verb-complement word order and the change from OV to VO. *York Papers in Linguistics*, 17, 241-264.
- Plank, F. & Lahiri, A. (2015). Microscopic and macroscopic typology: Basic valence orientation, more pertinacious than meets the naked eye. *Linguistic Typology*, 19(1), 1-54.

- Pocheptsov, G. (1997). Quasi-impersonal verbs in Old and Middle English. In J. Fisiak (Ed.). *Studies in Middle English Linguistics* (pp. 469-488). Berlin, New York: De Gruyter Mouton. <https://doi.org/10.1515/9783110814194.469>.
- Quick, R. & Wren, C. L. (1960). *An Old English grammar*. London: Methuen & CO LTD.
- Ramat, P. S. (1980). *Introduzione alla linguistica germanica*. Bologna: Patron Editore.
- Rissanen, M. (1987). Old English Indefinite Pronouns Meaning ‘Some’ and ‘Any’, with Special Reference to *hw*-forms. In Kahlas-Tarkka, L. (ed.) *Neophilologica Fennica: Société Néophilologique 100 ans (Mémoires de la Société Néophilologique de Helsinki, 45)*. Helsinki: Société Néophilologique.
- Rissanen, M. (1997). Whatever Happened to the Middle English Indefinite Pronouns? In J. Fisiak (Ed.) *Studies in Middle English Linguistics*, (pp. 513-529). Berlin, New York: De Gruyter Mouton.
- Roma, E. & Zanchi, C. 2025. «Old Irish in the PaVeDa database». In D. R. Cooper, R. A. Martin, G. S.D. O’Toole & S. E. Puopolo (Eds.) *Proceedings of the Harvard Celtic Colloquium. Vol. 42, 2023*. Cambridge/London: Harvard University Press. 212-238.
- Royster, J. F. (1922). Old English causative verbs. *Studies in Philology*, 19(3). 328–356.
- Ruiz Narbona, E. (2018). *Transitivising Formations in Competition? Labiality and the Effects of Preverbs on Old English Causative Oppositions*. Logroño: University of La Rioja. PhD Thesis.
- Ruiz Narbona, E. (2019). The Old English verbal prefixes *for-* and *ge-*: Their effects on the transitivity of morphological causative pairs. In M. Cennamo, & C. Fabrizio (Eds.). *Historical linguistics 2015: Selected papers from the 22nd International Conference on Historical Linguistics, Naples, 27-31 July 2015 (Current Issues in Linguistic Theory 348)* (pp. 217–243). Amsterdam, Philadelphia: John Benjamins.
- Rusten, K. A. (2019). *Referential Null Subjects in Early English* (Oxford Studies in Diachronic and Historical Linguistics 35). Oxford: Oxford University Press.
- Saibene, M. G. & Buzzoni, M. (2014). *Manuale di linguistica germanica*. Milano: Cisalpino – Monduzzi.
- Sauer, H. and Waxenberger, G. (2017). Chapter 9: Dialects. In L. Brinton & A. Bergs (Eds.). *Volume 2 Old English*. (pp. 160-186). Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110525304-009>.
- Saunders, C. J. (ed.) (2010) *A companion to medieval poetry*. London: Wiley-Blackwell.
- Sausa E. (2016). Basic valency orientation in Homeric Greek. *Folia linguistica Historica*, 37, 205-238.

- Seržant, I. A. (2021). Typology of partitives. *Linguistics*, 59(4), 881-947.
<https://doi.org/10.1515/ling-2020-0251>.
- Sievers, E. (1875). *Der Heliand und die angelsächsische Genesis*. Halle: Max Niemeyer.
- Sinar, R. (2006). *A history of English reflexives: from Old English into Early Modern English*. York: University of York. PhD thesis.
- Smith, J. J. (2022). *Essentials of Early English: An Introduction to Old, Middle, and Early Modern English* (3rd ed.). London, New York: Routledge. <https://doi.org/10.4324/9781003199472>.
- Steels, L. (Ed.). (2011). *Design patterns in fluid construction grammar*. Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/cal.11>.
- Steels, L. (Ed.). (2012). *Computational issues in fluid construction grammar*. Berlin: Springer Verlag. <https://doi.org/10.1007/978-3-642-34120-5>.
- Tarsi, M., & Zanchi, C. (2025). Basic valency orientation in Gothic. *INDOGERMANISCHE FORSCHUNGEN*, 130(1), 7-32.
- Tesnière, L. (1959). *Elements de syntaxe structurale*. Paris: Klincksieck.
- Townend, M. (2002). *Language and History in Viking Age England: Linguistic Relations between Speakers of Old Norse and Old English*, Studies in the Early Middle Ages 6. Turnhout: Brepols.
- Traugott, E. C. (2020). The intertwining of differentiation and attraction as exemplified by the history of recipient transfer and benefactive alternations. *Cognitive Linguistics*, 31(4), 549-578.
- Treharne, E. & Pulsiano, P. (2017). An Introduction to the Corpus of Anglo-Saxon Vernacular Literature. In P. Pulsiano, & E. Treharne (Eds.). *A Companion to Anglo-Saxon Literature*. (pp. 1–10). Oxford: Blackwell Publishing Ltd.
- Trips, C. (2002). *From OV to VO in Early Middle English*. Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/la.60>.
- Trips, C., & Stein, A. (2018). A comparison of multi-genre and single-genre corpora in context of contact-induced change. In R. Whitt (Ed.). *Diachronic Corpora, Genre and Language Change* (pp. 241–260). Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/sci.85.11tri>.
- Trotter, D. (2017). Chapter 12: Middle English Creolization. In L. Brinton & A. Bergs (Eds.) *Volume 3 Middle English*. (pp. 224-238). Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110525328-012>.
- Trousdale, G. (2016). Construction grammar. In M. Kytö & P. Pahta (Eds.). *The Cambridge Handbook of English Historical Linguistics*. (pp. 65–78). Cambridge: Cambridge University Press (Cambridge Handbooks in Language and Linguistics).
- Tsunoda, T. (1981). Split case-marking in verb types and tense/aspect/mood. *Linguistics*, 19, 389-438.

- Tsunoda, T. (1985). Remarks on transitivity. *Journal of Linguistics*, 21, 385–396.
- van Bergen, L. (2003). *Pronouns and Word Order in Old English: With Particular Reference to the Indefinite Pronoun Man (1st ed.)*. London: Routledge. <https://doi.org/10.4324/9781315686974>.
- van Gelderen, E. (2000). *A history of English reflexive pronouns*. Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/la.39>.
- van Gelderen, E. (2011). Valency changes in the history of English. *Journal of Historical Linguistics*, 1(1), 106–43.
- van Gelderen, E. (2014). Changes in Psych-verbs: A reanalysis of little v. *Catalan Journal of Linguistics*, 13, 99–122.
- van Gelderen, E. (2018). *The Diachrony of Verb Meaning: Aspect and Argument Structure*. New York: Routledge.
- van Kemenade, A. (1987). *Syntactic Case and Morphological Case in the History of English*. Dordrecht: Foris.
- van Kemenade, A. (1995). Old and Middle English. In E. König & J. van der Auwera (Eds.). *The Germanic Languages* (pp. 110-141). London, New York: Routledge.
- van Kemenade, A. (2012). Rethinking the loss of verb second. In N. Terttu & E. C. Traugott (Eds.). *The Oxford handbook of the history of English (822-834)*. Oxford: Oxford University Press.
- van Valin, R. & LaPolla, R. (1997). *Syntax: Structure, meaning and function*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139166799>.
- Vázquez-González, J. G. (2024). Updating Old English Dative–Genitives: A Diachronic Construction Grammar Account. *Languages*, 9(6), 213.
- Vázquez-González, J. G. & Barðdal, J. (2019). Reconstructing the ditransitive construction for Proto-Germanic: Gothic, Old English and Old Norse-Icelandic. *Folia Linguistica*, 53(40-2), 555-620.
- Vea Escarza, R. (2017). Classifying Old English Verbs of Perception on a Semantic-syntactic Basis. *Studies in the History of the English Language. SHEL10*.
- Vea Escarza, R. (2018). A syntactic-semantic analysis of Old English verbs of honour and reverence. *9th International Conference on Historical Lexicology and Lexicography*.
- Vea Escarza, R. (2019). Old English ‘be sorry for and grieve at’ verbs: class membership and syntactic behaviour. *ICHLL 10 – 10th International Conference on Historical Lexicography and Lexicology*.
- Vea Escarza, R. (2020). Old English verbs of envy: Class membership and grammatical behaviour. In P. J. Grund & M. E. Hartman, *Studies in the History of the English Language VIII*:

- Boundaries and Boundary-Crossings in the History of English* (pp. 187-208). De Gruyter.
<https://doi.org/10.1515/9783110643282-008>.
- Vendler, Z. (1967). Verbs and Times. In Z. Vendler (Ed.). *Linguistics in Philosophy* (pp. 97-121). Ithaca, NY: Cornell University Press. <https://doi.org/10.7591/9781501743726-005>.
- Vezzosi, L. (1998). Passive constructions: the case of Old English. *Folia linguistica historica*, 32(Historica-vol-19-1-2), 53-64.
- Vezzosi, L. (2015). Reciprocal Strategies in Middle English. *Filologia Germanica*, 7, 183-211.
- Visser, F. T. (1963). *An historical syntax of the English language*. Leiden: Brill.
- von Mengden, F. (2017a). Chapter 3: Old English: Overview. In L. Brinton & A. Bergs (Eds.). *Volume 2 Old English* (pp. 32-49). Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110525304-003>.
- von Mengden, F. (2017b). Chapter 5: Morphology. In L. Brinton & A. Bergs (Eds.). *Volume 2 Old English* (pp. 77-99). Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110525304-005>.
- Walkden, G. (2013). Null subjects in Old English. *Language variation and change*, 25(2), 155-178.
- Walkden, G. (2016). The HeliPaD: A parsed corpus of Old Saxon. *International Journal of Corpus Linguistics* 21(4), 559-571.
- Wełna, J. (2017). Chapter 4: Morphology. In L. Brinton & A. Bergs (Eds.). *Volume 3 Middle English* (pp. 50-75). Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110525328-004>.
- Williamson, K. (2017). Chapter 8: Dialects. In L. Brinton & A. Bergs (Eds.). *Volume 3 Middle English* (pp. 134-164). Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110525328-008>.
- Wischer, I. (2000). Grammaticalization versus lexicalization: ‘*Methinks*’ there is some confusion. In O. Fischer, A. Rosenbach & D. Stein (Eds.). *Pathways of Change: Grammaticalization in English*. (pp. 355-370). Amsterdam, Philadelphia: John Benjamin.
<https://doi.org/10.1075/slcs.53.17wis>.
- Zanchi, C. & Tarsi, M. (2021). Valency patterns and alternations in Gothic. In S. Luraghi & E. Roma (Eds.). *Valency over Time: Diachronic Perspectives on Valency Patterns and Valency Orientation*. (pp. 31-88). Berlin, Boston: De Gruyter Mouton.
<https://doi.org/10.1515/9783110755657-003>.
- Zanchi, C., Luraghi, S. & Combei, C. R. (2022). PaVeDa-Pavia Verbs Database: Challenges and Perspectives. In E. Vylomova, E. Ponti & R. Cotterell (Eds.). *Proceedings of the 4th workshop*

on research in computational linguistic typology and multilingual NLP (pp. 99-102). Seattle, Washington: Association for Computational Linguistics.

Zehentner, E. (2018). Ditransitives in Middle English: on semantic specialisation and the rise of the dative alternation. *English Language and Linguistics*, 22(1), 149–175.

doi:10.1017/S1360674316000447.

Zehentner, E. (2019). *Competition in Language Change: The Rise of the English Dative Alternation*. Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110633856>.

Zehentner, E., & Traugott, E. C. (2020). Constructional networks and the development of benefactive ditransitives in English. In L. Sommerer & E. Smirnova (Eds.). *Nodes and networks in diachronic construction grammar* (pp. 168-211). Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/cal.27>.

Zehentner, E., Röthlisberger, M., & Coleman, T. (2023). Ditransitive constructions in Germanic languages : new avenues and new challenges. In E. Zehentner, M. Röthlisberger, & T. Coleman (Eds.). *Ditransitives in Germanic languages : synchronic and diachronic aspects* (Vol. 7, pp. 1–18). Amsterdam, Philadelphia: John Benjamins. <https://doi.org/10.1075/sigl.7.00zeh>.

Zimmermann, R. (2024). How fear developed from an object to a subject experiencer verb: Remarks on argument structure change. *Journal of Historical Linguistics*.

<https://doi.org/10.1075/jhl.24003.zim>.

Zúñiga, F., & Kittilä, S. (2019). *Grammatical Voice*. Cambridge: Cambridge University Press.

Corpora, databases and websites

Cameron, A., Amos, A.C., diPaolo Healey, A. et al. (Eds.). (2024). *Dictionary of Old English: A to Le online*. Retrieved from <https://doe.artsci.utoronto.ca/> (last accessed 25/11/2025).

Cennamo, M & Fabrizio, C. (2013). Italian (Standard Italian). In I. Hartmann, M. Haspelmath, & B. Taylor (Eds.). *Valency Patterns Leipzig*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Retrieved from <http://valpal.info/contributions/ital1282>. (last accessed 25/11/2025).

diPaolo H. A., J.P. Wilkin & X. Xiang. (2009) *Dictionary of Old English Web Corpus*. Retrieved from <https://tapor.library.utoronto.ca/doecorpus/> (last accessed 25/11/2025).

Goddard, C. (2013). English. In I. Hartmann, M. Haspelmath, & B. Taylor (Eds.). *Valency Patterns Leipzig*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Retrieved from <http://valpal.info/contributions/stan1293> (last accessed 25/11/2025)

- Hartmann, I., Haspelmath, M. & Taylor, B. (Eds.). (2013). *Valency Patterns Leipzig*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Retrieved from <http://valpal.info> (last accessed 25/11/2025).
- Haspelmath, M. & Baumann, L. (2013). German (Standard). In I. Hartmann, M. Haspelmath, & B. Taylor (Eds.). *Valency Patterns Leipzig*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Retrieved from <http://valpal.info/contributions/stan1295> (last accessed 25/11/2025).
- Kroch, A. & Taylor, A. (2000). *Penn Helsinki Parsed Corpus of Middle English, second edition*. <https://www.ling.upenn.edu/hist-corpora/PPCME2-RELEASE-4/index.html> (last accessed 25/11/2025).
- Kroonen, G. (2013). *Etymological Dictionary of Proto-Germanic*, Leiden: Brill. Retrieved from <https://brill.com/view/title/12611> (last accessed 25/11/2025).
- Laing, M. (2013–) *A Linguistic Atlas of Early Middle English, 1150–1325*, Version 3.2. Edinburgh: © The University of Edinburgh. Retrieved from <http://www.lel.ed.ac.uk/ihd/laeme2/laeme2.html> (last accessed 25/11/2025).
- Lewis, R. E. Lewis, et al. (1952-2001). *Middle English Dictionary*. Ann Arbor: University of Michigan Press, Online edition in Middle English Compendium. Ed. F. McSparran, et al. Ann Arbor: University of Michigan Library, 2000-2018. <http://quod.lib.umich.edu/m/middle-english-dictionary/>.(last accessed 25/11/2025).
- Martín Arista, J., Domínguez Barragán, S., García Fernández, L., Ruíz Narbona, E., Torre Alonso, R. & Vea Escarza, R. (comp.). (2021). *ParCorOEv2. An open access annotated parallel corpus Old English-English*. Nerthus Project, Universidad de La Rioja. <https://www.nerthusproject.com/previous-versions> (last accessed 25/11/2025).
- Martín Arista, J. (Ed.), Domínguez Barragán, S., Fidalgo Allo, L., García Fernández, L., Hamdoun Bghiyel, Y., Lacalle Palacios, M., Mateo Mendaza, R., Novo Urraca, C., Ojanguren López, A. E., Ruíz Narbona, E., Torre Alonso, R. & Vea Escarza, R. (2023). *ParCorOEv3. An open access annotated parallel corpus Old English-English*. Nerthus Project, Universidad de La Rioja, Retrieved from www.nerthusproject.com (last accessed 25/11/2025).
- Pintzuk, S., & Plug, L. (2002). *The York Helsinki Parsed Corpus of Old English Poetry*. Department of Linguistics, University of York. Oxford Text Archive, first edition. <https://www-users.york.ac.uk/~lang18/pcorpus.html> (last accessed 25/11/2025).
- Polinsky, M. (2013). Applicative Constructions. In M. S. Dryer & M. Haspelmath (Eds.). *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Retrieved from <http://wals.info/chapter/109> (last accessed 25/11/2025).

- Randall, B. (2004-). *CorpusSearch 2*. <http://sourceforge.net/projects/corpussearch> (last accessed 25/11/2025).
- Taylor, A., Warner, A., Pintzuk, S. & Beths, F. (2003). *The York Toronto Helsinki Parsed Corpus of Old English Prose (YCOE)*. Department of Linguistics, University of York. Oxford Text Archive, first edition. <https://penn-historical-corpora.uni-mannheim.de/ycoe/YCOEHomepage.html> (last accessed 25/11/2025).
- Taylor, A., Nurmi, A., Warner, A., Pintzuk, S. & Nevalainen, T. (Eds.). (2006). *Parsed Corpus of Early English Correspondence (PCEEC)*. York & Helsinki: Universities of York and Helsinki. Retrieved from <https://ota.bodleian.ox.ac.uk/repository/xmlui/handle/20.500.12024/2510>. (last accessed 25/11/2025)
- Toller, T.N., C. Sean & O. Tichy (Eds.). (2014). *An Anglo-Saxon Dictionary Online* Prague: Faculty of Arts, Charles University. Retrieved from <https://boswortholler.com/> (last accessed 25/11/2025).
- Zimmermann, R. (2014). *The Parsed Corpus of Middle English Poetry (PCMEP)*. Retrieved from <https://pcmep.net/> (last accessed 25/11/2025).