‘Busked hem redy boun’: Integrating Norse-derived *busken* into the class of ‘prepare’ verbs in medieval English

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This paper advances a recent line of inquiry investigating how loan verbs are assigned argument structure in the replica language and whether lexical copying may effect changes in argument structure. It delineates how Middle English *busken* ‘prepare’ (< Old Norse reflexivised *búa-sk*) is assigned argument structure in the replica language both by copying from the model language and by assignment from near-synonyms in the replica language as a mixed copy. A comparative qualitative corpus study of the structural integration of *busken* and the diachronic development of its native near-synonyms in Old and Middle English shows how cognacy of linguistic units and structures, and mutual intelligibility between the languages in contact influence the lexical and, more importantly, structural outcomes of contact.

Keywords: Anglo-Scandinavian contact, loan verb, argument structure, Middle English, reflexives, ‘prepare’

1. Introduction

The field of Anglo-Scandinavian contact studies has long focussed on the lexical outcomes of this contact in medieval English (Björkman 1900–02; Hug 1987; Pons-Sanz 2013; Dance 2003, 2019; Dance, Pons-Sanz & Schorn 2019). The present study takes this indispensable line of work as its point of departure to investigate how Norse-derived lexis, especially verbs, is accommodated into the linguistic system of Middle English (ME; 1150–1500 CE) with regard to its argument structure realisation.[1] Verbs are particularly interesting regarding the struc-

1. Following Dance (2003, 2019) and the *Gersum* project (Dance, Pons-Sanz & Schorn 2019), the term ‘Norse-derived’ is used to indicate the high level of nuance characterising ME lexis influenced by or copied from Old Norse. Moreover, the term ‘Old Norse’ is used broadly to refer to the North Germanic varieties spoken by Scandinavians who came to Britain during the Viking Age. For the sake of referencability, Old Norse terms are quoted as recorded in the *Dic-*

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tural outcomes of language contact because they are a semantically and morphologically complex lexical category central to event description. The horizontal transfer of verbs' form-meaning parings also affects which argument structures they license in the language system.

This work follows recent research programmes that investigate the impact of language contact on verb argument structure and resulting morphosyntactic changes in the replica language (Holler 2015; Trips & Stein 2019; Trips 2020a, b; Percillier, Schauwecker, Stein & Trips 2024).[2] However, it is the first investigation of argument structural contact outcomes to focus on the Anglo-Scandinavian contact situation and the effects of the closeness between these languages.[3] This contact situation poses multiple new challenges to this line of inquiry. The language pair in contact, Old Norse (ON) and Old English (OE), is characterised by a close genealogical relationship, linguistic closeness, wealth of cognate lexis and likely mutual intelligibility (cf. Townend 2002; Keller 2020). This complicates the researcher's task of distinguishing between what is inherited as cognate from a common ancestor and what is transmitted through contact (cf. Dance 2003, 2019, *inter alia*). For this very reason, the detailed qualitative investigation presented here contributes greatly to our understanding of the structural outcomes of lexical transfer overall and of the impact of the Anglo-Scandinavian contact on English in particular.

First, a deeper examination of the concept of cognacy on all linguistic levels is required to capture what it entails for the investigation of the argument structure of lexical verbs transmitted horizontally between two languages as closely related as Old Norse (ON) and Old English (OE). The term 'cognate' is traditionally used in reference to lexical words as descendant "from a single common ancestor in the common ancestral language" (Trask 1996: 78). But this inheritance relation has also been applied in the contexts of sounds, morphemes and, most importantly to this work, in morphosyntax, especially concerning verb argument structure

tionary of Old Norse Prose (ONP) (Sigurðardóttir et al. 2021). This should not be taken as suggesting that the quoted lemmas necessarily are the exact forms encountered by English speakers in interaction with Norse speakers. Likewise, the term 'Old English' is used to refer to any and all varieties of Old English spoken during contact. Old English terms are referenced as in the *Bosworth-Toller Anglo-Saxon Dictionary* (BTASD) (Bosworth 2014).

2. Weinreich's (1953) 'model language' refers to what Johanson's (1999, 2002) code-copying approach terms the 'model code', i.e., the linguistic system on the model of which a linguistic element is borrowed or rather 'copied'. Parallelly, Weinreich's 'replica language' refers to Johanson's 'basic code', i.e., the linguistic system into which a linguistic element enters. The present work follows Johanson's approach (cf. Section 3) but uses both sets of terms synonymously in their general sense for increased readability.

3. See Elter (2023, 2024, forthcoming) for earlier work resulting from this research programme.

(Barðdal & Eyþórsson, 2012: 9; Barðdal & Eyþórsson, 2020; see Walkden 2013 for an overview and criticism).

Following the general definition of cognate linguistic units, the assessment of cognacy of proposed loan lexis established in lexicographical work on Anglo-Scandinavian contact traditionally only concerns their phonological form, semantic properties, and morphological derivation but beyond that generally does not include an assessment of their combinational and structural properties (cf. Dance, Pons-Sanz & Schorn 2019; Dance 2003). This means that, while a verb proposed to be a Norse-derived loan may have a well-established formal and semantic cognacy link to a native unit in English, the morphosyntactic properties and the possible argument structure realisation of this loan verb in equivalent contexts have not necessarily been established as being cognate. This work deals with exactly this gap by investigating the argument structural integration of the Norse-derived ME verb *busken* 'prepare'.[4]

As Section 3 lays out, the present work follows Barðdal and Eyþórsson's (2012, 2020) reconstruction approach and Barðdal (1999, *inter alia*) in assessing the assignment of argument structure to new verbs by setting them in relation to their model code etyma as well as to their basic code cognates and non-cognate synonyms. Drawing on these horizontal (cross-linguistic, synchronic) and vertical (intralingual, diachronic) comparisons, the present work assesses how argument structure is assigned to individual Norse-derived verbs in medieval English, i.e., at the junction of OE and ME. More generally, it shows how sensitive argument structure is to horizontal transmission in this type of contact scenario, especially where only some properties of the lexical unit are cognate.[5] Moreover, where model and basic codes differ or vary in the realisation of morphosyntactic operations and constructions, like reflexivisation, comparison of copied verbs with native cognate verbs and non-cognate synonymous verbs allows us to assess whether copies are integrated with model code patterns or assigned basic code cognate or non-cognate patterns.[6]

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4. The present work constitutes part of a research programme which investigates the argument structural integration of proposedly Norse-derived ME verbs of varying cognacy relations to native lexemes and varying kinds and degrees of Old Norse influence on the ME verb (cf. Elter 2023, 2024, forthcoming).

5. See Section 3 for definition of linguistic units as segmental.

6. See Walkden (2013) on approximating fulfilment of the *Double Cognacy Condition* in syntactic reconstruction by identifying correspondences in syntax. The author acknowledges that Walkden (2013) and Barðdal and Eyþórsson (2012, 2020) operate on different theoretical assumptions but does not generally subscribe to either approach here. The present work assumes that patterns of argument realisation and their corresponding semantic verb meanings found in multiple closely related languages may indeed be commonly inherited as cognates from the shared ancestor language. These patterns could be tentatively proposed as recon-

The present work investigates the structural integration of the Norse-derived verb ME *busken* 'prepare', which enters English as a simplex lexical verb based on an Old Norse reflexivised form ON *búask* (ON *búa* + *-sk*) (Dance, Pons-Sanz & Schorn 2019, *busk* v.; cf. Warner 2017: 373). The closeness of this verb's cognacy relation to its proposed cognate root in pre-contact English, OE *būan*, varies across their contrasting derivational, semantic and possibly argument structural properties. Furthermore, the model and replica language systems vary in the morphosyntactic patterns licensed for the expression of a central argument-reducing operations: reflexivisation (cf. Section 5.1). A predicate can be said to be used reflexively when two of its syntactic arguments are coreferential (Haspelmath 2023: 20). Depending on the language, reflexivity may be marked by various strategies like the use of coreferential personal pronouns (e.g., OE reflexive construction), reflexive pronouns (e.g., ON *sik*) or verbal suffixes (e.g., ON *-sk*) (cf. Haspelmath 2023). However, strategies marking reflexivity may also serve other functions, as is the case for ON *-sk* which also marked middle voice, reciprocity and anticausativity (Barnes 2008: 146; cf. Walkden 2013: 111f.). Strategies varying between languages in contact may lead to integration conflicts during lexical copying (cf. Trips 2020b).[7]

The present work asks how Norse-derived *busken* is assigned argument structure in medieval English in relation to its etymon, native cognate lexemes and native non-cognate near-synonyms (cf. Section 4). It seeks to illuminate whether only the model code's reflexivised sense of this verb was transferred into the English basic code resulting in corresponding argument structure patterns in ME, or if ME *busken* was assigned argument structure in analogy to native near-synonyms on the basis of semantic equivalence, thus gaining senses and argument structures realised by these near-synonyms in addition to its model code sense and pattern.

Contextualising the integration of ME *busken* in the medieval English verb lexicon, the set of near-synonymous verbs recorded in OE and ME as lexicalising 'prepare' are investigated as *comparanda*, with the integration of *busken* serving as the pivotal point for diachronic comparison. This semantic class of near-synonyms is specifically interesting because multiple Norse-derived verbs enter this set as a result of Anglo-Scandinavian contact (e.g., ME *atlen*(*-ien*), *busken, greithen*, …). Verbs are copied, variant forms of cognate verbs are adopted (e.g., ME *yāren* (<OE) and *gēren* (<ON)) and verbs are derived from Norse-derived

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structable proto-patterns for the common ancestor language, i.e., cognate patterns, that are inherited through the vertical transmission of language between generations.

7. See Sections 4 and 5 for details on OE and ON reflexive marking and the functional intransparency of *-sk* in Anglo-Scandinavian contact.

cognate adjectives (e.g., ME *bainen* v.(2), *bǒunen*). The amount of lexical expansion in this set of near-synonyms is remarkable considering the overall lexical outcomes of Anglo-Scandinavian contact. The class of 'prepare' verbs is thus well suited for an investigation into the structural effects of Norse-derived verbs on the argument structure of semantic verb classes in ME.

The structure of the paper will be as follows: The Anglo-Scandinavian contact situation and its implications for contact outcomes are laid out in Section 2. Section 3 expands on the theory of loan verb integration and assignment of argument structure to new verbs. Section 4 presents the case study on the integration of Norse-derived *busken* into the ME class of 'prepare' verbs. Section 5 discusses the results in the context of the argument structure assignment strategies available to speakers for individual copies and projects possible effects on the argument realisation of semantic verb classes, while Section 6 concludes.

2. Anglo-Scandinavian contact: Prior research and considerations

The contact between speakers of Old English and Old Norse presents researchers with a singular set of situational properties. These include the varying intensity, socio-economic dynamics, topological reach, and duration of the contact situation, the genealogical relation, typological and lexical closeness of the languages in contact, and the probable status of existing bilingualism and possible mutual intelligibility. Over time, the Anglo-Scandinavian contact in England varies significantly in these factors, but altogether roughly spans 787–1042 CE and spreads from the northeast to cover an area commonly known as the Danelaw (Pons-Sanz 2013: 6f.). Both languages are Germanic and proposedly only diverged around 200–250 years before coming into contact in North-East England (cf. Townend 2002: 41). This close genealogical connection is reflected in high lexical closeness and a degree of structural similarity that arguably resulted in a shared "adequate intelligibility" (Townend, 2002: 183) for productively monolingual speakers of the languages in contact.[8] This enabled speakers to employ processes of accommodation and levelling between the languages in a so-called 'switching code' (Townend 2002: 60, 183ff.) produced in their own native language rather than necessitating individual productive bilingualism.[9] Townend (2002: 60, 185, 189) consequently

8. While phrasing it differently, Björkman (1900–02: 8) and others also come to this conclusion earlier on (cf. Warner 2017: 375f.). See Keller (2020) for supporting evidence on lexical closeness.

9. See Warner (2017) for an analysis of koineisation as being the primary process characterising the structural outcomes of Anglo-Scandinavian contact. While Warner's analysis is congruent

postulates a high level of societal bilingualism in the most intense phase and area of continuous contact (cf. Pons-Sanz 2013: 6–9; cf. Warner 2017). Mutual intelligibility, and typological and lexical closeness have been proposed as factors facilitating copying (Johanson 1999: 49, 2002: 297, 306; cf. Winford 2003: 51ff.) and the need for extensive restructuring of copies "[...] may be smaller in the case of relatively similar codes, such as mutually intelligible and structurally similar dialects" (Johanson 2002: 297). Thus, monolingual speakers would also have been able to identify interlingual correspondences between Old Norse and Old English and copy linguistic units like lexis and even combinational patterns (Townend 2002: 60, 203; cf. Weinreich 1953: 56).

Concerning contact outcomes, the present work takes the detailed assessment of the *Gersum* project (Dance, Pons-Sanz & Schorn 2019) and Dance (2003, 2019) as its lexicographical basis and follows their classification of evidence and terminology for lexemes' etymological origin. One should note that differences in, first and foremost, the existence of cross-linguistic cognates and, secondarily, their formal and semantic closeness, lead to differences in identifiability of cognate pairs to speakers during contact. Identifiable cognacy is what impacts the integration of new words and consequently results in different contact outcomes (cf. Elter 2023, 2024, forthcoming).

3. Contact-induced change in verb argument structure

This section lays out how loan verbs are adopted into their replica language and how their argument structure is adapted accordingly. Verbs are semantically meaningful lexical units that contain representations of events. This representation defines the structure of a clause that a lexical verb may instantiate including information concerning the number of arguments taken by the verb, their semantic relation in the event and their morphosyntactic expression (Jackendoff 1990; cf. Rappaport Hovav & Levin 1998). Thus, argument structure realisation patterns are the morphosyntactic expression of the abstract representation of both semantic and combinational properties of lexical verbs.

In his code-copying approach, Johanson (1999, 2002, *inter alia*) proposes a segmental definition of linguistic units. This approach models copying as the non-identical replication of a linguistic unit from the model code at a speaker-subjectively equivalent position in the basic code. Johanson (1999, 2002) proposes

with Townend's (2002) assessment of the languages' mutual intelligibility, it proposes that the linguistic outcome represents a koine serving as a lingua franca rather than representing the unfocussed and non-stabilised production results of a set of active accommodation processes.

differences between types of copies according to whether a linguistic unit is copied from the model code as a 'global copy', with the whole set of material, semantic, frequential, and (morphosyntactically) combinational properties, or not. Where only selected properties of a linguistic unit are copied into the basic code, Johanson (1999: 41, 2002: 292) terms this 'selective copying'. 'Mixed copying' "combines both techniques, thus yielding selective – typically combinational or frequential – copies that comprise at least one global copy" (Johanson 2002: 292). At insertion, the model code properties of the copied unit are adapted to the basic code system (Johanson 1999, 2002: 296f.). The necessary kind and degree of adaptation and how it is achieved depend on the type of copy made and the formal and structural closeness of the languages and linguistic units in contact (cf. Johanson 2002: 297). Afterwards, copies behave as units of the basic code and are subject to its internal processes and constraints (Johanson 1999: 52).

While Johanson does not investigate the copying of verb argument structure specifically, this model is well suited to describe the effects of lexical copying of verbs on the argument structures possible in the replica language (cf. Percillier et al. 2024). I take global copying of argument-taking lexical units – verbs – as involving their material form and semantics, in the traditional sense of the 'lexeme', and the combinability of these linguistic units in larger structures, explicitly their morphosyntactic properties. From this approach, it also follows that verb argument structure as an abstract representation of lexical verbs' semantic and syntactic properties may be copied between model and basic code in global copies or in selective semantic and combinational copies (Johanson 1999: 44f.).

However, copying argument structure from the model code is not the only strategy by which newly copied verbs may receive argument structure in the basic code. Four strategies have been aggregated from work by Barðdal (1999, 2001, 2008, 2012) in Barðdal and Eyþórsson (2020: 216): assignment of argument structure realisation (i) as copied from the model code, (ii) by default in the basic code, (iii) by inheritance via identification with a cognate verb in the basic code, (iv) by analogy to native non-cognate synonymous verbs in the basic code.

Teasing apart these strategies is not straightforward when it involves contact between closely-related languages like Old Norse and Old English. The pervasive nature of cognacy between the languages is also reflected in a high similarity between the languages' canonical argument realisation patterns, meaning that they will match between codes for many functions and structures. Such a wide range of equivalence positions between the languages is conducive to copying and code-convergence (Johanson 2002: 297, 306; Winford 2003: 51ff.). But this also means that determining whether the argument structure of a copy can be identified as assigned from the basic code or as copied from the model code unit depends on whether these patterns themselves even differ between the codes, or more specifically, between model code verb and native equivalent verbs.

Even where model and basic codes differ and strategy (i) can be rejected, discerning between assignment strategies (iii) and (iv) depends on the identifiable existence and the formal, semantic and structural closeness of a native cognate. Proposing assignment of argument structure in analogy to a cognate (i.e., (iii)) hinges on the cognate lexeme being the linguistic unit showing the highest degree of similarity to the copied element, formally and semantically to speakers. As the present work will show, this is not generally the case, even in closely-related, high-cognate language contacts. Consequently, we must gain a deeper understanding of how speakers apply these strategies for the assignment of argument structure in mutually intelligible contact situations. Recent results on the argument structural change potential of language contact (Elter 2023, 2024, forthcoming; Percillier et al. 2024; cf. Holler 2015; Trips 2020a, b; Trips & Stein 2019) have shown that differences in the copying of verbs may affect the argument structure of semantic verb classes and potentially the overall linguistic system of the replica language. Applying this perspective to the Anglo-Scandinavian contact outcomes allows us to test the degree of linguistic divergence between model and basic codes necessary to trigger the integration of new (copied) patterns in the basic code during integration-necessitated restructuring (cf. Johanson 1999: 49, 51f.).

4. The integration of Norse-derived lexemes into the set of medieval English 'prepare' verbs: The case of ME *busken*

The verb *busk* meaning 'prepare, ready, dress' and 'set out, go, hurry', is the descendant of a copy of the ON reflexive 'middle voice' form *búa-sk* 'prepare; manage; coexist' of the lexical verb ON *búa* 'live, dwell; manage sth.; prepare sth.' (cf. ONP, 2*búa* vb.) into ME as *busken* (MED, *busken* v.; Dance, Pons-Sanz & Schorn 2019, *busk* v.; OED, *busk* v.1). While ON *búa* has a cognate in OE *búan* meaning 'live, dwell, inhabit', this verb is not attested in the *Oxford English Dictionary* (OED) (Proffitt n.d.) or the *Bosworth Toller Anglo-Saxon Dictionary* (BTASD) (Bosworth 2014) with senses 'prepare, ready' or 'set out, hurry' (cf. BTASD, *búan* v.). Uses of OE *búan* in reflexive constructions do not show 'prepare' senses parallel to the ON form *búask* but only reciprocal meanings 'coinhabit, coexist'. The ME verb *busken* meaning 'prepare, ready, dress' and 'set out, go, hurry' thus reflects senses attested for the ON cognate and its form *búask*, but not for the OE cognate verb. Based on these semantic properties and the material properties of the characteristically ON reflexivising inflectional suffix -*sk* being part of the stem of the ME lexical verb (cf. Warner 2017: 373), ME *busken* is treated as a copy with a contrasting native cognate (Elter 2024: 222f., forthcoming; cf. Dance, Pons-Sanz & Schorn 2019, *Gersum* A* categories). On all accounts, ME *busken* is derivationally independent of its OE cognate *būan*.

The ON -*sk* reflexivisation affix was not a transparent or productive formation in West-Germanic (cf. Walkden 2013: 113). ME *busken* is the only securely attested Norse-derived verb in English showing -*sk* as part of its stem recorded in the *Gersum* database, OED and *Middle English Dictionary* (MED) (Lewis et al. 1952–2001).[10] Consequently, it is unlikely that speakers of OE would have encountered -*sk* inflection systematically enough during contact to derive its function, and ME *busken* is copied as a simplex.

The present work seeks to identify the source of argument structure assignment to the ME copy and illuminate its integrational effects in the argument structure of the class of ME 'prepare' verbs. An item-oriented and a class-oriented qualitative comparative corpus study are conducted to answer the following research question: How is Norse-derived *busken* assigned argument structure in medieval English in relation to its etymon, native cognate lexemes and native non-cognate near-synonyms? The item-oriented study assesses the argument structure realisation of the ME copy and compares it to those of its ON etymon and native cognate, following comparative approaches to loan word integration. The class-oriented study sets these results in relation to the set of near-synonymous verbs in OE and ME, both native and Norse-derived, and compares the argument structure realisation of these verbs both diachronically and concerning the etymology of 'prepare' verbs.

Based on the formal, derivational and semantic contrast between the ON etymon and the native OE cognate, I hypothesise that the argument structure of ME *busken* is unlikely to be assigned from the native cognate. Considering the structural differences in reflexive marking between model code (verbal -*sk* suffixation or use of reflexive pronoun *sik*) and basic code (use of coreferential personal pronoun; see Section 5), we can test whether argument structure has been assigned in analogy to native near-synonyms rather than globally copied from the model code.

Verb classes showing alternation in argument structure patterns in OE and ME, like variant realisation of reflexives as intransitive reflexives, transitive reflex-

10. Compare that while ME *thrīven* is always given as derived from ON *þrífa-sk* (*Gersum* category B1) and has the sense of the ON reflexivised model form, the material -*sk* was not copied into English. In this it contrasts with ME *busken* for which both material and semantic properties were copied to the basic code. Moreover, a Norse-derived origin of ME *basken* from ON **baða-sk*, as a mediopassive of *baða* meaning 'bathe oneself', is suggested in the OED (OED *bask* v.). However, the MED contests this etymology and neither *Gersum* nor Dance (2019) record evidence for Norse-derivation of this verb (MED *basken* v.).

ives with a coreferential personal pronoun or *self*-reflexives, are especially interesting cases of tracing argument structural integration (cf. Levin 1993: Section 1.2.3). The integration of a copy into a class showing pattern variation may represent a potential of contact-induced change in the copied lexeme's or even class's argument structural behaviour. The set of 'prepare' near-synonyms of *busken* is doubly intriguing because it may be hypothesised to show cumulative contact effects resulting from lexical expansion by multiple Norse-derived verbs with their model code argument structure, as Section 5.2 will discuss.

4.1 Data and methodology

Based on the definition proposed in Section 3, argument structure is operationalised as the set of attested morphosyntactic realisation patterns of verb complements as noun phrases (NP), thematic prepositional phrases (PP) and clausal complements (CL). A qualitative comparison of the argument structure patterns of ME *busken* to those of its model code etymon in ON and to the baseline of near-synonymous ME verbs overall synchronically reveals the source of argument structure assignment to this copy. The general occurrence of patterns for the full class of 'prepare' verbs in each language stage and their occurrence by lemma are examined diachronically, comparing OE and ME, to assess the overall loss or gain of licensed patterns. This reveals how the argument structure realisations of this class developed during and after direct contact with ON and whether the integration of Norse-derived verbs like ME *busken* affected changes in its licensed patterns.

4.1.1 Verb class compilation and data extraction

Investigating a polysemous verb like ME *busken* in relation to its semantic verb class requires abstraction of the underlying meaning structure of this verb's basic senses. Drawing on the dictionaries' definitions of senses of the lexical verb (MED *busken*; OED *busk* v.1), this work proposes ME *busken* to be polysemous in two sets of basic senses. First, senses of preparation (including dressing) (MED *busken*, senses 1–3) and second, senses of motion (MED *busken*, senses 4–5). This work takes the former as representing (caused) change of state events and the latter as representing (caused) change of location events. The analysis below focuses on (caused) change of state events and leaves the latter to future research.

Following the decomposition of change of state verbs by Rappaport Hovav and Levin (1998: 108) and the definitions posited for verbs lexicalising 'prepare, make ready, get ready', I take ME *busken* to realise the event structure template [[X ACT] CAUSE [BECOME [Y <STATE>]]] and filling the <STATE> constant with a result state of 'preparedness' or 'readiness' as its idiosyncratic meaning component.

Considering this event structure and the frames posited for Present-Day English (PDE) verbs lexicalising 'prepare, make|get ready' (cf. Unified Verb Index (UVI), *prepare*), I propose the following participants for ME *busken* in its respective senses: First, in causative change of state events, ME *busken* semantically s-selects for a THEME which is affected by this activity and an AGENT causing the THEME to be affected (see Examples (5) and (6) below). This THEME may be coreferential to the AGENT subject in *argument reflexive* senses (compare Example (3) below, cf. Steinbach, 2002: 4; Trips, 2020b). Second, in non-causative change of state senses of 'prepare, get ready', ME *busken* s-selects at least for an AGENT executing the preparatory activity. The overt categorical c-selection of a coreferential THEME pronoun in the morphosyntax in a *non-argument reflexive* (Steinbach 2002) is possible but not obligatory, because the reflexivity of preparatory action is prototypical (compare Examples (2) vs (3) below; cf. Rappaport Hovav & Levin 1998: 115f.; Jackendoff 1990; OED *busk* v.1 senses I.1.b vs. I.1.c & I.2.b; UVI, *prepare*).[11] Optionally, a PURPOSE or a BENEFICIARY of the preparation event might be realised among other non-core elements, like specification of the RESULT state (see Examples (3)–(6) below; cf. UVI, *prepare* v.).

Like the item-oriented study, the extension of the corpus analysis to the verb class of near-synonyms of ME *busken* focuses only on (caused) change of state events (Section 4.2.2) lexicalising result states of preparedness or readiness as their root in OE and ME. This way it can more closely account for the relationships between argument realisations and the lexicalised senses determining them. Specifically when investigating the possible integration effects of Norse-derived verbs that share partial synonymy with one or more other Norse-derived verbs in ME, like the 'prepare' senses of ME *busken, gēren*, and *bǒunen*, the extension of item-oriented studies must focus on such shared meanings (cf. approach established in Elter 2024).

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11. Concerning the argument status of the varying reflexive uses, Fischer (1992: 237–238) proposes that OE reflexive pronouns are generally thematic making them argument reflexives. Recent work shows that both argument reflexives and non-argument reflexives exist in OE and ME (Trips 2020b: 6–8, van Gelderen 2018, Chapter 6). The senses recorded for *busken* and the present analysis suggest that this is also true for this polysemous verb: Firstly, ME *busken* can clearly be realised as an argument reflexive in two-place predications in (internally) caused change of state (cf. Steinbach 2002: 4). Where it receives middle and inherent-reflexive interpretations, the first semantic argument is reduced and syntactically unexpressed and its coreferentiality to the second semantic argument of THEME expressed as the syntactic subject is evident from the context. Secondly, ME *busken* (and PDE *busk* v.1) may also be used as a non-argument reflexive in intransitive constructions as copied from the ON reflexivised etymon.

To compile these lexical sets, a combined dictionary-based approach is employed. Near-synonyms listed up until 1500 CE in *The Historical Thesaurus of English* (Kay et al. 2024), the *Thesaurus of Old English* (Roberts, Kay & Grundy 2017), MED, and BTASD were collated. To avoid conflation between patterns available to Germanic near-synonymous verbs and Latinate or Romance verbs, the latter (e.g., ME *dighten, prēparāten, enǒurnen, gīsen*) were excluded. ME *richen* v.(1), which shows close cognacy between OE **ryccan* and ON *rykkja* and is of somewhat uncertain origin, is included as belonging to the set of native verbs.

The resulting lists of OE and ME verbs are the basis for data extraction utilizing existing lemmatizations in the respective corpora.[12] Data were extracted from *The York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE) (Taylor et al. 2021),[13] *The Penn-Helsinki Parsed Corpus of Middle English (2nd edition)* (PPCME2) (Kroch and Taylor 2000), *A Parsed Linguistic Atlas of Early Middle English* (PLAEME) (Truswell et al. 2018), and *The Parsed Corpus of Middle English Poetry* (PCMEP) (Zimmermann 2018) for ME *busken*, the OE cognate *būan* and the near-synonymous class members for OE and ME. Argument structures licensed for ON *búask* attested in the early texts (–1500 CE) of *The Icelandic Parsed Historical Corpus* (IcePaHC) (Wallenberg et al. 2011) and those documented in *The Dictionary of Old Norse Prose* (ONP) (Sigurðardóttir et al. 2021, 2 *búa* vb.) entry subsection for *búask* served as the cross-linguistic *comparandum* for those attested for the copy in ME. The lexemes and absolute usage frequencies of the OE class of 'prepare' verbs are listed in Table 1 including prefixed forms.[14]

Table 2 lists the ME 'prepare' verbs including prefixed forms and subsectioned into native lemmas, those derived from West-Germanic and transmitted through OE to ME, and lemmas showing varying degrees of Norse influence, as indicated in column 2.[15]

12. Verb lemmatisation for the ME corpora stems from the work of the project *Borrowing of Argument Structure in Contact Situations* (https://tinyurl.com/dfgbasics; cf. Percillier & Trips 2020). A beta version of the lemmatisation-enriched YCOE data was graciously provided by Ann Taylor (Taylor et al. 2021).

13. Thanks are due to Ann Taylor and colleagues for graciously providing a beta version of the YCOE (Taylor et al. 2003) newly enriched with lemmatisation annotations preceding its release (Taylor et al. 2021).

14. Fraser (1985) argues that, while OE did not have a grammatical middle voice, preverbs like *a-* could be used for the lexical derivation of middle semantics. As no true positive instances of *a*-prefixed verbs lexicalising 'prepare' remained in the data after annotation, differences in argument structure between *a*-prefixed and non-prefixed OE verbs could not be tested. See Section 4.3 for results on ME *greithen* and *a-graithen*.

15. This work follows the lexicographical work of Dance (2003, 2019) and the *Gersum* project (Dance, Pons-Sanz & Schorn 2019) in the etymological assessment of ME lexemes and clas-

Table 1. Absolute frequencies of OE verbs lexicalising [[X ACT] CAUSE [BECOME [Y <STATE$_{prepared}$>]]] in YCOE

OE lemma	Definition(s)	Absolute frequency	Absolute frequency of 'prepare' senses
a-būnden	'ready'	0	0
rǣdan	'give|take counsel, determine, prepare'	304	2
a-rǣdan | *ā-rǣdan*	'take counsel, determine, prepare'	28	0
ge-rǣdan	'give counsel, bring about by counsel'	103	6
ā-scirpan	'dress, make ready'	0	0
gearcian	'make ready, prepare, supply'	65	65
ge-gearcian	'make ready, prepare, supply'	47	47
gearwian	'make ready, prepare, clothe, supply'	47	47
geatwan	'make ready, equip'	0	0
dæftan	'make ready, prepare'	2	2
ge-dæftan	'make ready, prepare'	5	5
ge-fysan |*-fȳsian*	'make ready, cause to hurry'	0	0
(ge-)gærwan	'make ready, prepare, dress'	0	0
regnian | *rēnian*	'set in order, arrange, prepare, adorn'	3	3
ge-regnian |*-rēnian*	'set in order, arrange, prepare, adorn'	1	1

sification of evidence for Norse-derivation where available and otherwise draws information from the MED and OED. The verbs treated as Norse-derived in this work vary regarding the nature and strength of evidence for their Norse-derivation and the lexico-categorical nature of the copy (cf. Section 5). See Dance, Pons-Sanz and Schorn (2019) and references therein for assessment of individual lexemes.

Table 2. Absolute frequencies of ME verbs lexicalising [[X ACT] CAUSE [BECOME [Y <STATE$_{prepared}$>]]] in PPCME2, PLAEME and PCMEP

ME lemma	Evidence for Norse-derivation / *Gersum* category	Definition(s)	Absolute frequency	Absolute frequency of ‘prepare’ senses
Native:				
fetlen	N/A	‘shape, fix, prepare, get ready’	0	0
highten v.(2)	N/A	‘beautify, prepare, adorn’	5	1
rēdīen	N/A	‘make ready, prepare, direct or guide oneself’	2	1
birēdīen	N/A	‘prepare, get ready’	110	1
arēdīen	N/A	‘prepare, get|make ready’	0	0
rẹ̄nen	N/A	‘prepare (for), clear a way’	27	2
shāpen	N/A	‘create, establish, ordain, prepare, go, direct’	86	14
yāren	N/A	‘prepare, make ready, make possible’	2	2
yarken	N/A	‘make ready, prepare, marshal, ordain, grant’	39	39
yarknen	N/A	‘prepare, make ready’	0	0
richen v.(1)	uncertain	‘arrange, make ready, dress, mend, pull, move’	2	1
Norse-derived:				
atlen(-ien)	A1*c	‘intend, plan, prepare, advance, be inclined to’	3	3
bainen v.(2)	< bain (adj) A1bc	‘make ready, prepare’	0	0
bŏunen	C3c	‘get ready, dwell, go’	1	1

Table 2. *(continued)*

ME lemma	Evidence for Norse-derivation / *Gersum* category	Definition(s)	Absolute frequency	Absolute frequency of 'prepare' senses
busken	A2*c	'prepare, get ready, provide, clothe, go, hurry'	7	6
gēren	A1*c	'prepare, equip, dress, cause, make'	147	8
(en-)greithen	A1*c	'prepare, dress, provide, cause, make, hasten'	54	51
a-graithen	A1*c	'make ready, prepare, clothe, dress'	10	10
fōr(e)-greithen	< for+greithen	'make ready, prepare'	0	0

4.1.2 Data annotation and analysis

In the raw data, some verbs seem frequent (cf. Tables 1 & 2), but include a high number of homograph forms representing unrelated lexemes (ME *rẹ̄nen* 'prepare' vs *rennen* 'run', *regnen* 'reign' & *birēdīen* 'prepare' vs *birien* 'bury').[16] Additionally, some verbs are polysemous beyond change of state senses connected to preparation (OE *rǣdan*, ME *gēren, greithen, shāpen* & *yarken*). Tokens not representing the target lemmas or target senses were excluded. This resulted in the absolute frequencies per lemma represented in the rightmost columns of Tables 1 and 2. Data extraction and annotation for ON *búask* forms resulted in 113 tokens.

All resulting tokens are semi-automatically annotated for the number and morphosyntactic realisation of overtly expressed arguments and their semantic roles. Annotations followed the pattern [syntactic relation(morphosyntactic realisation)-THEMATIC ROLE] for all realised complement phrases of each verb token (e.g., [subject(nominative)-AGENT; direct object(accusative)-THEME]). Argument structure annotations included nominal and pronominal argument NPs as well as PPs recurrently representing core thematic roles (e.g., *to*-dative RECIPIENT|BENEFICIARY, *for*-prepositional phrase PURPOSE|BENEFICIARY) and finite and non-finite PURPOSE event complement clauses. Patterns showing coreference between two realised complements, specifically an NP-AGENT and a reflexive marker or

16. For information on multiple lemma attribution to ME verb forms by the BASICS lemmatiser, see Percillier (2016: 210) and Percillier and Trips (2020).

personal pronoun, were coded as reflexive, as were absolutive intransitives with reflexive meaning.

Due to the low token frequencies for most of the investigated lemmas, the analysis is restricted to a qualitative comparison of attested existence of argument structure patterns in the data. Cognacy of patterns is assumed to be reconstructible where the patterns attested for near-synonymous lexemes in OE and ON match (cf. Barðdal & Eyþórsson 2020). Consequently, if patterns recorded for ME *busken* match such attested cognate patterns, the strategy of argument structure assignment cannot be further narrowed down than proposing that cognate argument structures are stably transmitted even under the condition of contact.

4.2 Results of the item-oriented study

In the corpus data of the combined corpora of ME, ME *busken* occurs once in a sense of change of location or hurrying (in an early fourteenth-century poem in a Northern dialect; LaurMinot.[Poem_2],5.22.84, PCMEP) and once in the sense of dressing, in the passive clause in (1) with [subject(nominative)-THEME] and adjunct PP INSTRUMENT.

(1) *wen ho wer* ***busket*** *i bis. yer the baner ho*
When they.NOM be.PST.3PL dress.PASS.PTCP in fine.linen there the banner they
ber with costes ful kene
bore with ways very warlike
‘Often, when they were attired in fine linen, they bore the banner there in very warlike ways’[17] (LAM499LYRICS.4, PLAEME)

In the prototypical senses of ‘prepare, get ready’, *busken* occurs once in an intransitive active clause. This token in (2) represents an absolutive use of verbs with reflexive meaning without the use of a coreferential object pronoun which is non-canonical but grammatical in OE and ME (cf. Visser 1966: § 159).

(2) ***Busken*** *bernes. Boues brytnen.*
busk.PRS.3SG man.PL.NOM bows destroy
‘Men make ready. Bows take life.’ [18] (LAM499LYRICS.5, PLAEME)

Both (1) and (2) hail from a collection of alliterative verse lyrics from the margins of a late thirteenth-century manuscript written in Cheshire, likely in a North-

17. Translation from Pickering (1992: 162). Glosses and translations are created by the author unless otherwise indicated. Glosses follow the Leipzig Glossing Rules with addition of the following abbreviations: OBJ=objective case in ME, EMPH=emphatic, RSP=resumptive.

18. Translation from Pickering (1992: 163).

West-Midlands dialect (Pickering 1992: 157, 168–170). Pickering (1992: 157) remarks that these verses are elliptical, highly lyrical and their meaning cryptic. Consequently, their word order and possibly also the lack of expression of a reflexive pronoun might not be representative of the common spoken usage and argument structure realisation of this verb. However, as Dance (2003: 322–324; 2019: 58, 82) discusses, Norse-derived lexis which is primarily attested in alliterative verse outside the Danelaw, like ME *busken,* might have its point of transmission and subsequent dispersion in English exactly in its "useful[ness] in expressive, literary context" (Dance 2003: 322).[19]

Most frequently in the data, *busken* occurs 4 times in transitive constructions with reflexive meaning, where the pronominal NP complement in objective case is the reflexive use of a personal pronoun, coreferential with the subject in a [subject(nominative)-AGENT; reflexive(objective)-THEME] pattern like in Examples (3) and (4).

(3) *Þo bold bernes for to abide* ***Busked*** *hem redy boun.*
Those brave soldier.PL.NOM for to go.forth busk.PST.3PL they.REFL ready ready
'Those brave soldiers prepared themselves fully ready to go forth.'
(AmisAmiloun,15.[Stanza_24].279.103, PCMEP)

(4) *& al his meine bi ich a side* ***Busked*** *hem redi to ride*
And all his company.NOM by each a side busk.PST.3PL they.REFL ready to ride
Wiþ her lord for to gon
with their lord for to go
'And all his company on each side made themselves ready to ride and go with their Lord' (AmisAmiloun,49.[Stanza_87].1038.453, PCMEP)

All four of these occurrences also include a *(for) to*-infinitive complement clause realising the PURPOSE of the preparation and stem from the same lyrical text composed in an East-Midlands dialect in the early fourteenth-century. Two of these instances, (3) and (4), additionally realise a specifying resultative DEGREE adverb lexicalising 'ready'. This transitive pattern is also prominently attested in other texts in the MED and OED (cf. MED *busken* v., sense 1(b)). While the combined ME corpora only attests the reflexive transitive pattern, the dictionaries also regularly attest transitive constructions (also in lyrical texts) describing events

19. Dance refers to lexical choice from an already existing lexical set including Norse-derived lexis rather than the morphosyntactic patterns realised with these copied lexemes. However, the structural properties assigned to Norse-derived verbs during integration into the English basic code may also be affected by the linguistic context of their usage beyond the levels of form, semantics, the lexicon and morphosyntax of the speaker's variety, namely by register and text type specific considerations of the speaker, like style and metre.

of preparation of a THEME for an optionally realised PURPOSE orBENEFICIARY in the pattern [subject(nominative)-AGENT; direct object(objective)-THEME] with (*to*-PP)-PURPOSE, clause ((*for*) *to*-infinitive)-PURPOSE as in (5), or (*for*-PP)-BENEFICIARY as in (6).

(5) *Þe kyng* **boskes** *lettres a-non to bounen his bernes*
The king.SG.NOM busk.PRS.3SG letter.PL.OBJ immediately to boun his soldiers
'The king prepares dispatches immediately to ready his soldiers'
(c1390(?c1350) Jos.Arim.(Vrn)414 as cited in MED *busken* v.)

(6) *Þe* [[*read: þere*]] *were beddes* **busked** *for eny burn*
there be.PST.3PL bed.PL.NOM prepare.PASS.PTCP for any soldier
riche.
noble
'There beds were prepared for any noble soldier.'[20]
(a1375(1335–1361) WPal.(KC 13)3196 as cited in MED *busken* v.)

The etymon of ME *busken* is the ON reflexivised 'middle' formation *búask*. The base verb ON *búa* (cf. ONP 2*búa* vb.) can be used intransitively, in reflexive constructions with *sik* and in transitive constructions with a THEME object in 'prepare sth., dress so.' senses in ON. However, -*sk* inflection detransitivises the form *búask* and expresses reflexive senses of 'prepare, manage', 'set out', 'dress', and reciprocal 'co-exists'. Here the THEME of preparing and the AGENT are coreferential and only a subject is categorically c-selected in the morphosyntax.

In the 113 tokens from the IcePaHC, ON *búask* forms occur mainly in intransitive constructions (111/113) with reflexive meanings of 'prepare' and 'dress' but also with motion meanings of 'go, set out, depart'. In its 'prepare' senses, ON *búask* realises [subject(nominative)-AGENT] and a range of PPs like in (7) and clauses (8) realising PURPOSE complements.

(7) *og* **búast** *til varnar*
and prepare.PRS.IND.3PL.REFL to defense
'and [they] prepare for a defense' (1260.JOMSVIKINGAR.NAR-SAG,.336)

(8) *Einn tíma* **búast** *þeir Finnbogi og Þorkell að*
One time prepare.PRS.3PL.REFL that.NOM Finnbogi.NOM and Þorkell.NOM to
ríða til Gnúps
ride to Gnúp
'One day they, Finnbogi and Thorkell, prepare to ride to Gnūp'
(1350.FINNBOGI.NAR-SAG,653.1582)

20. This work takes passive clauses as in (6) to be valency-reduced transformations, here of a non-reflexive transitive usage of ME *busken*.

Two instances of *búask* inflected for 3rd person singular occur without a nominative subject but instead show an accusative NP. These represent impersonal constructions in the sense of 'be expected' as recorded in the ONP.

As mentioned at the top of Section 4, the native cognate OE *būan* meaning 'live, dwell, inhabit' differs derivationally and semantically from the ON etymon *búask* and the copy ME *busken*. In the YCOE data, OE *būan* is attested 13 times and lexicalises stative senses of 'occupy, inhabit' which can take a LOCATION in accusative case. It does not occur reflexively with coreferent complement pronouns or in reciprocal or comitative senses.

Two mismatches become apparent when one compares the argument structure patterns observed for ME *busken* to those of the ON etymon and the OE cognate. First, in senses of preparation, ME *busken* occurs in intransitive constructions in reflexive senses of 'prepare oneself, get ready' as in (2), while the native cognate OE *būan* cannot. This pattern indicates that the morphologically-marked reflexivity of the ON formation *búask* may have been somewhat preserved as prototypical and inherent in non-argument reflexive intransitive uses of ME *busken*.

Second, ME *busken* occurs transitively, expressing the preparation of a separate THEME entity and, in reflexive constructions, the preparation of the AGENT themself. The ME reflexive formation using coreferential object personal pronouns is a construction unlike what is attested in ON, which uses reflexive pronouns like *sik* (3rd person) or *-sk* affixation as mutually exclusive reflexivising transformation strategies. Moreover, ON *búask* cannot occur in transitive constructions with non-reflexive causative meaning. Thus, the transitive construction in senses 'prepare sth., make ready' recorded for ME *busken* is attested neither for the etymon form *búask* nor for the native cognate verb OE *būan*. It follows that neither OE *būan* nor the ON inflectional form *búask* can be the direct model for this pattern in ME *busken*. One must look to native non-cognate near-synonyms of ME *busken* for the most likely source of the transitive patterns analogously realised in these senses.

4.3 Results of the class-oriented study

4.3.1 'Prepare' verbs in OE

In the YCOE data, all OE 'prepare' verbs are attested with a transitive [subject(nominative)-AGENT; direct object(accusative)-THEME] pattern as in (9) for *gearcian*.

(9) *& mine gemæstan fugelas & ealle mine þing ic*
and my fattened fowl.PL.ACC and all my thing.PL.ACC I.NOM
gearcode
prepare.PST.1SG
'And I prepared my fattened fowl and all my things'
(cocathom1,ÆCHom_I,_35:477.51.6942, YCOE)

Moreover, *rǣdan, a-rǣdan | ā-rǣdan, ge-rǣdan, gearcian, ge-gearcian,* and *gearwian* realise a reflexive transitive pattern with [subject(nominative)-AGENT; reflexive(pronoun.accusative)-coreferential THEME] both with and without (10) emphatic *self.*

(10) *[...] & hie het þæt hie hie mid heora wæpnum*
[...] and them commanded that they.NOM they.ACC.REFL with their weapons
gereden, *& mid þy herige forðferdon*
ready.PST.SBJV.3PL and with that army forth.go
'[...] and [I] ordered them that they should prepare themselves with their weapons and go forth with the army' (coalex,Alex:10.12.77, YCOE)

Only *gearcian* and *gearwian* are attested with an intransitive [subject(nominative)-AGENT] pattern with inherently reflexive meaning as in (11).

(11) *Ða cwædon hig, hwar wylt tu þæt we*
Then say.PST.3SG they.NOM where want.PRS.2SG you.NOM that we.NOM
gearwion*?*
prepare.PRS.SBJV.1PL
'Then they said, 'where do you want us to prepare?''
(cowsgosp,Lk_[WSCp]:22.9.5422, YCOE)

All lemmas except for OE *(ge-)regnian | rēnian* also realise a ditransitive pattern [subject(nominative)-AGENT; direct object(accusative)-THEME; indirect object(dative)-BENEFICIARY]. Example (12) represents a sense of food preparation with this pattern where the result state of the THEME similarly implicates its creation.[21] Verbs of this class (cf. Levin 1993: Section 26.3) alternate between realising indirect object BENEFICIARIES ((12), see also Example (19) for ME below) and oblique BENEFICIARIES (compare Example (24) for ME below) in the *benefactive alternation* in PDE and in ME (see Section 4.3.3 and Table 3), while they only realise the first pattern in OE.

21. Verbs of creation and transformation are a subtype of change of state verbs that do not presuppose the existence of the THEME at the initial temporal bound of the event (Kamp & Roßdeutscher 2005).

(12) *Martha his sweostor þa* ***gearwode*** *þam Hælende*
Martha.NOM his sister then prepare.PST.3SG that saviour.DAT
æfengereordu
evening.meal.ACC
'And Martha, his sister, then prepared the saviour an evening meal'
(coblick,HomS_21_[BlHom_6]:67.30.824, YCOE)

The OE 'prepare' verbs also take non-finite (13) or bare adverbial (14) clause complements of PURPOSE both with otherwise transitive (13) and canonical reflexive (14) patterns or realise prepositional object complements as (*to*-PP)-PURPOSE like in (15).

(13) *Þa* ***gearwodon*** *heo his lichoman to byrgenne stænenne*
Then prepare.PST.3PL they.NOM his body.ACC to bury stony
þruh.
tomb.SG.ACC
'Then they prepared a stone tomb to bury his body.'
(cobede,Bede_4:14.296.16.2988, YCOE)

(14) *þa Sathanas, þære helle ealdor, cwæð to helle,* ***Gearca*** *þe,*
There Satan that hell's prince said to hell prepare.IMP you.SG.REFL
helle, þæt þu muge Crist onfon, [...]
hell.VOC that you may christ receive
'There satan, the prince of hell, said to hell: "prepare yourself, hell, that you may receive christ, [...]"' (conicodC,Nic_[C]:230.231, YCOE)

(15) *and* ***gearcodon*** *heora mod to ðam martyrdome, caflice to*
and prepare.PST.3PL their spirit.ACC to that martyrdom valiantly to
campienne for Cristes geleafan
fight for Christ's belief
'and [they] prepared their spirit for martyrdom, to valiantly fight for Christ's belief' coaelive,ÆLS_[Sebastian]:148.1300, YCOE)

Other non-core participants like instruments, comitative participants and non-agentive natural causes can be expressed as adjunct PPs.

4.3.2 'Prepare' verbs in ME

In the combined ME corpora, all attested 'prepare' verbs show transitive patterns as in Example (16), except for *heighten* v.(2) and *rẹ̄nen*, which only occur once each as adjectival participles. The instances of transitive pattern [subject(nominative)-AGENT; direct object(accusative)-THEME] attested for *atlen(-ien), bǒunen, rēdīen, richen* v.(1), *yāren*, and *yarken* (16) in the data are exclusively non-reflexive.

The attestations of transitive reflexive patterns for all of these lemmas in the MED and OED suggest that this is a reflex of the size of the dataset.

(16) *& tu mihht ec gastlike laf Onn oþerr wise* ***ȝarrkenn***
and you.NOM may.PRS.3PL also spiritual life.OBJ on other ways prepare.INF
'And you might also prepare a spiritual life in other ways'
(CMORM,I,49.493, PPCME2)

For *shāpen, birēdīen* and *busken* (cf. (3)–(4)) all instances of transitive patterns in the data exclusively realise a reflexive [subject(nominative)-AGENT; reflexive(pronoun.accusative)-coreferential THEME] pattern.[22] Both non-reflexive (17) and reflexive (18) transitive patterns are realised in the data by *gēren, (en-)greithen* and *(a-)graithen.*

(17) *Vor þet guode los to abatye and hyre guodes to loȝy þe*
For that good reputation to abate and their goodness to lower the
enuious ***agrayþeþ*** *alle his gynnes.*
envious.NOM prepare.PRS.3SG all his device.PL.OBJ
'Their good fame to abate and their goodness to depreciate the envious prepares all his devices.'[23] (CMAYENBI,28.446, PPCME2)

(18) *And zaynte paul þus zayþ Þet þe wyfmen hi ssolle*
and saint paul thus says that the woman.PL.NOM they.NOM.RSP shall.PRS.3PL
ham ***agrayþi*** *mid sobrete [...]*
they.OBJ.REFL prepare.INF with sobriety
'and St. Paul thus says that the women should dress themselves with sobriety [...]' (CMAYENBI,258.2418, PPCME2)

Only ME *greithen* and *a-graithen,* as well as *busken* (see Example (2) above) also occur in an intransitive pattern [subject(nominative)-AGENT] with inherently reflexive meaning.

Moreover, the ME lemmas *greithen* and *yarken* also realise a ditransitive *double object construction* pattern [subject(nominative)-AGENT; direct object(accusative)-THEME; indirect object(dative)-BENEFICIARY] in senses of preparation as in (19).

22. Non-reflexive transitive uses of ME *shāpen* exclusively lexicalised senses of creation or ordination rather than change of state (with the possible implication of creation). Still, the MED attests the possible transitive usage of ME *shāpen* in 'prepare' senses.

23. Translation from Wyatt, Michel & Laurent (2019: 23).

(19) *ha* **greiðið** *þe* *o grome nu alles cunnes pinen.*
He.NOM prepare.PRS.3SG you.SG.OBJ in anger now all kind.POSS pain.PL.OBJ
'He now wrathfully prepares you pains of every kind.'
(CMJULIA,107.191, PPCME2)

ME *atlen(-ien), gēren, a-greithen* and *shapen* also regularly take non-finite complement clauses of PURPOSE in combination with [subject(nominative)-AGENT] pattern (20) in inherently reflexive senses.

(20) *þai* **gert** *seke north and sowth þe mowntes of israell*
they.NOM prepare.PST.3PL seek north and south the mountains of Israel
'they prepared to search the north and south of the mountains of Israel'
(Nicodemus,82.[Stanza_79].946.530, PCMEP)

Parallel to what has been shown for ME *busken* and the OE 'prepare' verbs (cf. (13)–(14)), finite (21) and non-finite (22) PURPOSE complement clauses are realised with reflexive [subject(nominative)-AGENT; reflexive(pronoun.accusative)-coreferential THEME] pattern by *greithen* (21) and *shāpen*; and with [subject(nominative)-AGENT; direct object(accusative)-THEME] pattern in otherwise transitive constructions by *yarken* (22) and *greithen*.

(21) *His wif he het to* **greiþe** *hure. þt heo wiþ*
His wife.OBJ he.NOM order.PST.3SG to prepare.INF she.OBJ.REFL that she with
him come
him come.PST.SBJV.3SG
'He ordered his wife to prepare herself so that she could have come with him'
(CORP145SELT.1511, PLAEME)

(22) *He* **ȝarkede** *aday is ost. aȝen hom for stoned*
He.NOM prepare.PST.3SG at.day his army.OBJ against them to stand
'By day he prepared his army to stand against them'
(CORP145SELT.191, PLAME)

Alternatively, ME 'prepare' verbs can realise PURPOSE (23) or BENEFICIARY (24) complements as prepositional objects. ME *yarken, rēdīen* and *shapen* express *to*-PP PURPOSE participants with inherently reflexive intransitive, reflexive transitive and transitive (23) patterns.[24] ME *greithen* and *yarken* are recorded with (*to*|*for*|*against*|*toward*-PP)-BENEFICIARIES, as in (24). The alternation between indirect object and oblique BENEFICIARIES occurs both in argument reflexive and in non-reflexive (19, 24) (di)transitive constructions.

24. Compare Example (15) for a parallel pattern in OE.

(23) *Þouȝ þat wistest al bifor wȝi* ***schope*** *þou me to*
You that knew all before why prepare.PST.2SG you.SG.NOM I.OBJ to
wroþerhele
ruin
'You that knew everything before, why did you prepare me for ruin'
(LAUD108BT.205, PLAEME)

(24) *Rihht swa summ bidell birrþ ben sennd To* ***ȝarrkenn*** *& to* ***greȝȝþenn***
Right so some herald ought.to be sent to prepare.INF and to ready.INF
Onnȝæn hiss laferrd tær þær he Shall cumenn swiþe newenn, Rihht o þatt
against his lord.OBJ there where he shall come very soon right so that
wise comm Johan Biforenn Cristess come, To ***ȝarrkenn*** *follc*
way come Johan before Christ's coming to prepare.INF people.OBJ
onnȝæness Crist, To taken wiþþ hiss lare.
against Christ to assent.INF with his teaching
'Just like some herald must be sent to prepare and prepare (in preparation) for his Lord there where he shall come very soon, right so that way John came before Christ to prepare the people for Christ to believe in his teaching'
(CMORM,INTR.L85.118, PPCME2)

Finally, like the verbs of the OE 'prepare' class the ME class of 'prepare' verbs can express non-core elements as adverbials of result state or degree like *redy boun* with ME *busken* in (3), or as adjunct *with|by|through*-PPs of manner or instrument as in (18) above.

4.3.3 Comparative results: Etymological and diachronic differences in the argument structure of English 'prepare' verbs

Taking a diachronic and etymological perspective, Table 3 compares the argument structure realisation patterns attested for 'prepare' verbs in OE and ME by lemma. Some diachronic changes are observable in the expansion of 'prepare' verbs to complex event structures realised as ditransitives in senses of caused transformation with subsequent provision of the THEME in its result state to a BENEFICIARY.

Table 3. 'Prepare' verbs in OE and ME, by argument structures attested in the YCOE, and combined corpora of ME (PP = prepositional phrase, INF = infinitive, CL = clause; N/A marks patterns not attested with investigated lemmas)

AS pattern	OE lemma	ME lemma	
	Native	Native	Norse-derived
[subject(nominative)-AGENT(refl.)]	*gearcian, gearwian*	*N/A*	*busken, greithen, a-graithen*
[subject(nominative)-AGENT; direct object(accusative)-THEME]	*ge-rǣdan, gearcian, ge-gearcian, gearwian, dæftan, ge-dæftan, rēnian* | *regnian, ge-rēnian*|*-regnian*	*yarken, yāren, richen* v.(1)	*atlen(-ien), bǒunen, gēren, greithen, a-graithen*
[subject(nominative)-AGENT; reflexive(accusative)-THEME(coref.)]	*rǣdan, ge-rǣdan, gearcian, ge-gearcian, gearwian*	*birēdīen, shāpen*	*busken, gēren, greithen, a-graithen*
[subject(nominative)-AGENT; direct object(accusative)-THEME; indirect object(dative)-BENEFICIARY]	*rǣdan, ge-rǣdan, gearcian, ge-gearcian, gearwian, dæftan, ge-dæftan*	*yarken*	*greithen*
[subject(nominative)-AGENT; direct object(accusative)-THEME; reflexive indirect object(dative)-BENEFICIARY(coref.)]	*gearcian*	*N/A*	*greithen*
[subject(nominative)-AGENT; reflexive(accusative)-THEME(coref.); indirect object(dative)-BENEFICIARY]	*ge-gearcian*	*N/A*	*N/A*
[subject(nominative)-AGENT; direct object(accusative)-THEME; prepositional object(PP)-BENEFICIARY]	*N/A*	*yarken*	*greithen, a-graithen*
[subject(nominative)-AGENT(refl.); complement clause(INF-CL|*that*|*wh*-CL)-PURPOSE]	*gearcian*	*shāpen*	*atlen(-ien), gēren, a-greithen*
[subject(nominative)-AGENT(refl.); prepositional object(PP)-BENEFICIARY]	*N/A*	*N/A*	*greithen*

Table 3. *(continued)*

AS pattern	OE lemma	ME lemma	
	Native	Native	Norse-derived
[subject(nominative)-AGENT(refl.); prepositional object(PP)-PURPOSE]	*N/A*	*yarken*	*N/A*
[subject(nominative)-AGENT; direct object(accusative)-THEME; complement clause(INF-CL|*that*-CL)-PURPOSE]	*rǣdan, gearcian, ge-gearcian, gearwian*	*yarken*	*greithen*
[subject(nominative)-AGENT; reflexive(accusative)-THEME(coref.); complement clause(INF-CL|*that*-CL)-PURPOSE]	*gearcian*	*shāpen*	*busken, greithen*
[subject(nominative)-AGENT; direct object(accusative)-THEME; prepositional object(PP)-PURPOSE]	*gearcian, ge-gearcian, gearwian*	*shapen*	*N/A*
[subject(nominative)-AGENT; reflexive(accusative)-THEME(coref.); prepositional object(PP)-PURPOSE]	*gearcian, gearwian*	*rēdīen*	*N/A*
[subject(nominative)-AGENT; direct object(accusative)-THEME; indirect object(dative)-BENEFICIARY; prepositional object(PP)-PURPOSE]	*gearcian*	*N/A*	*N/A*
[subject(nominative)-AGENT; reflexive(accusative)-THEME(coref.); indirect object(dative)-BENEFICIARY; prepositional object(PP)-PURPOSE]	*ge-gearcian*	*N/A*	*N/A*

First, while the OE verbs realise BENEFICIARIES only as indirect objects and not as prepositional objects with *to-*|*for*-PP, ME *greithen* and *yarken* appear to alternatingly express BENEFICIARIES as prepositional and indirect objects in senses of preparation and subsequent provision.[25] Following Broccias and Torre

25. While Zehentner (2018: 170) proposed the benefactive alternation to be "strikingly absent from ME", Broccias and Torre (2020: 180ff.) show that in ME the double object construction could alternate with *to*-PPs in what one would treat as benefactive contexts in PDE. Broccias and Torre (2020: 180) conclude that the benefactive alternation indeed existed in early ME but was expressed by double object construction and *to*-PP pattern alternation and the *for*-PP entered this alternation only later.

(2020: 180–183), this represents abstract transfer of possession to these BENEFICIARIES. Consequently, this work analyses these ME 'prepare' verbs as being verbs of creation and transformation alternating in an early stage of the benefactive alternation (cf. Broccias & Torre 2020: 180; cf. Levin 1993: Section 26.3).

Second, both OE and ME 'prepare' verbs can realise the PURPOSE of the preparation event as complement clauses or as PPs, headed by *to* and *for* among other prepositions. As the *to*-dative is not yet well established in OE (cf. Zehentner 2018: 152f.), it is not surprising that OE 'prepare' verbs do not show (*to*|*for*-PP)-BENEFICIARIES but only realise them in double object constructions. However, in ME, BENEFICIARIES of creation and transformation events like those lexicalised by 'prepare' verbs can also be realised as (*to*|*for*-PP)-BENEFICIARY objects like (6) with *busken* and in the passive construction in (25).

(25) *Gað ȝe wariede ut of min eȝe sichðe intoþet eche fur. Þt wes*
Go you damned out of my eye sight into.that eternal fire that be.PST.3SG
igreiðet *to þe feont. & to his engles.*
prepare.PST.PTCP to the enemy.OBJ and to his angel.PL.OBJ
'Go, you who are accursed, out of my sight, into that eternal fire that was prepared for the devil and for his angels.'[26] (CMANCRIW-1,II.226.3271, PPCME2)

When combining these two observations, the changes in the argument realisation patterns taken by the OE and ME 'prepare' verbs in contexts where both PURPOSE and BENEFICIARY of a preparatory event are realised, become clearer. As BENEFICIARY and PURPOSE are semantically similar participants, both being indirectly affected by the realisation of the result state of the event, both may be expressed as *to*|*for*-PP after the rise of the dative and benefactive alternations in ME. Consequently, ambiguities between PURPOSE and BENEFICIARY can arise in contexts where both participants are realised. While BENEFICIARIES are generally human, or at least animate and somewhat sentient, PURPOSES are more often events, generally states or activities, or inanimate, possibly abstract, entities. In the data, ME 'prepare' verbs show a preference for double object constructions with BENEFICIARY indirect objects and PURPOSE PPs over *for*|*to*-PP expression of BENEFICIARIES. This helps avoid semantic ambiguities resulting from the expression of both participants as PPs.

Moreover, while the OE verbs take prepositional objects of PURPOSE both with transitive and ditransitive structures, the ME data only attest them with reflexive transitive uses of *rēdīen* and *shāpen*. Generally, OE verbs express PURPOSE as complement clauses and prepositional objects while the ME verbs seem to prefer complement clauses over prepositional objects for the expression of PUR-

26. Translation from Salu (1955: 136).

POSE events or activities with otherwise intransitive and transitive, and ditransitive structures.

Comparing the patterns realised by ME verbs across etymological origins, this analysis finds that only the Norse-derived verbs occur in an intransitive pattern with inherently reflexive meaning. However, native *yarken* and *shāpen* do realise inherently reflexive meaning in otherwise intransitive patterns with a nominal AGENT subject and a PURPOSE clause or PP. Taking a diachronic perspective, this seems to be partially a data poverty problem rather than actual non-existence of native ME verbs in intransitive non-argument reflexives: As Table 3 shows, this ME lack of attestations is juxtaposed by the, albeit infrequent, occurrence of this pattern with native OE *gearcian* and *gearwian*, predecessors of ME *yarken* and *yaren* and cognate to Norse-derived ME *gēren*. Consequently, and in line with Visser's (1966, §159) observations, this pattern was clearly grammatical for verbs lexicalising 'prepare' in OE. There is no reason to assume that the ME descendants of native West-Germanic lexemes would lose this possible argument structure realisation while licensing it for newly copied Norse-derived verbs and cognates.

Abstracting from classes of near-synonyms to verb classes defined by their structural behaviour, Levin (1993: Section 1.2.3) describes the *Understood Reflexive Object Alternation* for verbs alternating between intransitive uses with reflexive meaning and reflexive transitive structures, like PDE *dress*. Considering the data, the 'prepare' verbs OE *gearcian* and *gearwian* and ME *busken, greithen*, and *a-graithen* seem to have participated in this alternation. As Table 3 suggests and dictionary attestations corroborate, OE *gearwian*, its ME descendant *yāren* and its Norse-derived cognate copy *gēren*, as well as the 'prepare' sense of OE (*a-*|*ge-*)*rǣdan* and its ME descendant (*bi-*)*rēdīen* are additional candidates for verbs showing this alternation from early English onwards. PDE verbs lexicalising change of state towards a result state of preparation, like *prepare* and *ready*, and related verbs like *dress* also show this alternation. How do these results reflect on the integration of Norse-derived copies like *busken* into the class of verbs lexicalising 'prepare'?

5. Discussion

5.1 Integration of Norse-derived 'busken'

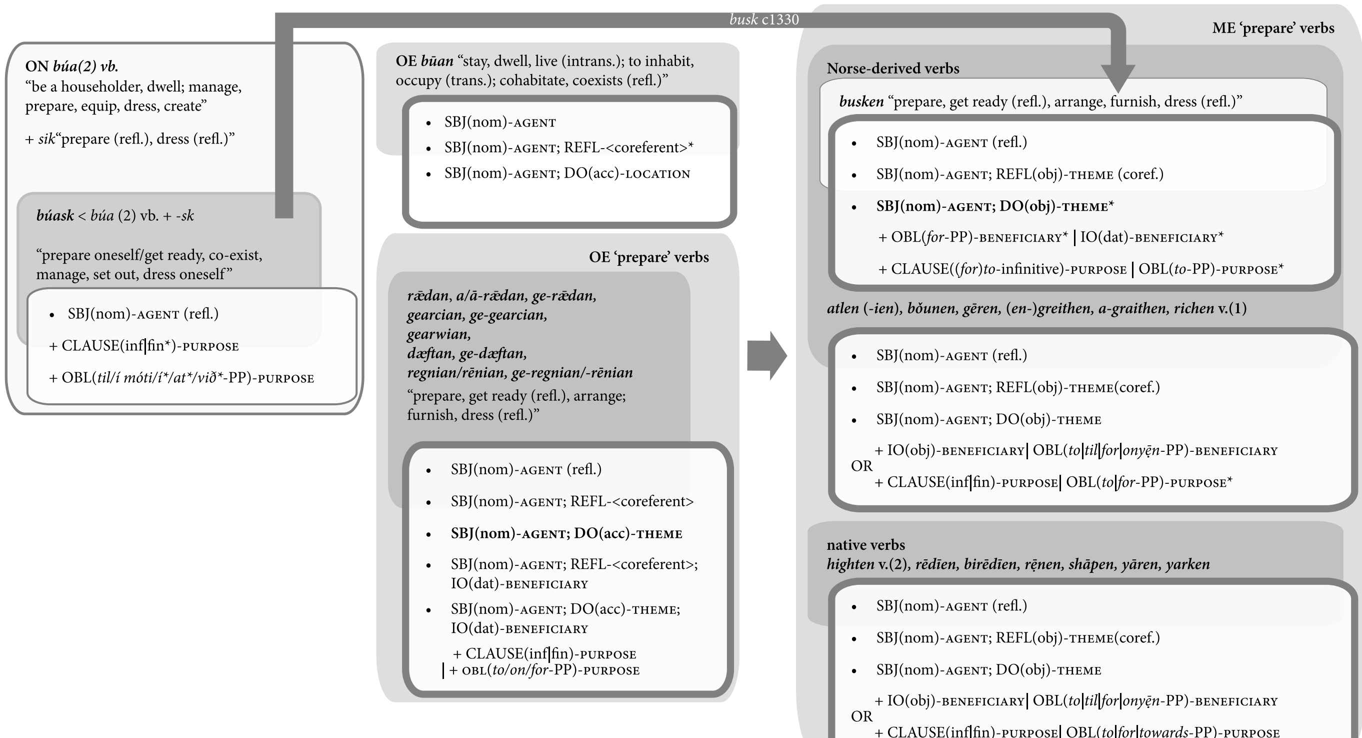
While ME *busken* occurs as an inherently reflexive intransitive verb in a slightly earlier text than it does in the reflexive transitive construction in the corpora, all instances are from compositions dated closely together in the Helsinki-period M2

(1250–1350 CE). This permits no conclusions about the diachrony of the lexeme's integration. Similarly, *busken* occurs only in a small number of lyrical texts composed either in Scandinavianised varieties or varieties neighbouring the erstwhile Danelaw. Consequently, no conclusions regarding possible dialectal variations in the argument structural patterns assigned to ME *busken* upon integration can be drawn. Overall, the evidence regarding the etymological origin of ME *busken*'s argument structures is twofold, as Figure 1 illustrates.

Firstly, ME *busken* realises an intransitive inherent reflexive argument structure. Generally, OE forms reflexives by use of an anaphorically bound subject-coreferential pronoun (Haspelmath 2023: 23). However, Visser notes that omission of the reflexive complement and thus intransitive use of generally transitive lexical verbs with reflexive meanings is non canonical but grammatical in OE, where "context and/or situation […] prevents the shorter construction from being misunderstood" (Visser 1966: §159). In contrast to OE, ON expresses reflexivity by use of coreferential reflexive pronouns in transitive constructions or by intransitive usage of 'middle voice' *-sk* verb forms (Barnes 2008: 146), as apparent in the etymon ON *búask*. Overall, the intransitive reflexive pattern shown by ME *busken* is a pattern match between the languages in contact. However, as laid out in Section 4, OE *būan* does not show such intransitive inherent reflexives and cannot be the source of ME *busken*'s intransitive reflexive argument structure. The assignment of an intransitive reflexive argument structure to ME *busken* suggests a global simplex copy of this reflexivised ON verb form *búask* with its inherently reflexive semantic and intransitive combinational properties into English as an inherently reflexive, or non-argument reflexive verb (cf. Steinbach 2002). This does not pose an integration conflict to the basic code.

However, a scenario of global copying cannot account for the transitive reflexive formation with a coreferential personal pronoun also realised by ME *busken*, as such a pattern is ungrammatical for the model unit *búask* in ON. It cannot have been globally copied. Moreover, because the cognacy relation between OE *būan* and ON *búask* was opaque to speakers during contact, due to their formal and semantic contrast, licensing of the regular OE reflexive formation for ME *busken* in analogy to OE *būan* is unlikely. This argument realisation pattern likely stems from English equivalents.

By comparing the reflexive patterns realised by ME *busken* to those realised by the class of 'prepare' verbs into which it is integrated, this analysis finds that some verbs of the OE class indeed participate in the understood reflexive object alternation (Levin 1993: Section 1.2.3; cf. Section 4.3.3). Consequently, the assignment of the canonical English transitive reflexive pattern to ME *busken* supports an assignment of argument structure based on semantic analogy to native near-synonymous reflexive verbs (strategy iv, cf. Section 3).



* Pattern attested only in respective dictionaries but not in the corpora

Figure 1. Argument structural integration of ME 'busken' on the model of ON 'búask' into the ME class of verbs lexicalising "prepare" (DO = direct object; IO = indirect object)

Secondly, ME *busken* realises non-reflexive senses of caused change of state in transitive and ditransitive patterns. This pattern is ungrammatical for the etymon in ON (cf. Section 4.2) and global copying of ON *búask* as an inherently reflexive verb cannot account for this innovation on the copy ME *busken*. However, as Section 4.3.1 has shown, these transitive and ditransitive patterns are attested for the OE class of 'prepare' verbs, into which *busken* is integrated. Moreover, causative transitive patterns are also realised by native and copied near-synonymous verbs in ME, like native *rēdīen, shāpen*, and *yarken* and Norse-derived *greithen* and *bǒunen*. Overall, the assignment of transitive reflexive, transitive and ditransitive argument structures to ME *busken* is innovative when compared to the argument structures available to the ON etymon.

These deviations from the etymon's semantic and combinational properties suggest that ME *busken* also shows the characteristics of a selective formal and partial semantic copy of the ON etymon. This selective copy is then assigned cognate argument structures already existing in OE based on semantic analogy to near-synonymous verbs in the basic code: namely intransitive reflexives in analogy to the model code's cognate pattern and transitive reflexive formation with coreferential object pronoun in analogy to native near-synonyms. However, a number of these basic code near-synonyms are labile and polysemous between change of state and caused change of state senses in OE and ME. In analogy to these labile native near-synonymous lexemes, ME *busken* is additionally assigned cognate transitive and ditransitive as well as prepositional BENEFICIARY argument structures. As a result, it also lexicalises caused change of state senses in ME.

While the senses and patterns assigned to the ME copy do not all have direct equivalents available to the model unit *búa-sk* in ON, these additional patterns assigned to the copy nevertheless present a match between the OE and ON codes overall: They are the canonical cognate patterns licensed for (caused) change of state verbs in both languages.

5.2 Loan verb integration effects on the verb class

Abstracting from individual lexical copies to the semantic verb class, the integration of *busken* and other Norse-derived 'prepare' verbs does not seem to have triggered major restructuring of the set of available argument realisation patterns of this class in ME concerning the expression of reflexivity. The Norse-derived verbs enter English with an intransitive reflexive *and* a transitive reflexive pattern. Native near-equivalent patterns did exist in the basic code for both patterns. While ON employs reflexive pronouns in transitive reflexive patterns, the OE pattern of reflexive marking by use of coreferential personal pronouns is assigned to the Norse derived copies upon integration into the basic code. While intransitive expression of inherently reflexive preparation events was less common but permissible in OE (Visser, 1966: § 159), the ME Norse-derived 'prepare' verbs show this pattern with a wider range of lexemes than the native ME verbs of this class. The ON model code has both an equivalent intransitive reflexive pattern and the synthetic verbal reflexivisation with *-sk* as available strategies for reflexivising detransitivisation. The copying of the model code units' combinations of semantic features in reflexive senses and their corresponding combinational features of intransitivity might have been copied into English as the cognate intransitive reflexive pattern realised with these copied verbs. Consequently, the verb type-increase of the intransitive reflexive pattern resulting from the copying of Norse-derived 'prepare' verbs into ME might be a frequential integration effect.

While these qualitative results are intriguing, the etymological classification of Norse-derived 'prepare' verbs limits their explanatory power. The Norse-derived lexemes in the ME set of investigated near-synonymous verbs are of varying kinds of Norse-derivation (cf. Dance, Pons-Sanz & Schorn 2019). Other than ME *busken*, ME *atlen(-ien), gēren* and *greithen* are also copies with a contrasting native cognate (cf. Section 4). Other possibly Norse-derived verbs are the resultative deadjectival verbs ME *bainen* v.(2) and *bŏunen*, both ultimately from the same Proto-Germanic root **buwwēn-* as OE *būan* and ON *búa*. I do not propose that any of these verbs individually or directly are the source for the described developments in the argument structure of ME 'prepare' verbs. However, the number of Norse-derived verbs entering this class is considerable. The combined impact of the type-frequency with which these copies realise cognate structures that are otherwise non-canonical and less frequent with native class members in the basic code, namely, intransitive reflexives, may be crucial to the continued existence of these structures in the set of possible argument structures of this class.

Quantitative analysis of a larger data set is necessary to test whether this integrational effect is significant and constitutes a frequential copy of this cognate pattern with these lexical verbs. Due to the size and imbalance of the present dataset across the variables of etymology, lemma, and argument structure the application of statistical tests to this end was impossible without conflating the argument structural alternations realised by this verb class.

6. Conclusion

Regarding the research question of how Norse-derived *busken* is assigned argument structure in medieval English (cf. Section 4), this analysis proposes that the structural integration of the lexeme ME *busken* combines two strategies of argument structure assignment for its main senses of preparation, resulting in a *mixed* *copy* following Johanson (1999: 52). First, the intransitive realisation of the inherently reflexive sense of ME *busken* is copied globally from the model code unit with its material form following strategy 1 (see Section 3). Second, the reflexive transitive – semantically argument reflexive – argument structure, and the transitive and ditransitive argument structures are assigned to ME *busken* in analogy to labile near-synonymous verbs in the basic code which lexicalise senses of (caused) change of state. This extension of the semantic and combinational features of ME *busken* on the model of labile native near-synonyms follows assignment strategy 4 and represents a selective copy of this form-meaning-structure pairing. Overall, the polysemous, labile verb lexeme ME *busken* is a mixed copy.

Such a complex lexical copy speaks to the importance of the lexical and typological closeness characterising the Anglo-Scandinavian contact situation because in contacts where "[...] the two interacting codes are closely related, as in the case of English and Norwegian, there are relatively many equivalence positions, which allows a wider range of copying patterns" (Johanson 1999: 49). The present study thus corroborates the results of previous work (Elter 2023, 2024, forthcoming; Elter & Shaw 2025), showing that both the typological closeness of languages in contact and specifically the existence and closeness of cognacy relations between a native and copied lexeme impact the structural outcomes of loan verb integration. These factors of closeness between languages seem to be a force of language stability by facilitating the structural integration of copies and strengthening both cognate lexis and cognate structures in the Anglo-Scandinavian contact. This enhances our understanding of the impact of this contact situation on English and why its extent and depth often seem to be both significant but hard to discern with certainty.

Overarchingly, the result that the argument structures of 'prepare' verbs remain stable throughout the transmission from OE to ME is not trivial (cf. Barðdal 2013: 442; Barðdal & Eyþórsson 2020). The present work brings evidence to the statement that "the study of individual cognate verbs in the earliest Germanic languages to discover fine-grained differences, and attempting to reconstruct where differences do exist [is] an interesting endeavour and less open to the charge of banality" (Walkden 2013: 107 fn.6). This becomes especially clear in the present study which reveals both horizontal and vertical transmission of cognate argument structures in contact between two closely related languages. Here the reconstruction of stability is all but trivial in light of the integration of multiple Norse-derived cognate verbs of a contrasting nature into a single semantic verb class.

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