

The derivation of verbs in Old English and Middle English

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Abstract. Within the framework of minimalist syntax, it is argued that the core-syntax derivation of verbs in OE and ME (up to approx. 1450) is regulated by two licensing T(ense) heads (that is, two T Probes) plus a licensing *v* head (or *v* Probe), all of which are in charge of *interpreting* τ -features. *v* acts as Probe of v^0 (its Goal) in order to *interpret* [+/-past] τ -features for strong verbs. This capacity of *v* is argued to rely on the *ablaut* distinction between Pret. 1 and Pret. 2, since *ablaut* is determined by the specific [person] of the subject and must therefore be syntactically derived. This situation comes to an end in the period ca. 1450. Of the two T Probes, [_TT] is in charge of *interpreting* [past] τ -features for weak verbs, and it expones as a /d/ suffix. The other T Probe is labelled here [_TAgrT] and is in charge of *interpreting* [+/-past] τ -features with an additional ϕ -interpretation. A proof for the existence of this Probe is for the agreement (person and number) endings to co-vary with Present tense and Past tense, despite cases of syncretism between exponents or Vocabulary Items. [_TAgrT] is the Probe that is obligatorily present in the licensing of any kind of verb in OE (and also in ME) –whether weak or strong– and therefore it must be held responsible for the configurational status of the latter as a T language.

Keywords: τ -features; τ -interpretation; ϕ -interpretation; T Probes; *v* Probe; weak verbs and strong verbs in OE and in ME.

[es] El Proceso de Derivación de los Verbos en Inglés Antiguo y en Inglés Medio

Resumen. Siguiendo el modelo de la sintaxis minimalista, se propone en este artículo que la derivación o procesamiento de los verbos en inglés antiguo y en inglés medio (hasta 1450 aprox.) está regulado en el componente de la sintaxis por dos núcleos legitimadores T(tiempo) (esto es, dos *Probes* de T) más un núcleo legitimador *v*, todos los cuales *interpretan* rasgos- τ . *v* actúa como núcleo legitimador o *Probe* de v^0 (su *Goal*) y tiene la finalidad de *interpretar* rasgos- τ [+/-pasado] en el caso de los verbos fuertes. La capacidad de *v* para ejercer como legitimador de rasgos- τ se confirma por la distinción de *ablaut* entre los llamados Pretérito 1 y Pretérito 2, ya que esta distinción depende del rasgo [persona] del sujeto: es, por tanto, una distinción propia de la sintaxis nuclear. La capacidad de *v* de actuar como núcleo legitimador llega a su fin alrededor de 1450. En relación a los citados *Probes* de T, [_TT] está encargado de *interpretar* los rasgos- τ [pasado] de los verbos débiles, los cuales se corresponderían en la morfo-fonología con el sufijo /d/. El otro *Probe* de T, que se defiende en este artículo bajo la etiqueta [_TAgr] (Tiempo en Concordancia), está encargado de *interpretar* los rasgos- τ [+/-pasado] que poseen adicionalmente, como el nombre indica, *interpretación* de concordancia (esto es, de persona y número). Se propone que la prueba de la existencia de este *Probe* es el hecho de que las terminaciones de concordancia (los citados segmentos de persona y número) *co-varían* con el tiempo Presente y el tiempo Pasado, a pesar de los casos de sincretismo. [_TAgr] es el núcleo legitimador (o *Probe*) obligatorio en la sintaxis de cualquier verbo del inglés antiguo (y del inglés medio), ya sea un verbo débil o un verbo fuerte, lo que significa que debe ser considerado el responsable del estatus configuracional del inglés antiguo como tal lengua T.

Palabras clave: rasgos- τ , interpretación- τ , interpretación- ϕ , núcleos legitimadores T, núcleo legitimador *v*, verbos débiles y fuertes en inglés antiguo y en inglés medio.

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How to cite this article: Castillo, Concha. (2022). The Derivation of Verbs in Old English and Middle English, in *Complutense Journal of English Studies* 30, 23-37.

1. Introduction²

This work is part of a wider research on the (core or narrow syntax) derivation of tense and of verbal subject agreement in languages of the Germanic and the Romance family in their old stages, and in those of their ancestors, Proto-Germanic (PGmc) and Latin respectively (all with a common source in Proto-Indo-European

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² My thanks to two anonymous reviewers for their comments. All errors are my responsibility.

(PIE)). The framework of analysis is minimalist syntax, and in the present paper I deal specifically with the verbal system of Old English (OE), and with the changes occurring specifically in this domain in Middle English (ME). I argue (a) that T(ense) has the structure of a double head, and that each of the feature-licensing T heads, or the same T Probes, are endowed with *interpretable* tense or τ -features (that is, features like [+past] or [-past]), though one T head or Probe additionally carries with it agreement or ϕ -interpretation (person and number). The corresponding features with both τ - and ϕ -interpretation could then be characterized as a kind of *portmanteau*. I also argue (b) that T (more precisely, one of the two T heads) is in charge of *interpreting* τ -features proper (that is, those identified solely as τ and not additionally as ϕ , as just suggested) whenever it is weak verbs that are at stake, since corresponding τ -features on strong verbs are *interpreted* not by T but by little *v*. *v* therefore acts itself as a Probe in the derivation of strong verbs, which requires a specific *v*-architecture.

Widely-known historical works like Lass (1992, 1997) or Hogg (1992), which are major sources that the present discussion draws on, provide fine-grained taxonomies and analyses of verbal groups or classes in OE and ME (and of dialectal variation within the latter) from a morphological (or morpho-phonological) perspective proper, which entails detailed reference to tense markers and subject agreement markers. On the other hand, Lahiri (2003: 100) highlights one specific aspect from the verbal system in Germanic that is the same one as leads me to ultimately establishing (a) above, though she does so for completely different reasons (see footnote 21). An important novelty of the (morpho-syntactic) analysis entailed by (a) is that there are no ϕ -features proper (that is, no ϕ -features without tense specification) in any of the two T heads or Probes that are argued for here, which incidentally appears to be perfectly compatible with ϕ -features being both *interpreted* and *valued* exclusively on nominals, that is on corresponding D(eterminer)P(hrase) subjects (see Section 1.1). But other than any potential theoretical relevance of such an analysis, and perhaps more importantly, what is at stake is the specific content of the T Probe that sanctions OE as a language where T occupies a superordinate position such that it c-commands all constituents in the verbal phrase and further determines in a systematic way the position to be occupied by the subject: I contend that such a T Probe is the one with additional ϕ -interpretation, which is labelled here [$_{\tau}$ AgrT] as a short form for [$_{\tau}$ AgreeingTense], and not the one ϕ -free or [$_{\tau}$ T] (= [$_{\tau}$ Tense]).

Though there exist since GB theory roughly speaking two big families of analyses in the literature accounting for whether Spec,TP (or Spec,IP) is a dedicated subject position, or a generalized topic position, there is quite general consensus on the relevance of the T head as an element determining the position of the subject. To take two examples from the literature, Allen (1986) is one of the first works to argue that the availability of dative subjects in OE indicates the existence of a functional head closely connected with subject agreement such that it vertebrates the language as a configurational system and, very recently, Haeberli and Ihsane (2016: 502ff.) offer an update of arguments pointing to the existence of T that is based principally on the positions of the (full NP or otherwise pronominal) subject and also of particles and adverbs. Assuming a simplified analysis as in [$_{TP}$ Subject [$_{\tau}$ T V_{finite} [$_{VP}$ trace trace...]]], where the (finite) verb and the subject move from within the verbal phrase to TP, more specifically to T and Spec,T respectively, then it is the case that T c-commands the entire verbal phrase and, once the subject moves, it m-commands the subject. It is well known that c-command is a more strict configurational relation than m-command, but for T to m-command the subject importantly entails that the latter moves to the Spec node projected by T itself.

As is of course widely known, there exists a varied set of V2-sequences in OE, which means that the structure of numerous (matrix) sentences is bound to incorporate further functional structure to the left of TP, that is to the CP area: [$_{CP}$... [$_{Functional\ Phrase/Finite\ Phrase}$... [$_{TP}$... [$_{VP}$...]]]] (see e.g. Fischer et al. (2000: 126); Haeberli and Ihsane (2016); ...). The phrases moving to the corresponding Spec positions can be *wh*-elements, negative elements, or adverbs like *þa* 'then', or also pronominal subjects or topics, a full body of literature having of course been published in the very last decades on the contents of *information structure*, to use just one widely-acknowledged term. What matters most to the present discussion is that the (finite) verb that is potentially to figure to the left of TP has actually moved there from a T head position where, irrespective of whether it is a weak verb or a strong verb, in the Present or in the Past, it has been licensed by a [$_{\tau}$ AgrT] Probe, that is a T Probe with τ - and ϕ -interpretation.³

Not only do both weak and strong verbs share the relevant T Probe, but also the set of so-called *preterite-present* verbs, which of course includes modals and likewise forms of the copula (*eart*, *earon*, *sind(on)*). I contend in my research that these elements get their τ -features proper (that is, [+/-past]) licensed in an exceptional way in OE since the cited features are interpreted neither by T nor strictly speaking by *v*, though the role played by the *v* position itself is a crucial factor determining their licensing (see brief reference in Section 2). It is the exceptional licensing of τ -features of modals and the copula that leads these verbs into becoming T elements themselves.⁴ Due to space limitations, I deal with modals and with the copula in a separate paper.

³ I argue in my current research that, for the rest of the old Germanic languages, which are more systematically V2 than OE and which are frequently argued in the current literature to project a CP directly on top of the verbal phrase without a proper TP, an [AgrT] Probe incorporating both τ - and ϕ -interpretation is likewise to be defended.

⁴ I do not mean to say that their contrasts with the rest of verbs regarding thematic properties is not a necessary condition for them to become T, but it is clearly not a sufficient condition since their genuine thematic properties are also shared by their homologues in the rest of Germanic languages

I further argue in ongoing research that [_TAgrT] is the Probe that is at the base of the widely-discussed and highly controversial issue of V-to-T movement. The present discussion is not about V-to-T though, and the main aspects dealt with here are not altered whether verbal movement applies or not.⁵

In (1) below are listed in telegraphic form the main issues dealt with in this paper.

- (1)
 - a. availability of two T Probes in OE and ME, to be specified as [_TT] and [_TAgrT]
 - b. capacity of *v* to interpret τ -features
 - c. loss of the capacity of *v* to interpret τ -features (after ca. 1450)
 - d. the T Probes in the course of ME

The paper is organized as follows. I deal first, in Section 2, with the role of T in the licensing of τ -features with a pure tense interpretation for weak verbs, that is the role of [_TT], and with the corresponding role of *v* in the licensing of features for strong verbs (see (1b)). In Section 3 I focus on the analysis of [_TAgrT], that is the specific T head or Probe that I argue to be present in the τ -licensing of all verbs in OE and ME. In Section 4 I deal with the loss suffered by *v* (see (1c)) and with whether morpho-phonological loss corresponds with any change in [_TAgrT] (1d). Before Section 2, in Section 1.1 immediately below, I refer to basic assumptions that I adopt from the literature for the present discussion.

1.1. Assumptions from the diachronic literature and the theoretical literature

The present discussion is about the syntactic derivation in core or narrow syntax of verbs in OE and ME.

Now, the derivation of verbs in core or narrow syntax is typically postulated to proceed through the licensing of formal features like τ -features (typically, ([+/-past])⁶ and ϕ -features (that is, features of person and/or number and/or gender). τ -features are identified as the abstract counterpart in core or narrow syntax of morphological markers of tense, and similarly, ϕ -features are the abstract counterpart of morphological agreement markers. I assume a framework like Distributed Morphology (DM) (Halle and Marantz 1993 et seq.) where the cited licensing of features is therefore the morpho-syntactic operation which is subsequently the input to the morphological component, with its rules of *Vocabulary Insertion* (that is, exponency). Vocabulary Insertion (together with various sets of rules, among these *rules of impoverishment*, *rules of readjustment*,...) is thus the typical mechanism providing terminal nodes with realization: we can therefore refer properly to the morpho-phonological component.

The focus of the present discussion is principally on abstract morpho-syntactic objects or elements, and also on their morpho-phonological realization. The specific verbal forms chosen from the OE Lexicon to illustrate the analysis are, nevertheless, quite transparent in the sense that the number of formal features to be invoked corresponds quite neatly with the number of segments that act as their output. The very term *segment*, or also *marker* or *Vocabulary Item* will be used to refer to the elements of exponency illustrated, though no characterization of Vocabulary Items is formalized through resort to the *Subset Principle*.⁷ Further, the terms *Present* and *Past* (in capital letters) will be employed to refer to verbal forms as such overt morphological words, and [+/-past] will typically be identified as formal features proper.

A current issue of debate in DM is whether lexical roots behave like the rest of *Vocabulary Items* and attend Late Insertion (that is, post-syntactic Insertion) (as in Marantz (1995), Haugen and Sidiqi (2013), or Harley (2014)) or whether, by contrast, these abide by Early Insertion (as defended in Embick (2000); (2010), Marantz (2007) or Bobaljik (2012)). I assume in the present discussion the latter option, namely for roots to enter the derivation in a phonological form.

Regarding the characterization in the minimalist literature of the formal features typically assumed for the licensing of verbs, and also on the relevant functional projections, it is well known that the T head and the little *v* head are generally postulated to be in charge of licensing the τ -features and the ϕ -features of finite verbs in IE languages in general. A derivation proceeds through the operation *Merge* on the one hand, which combines two syntactic units from the Lexicon/Numeration (external Merge) in order to form a new syntactic unit, and the operation *Agree* on the other, which applies between a *Probe* and a (c-commanded) *Goal* and whose purpose is to license a given formal feature (Chomsky 2000, 2001). τ -features and ϕ -features, as such formal

and also in Romance languages in general, and nevertheless they become Aux in these languages (or perhaps raising verbs in some specific cases), but not T.

⁵ In the cited work in preparation I argue that the *time gap* that raises so many problems in the literature on V-to-T between the presumed loss of morphology and the generalized use of periphrastic *do* is not such, and I base my analysis on the cited [_TAgrT] Probe being active until an advanced stage within MnE.

⁶ τ -features in matrix T can also be associated with the content [*non-factual* +past] and/or [*non-factual* -past], as those minority cases of e.g. a Subjunctive in a main clause in English, or also in the firmly-established Subjunctive in e.g. Spanish or Italian, or the future or the conditional again in languages like the latter.

⁷ In my current research on the full development of the contents of the T Probes proposed in this paper, I employ the Subset Principle to analyze the gradual loss of exponency associated with [_TAgrT]. See also brief reference to this issue in Section 4.2.

features, attend to the characterization *interpretable* [*iF*] vs. *uninterpretable* [*uF*] on the one hand, and *valued* [*F: val*] vs. *unvalued* [*F: __*] on the other. Following Pesetsky & Torrego (2007), *valuation* and *interpretability* work independently of each other. Feature-interpretability refers to the semantic content or contribution of a feature, and feature-valuation means that the feature in question is ensured to appear on a specific item. There happens to be generalized consensus that τ -features in Present Day English (PDE) (and in IE languages in general) are *interpretable* but *unvalued* on T, and *uninterpretable* but *valued* on *v*, and that ϕ -features are similarly *unvalued* on T and *valued* on *v*, but they are *uninterpretable* on both T and *v*, it being the DP subject the source of interpretation. ϕ -features are thus both *valued* and *interpretable* on DP.

I assume that T borrows its ϕ -feature specification from the DP subject via *Checking*, which is to be distinguished from *Agree* in the sense that it does not necessarily result in the licensing of a feature between the two elements involved (see e.g. a recent work like Bjorkman and Zeijlstra 2019).⁸ *Checking* between T and DP is no obstacle for the (proper) *Agree* relation that is bound to apply between the two by means of which the DP arguably gets its nominative Case licensed, and T possibly licenses a so-called Edge-feature. Both *Checking* and *Agree* between T and DP can take place as a single operation, and not necessarily as two distinct operations. Nevertheless, I must emphasize that the issue of Case on the DP subject is out of the scope of the present discussion.

Further, with regard to τ -features, I would like to note that the interpretation of [+/-past] as discussed in this paper corresponds in all cases to the Indicative.⁹

In connection with the assumptions about sentential structure in OE, I endorse the availability of a *TP* on top of the *verb phrase*. For OE to be both head-final and head-initial in relation to T (that is, VP T / T VP) and in relation to V (that is O V / V O), or rather, for the language to progress from head-final to head-initial is not considered for the present discussion, since the core aspects about the derivation of verbs argued for here remain unaltered whether it is one case or the other. Also, as observed in Section 1, there is a wide array of V2 structures in OE which demand further functional projections on top of or to the left of TP. And pronominal subjects are likewise particularly argued to occupy a higher position than nominal (or full NP) subjects, which entails a place above TP. The analysis proposed in this paper, however, can perfectly well be constrained to the boundaries of the TP projection, and such is the syntactic space to be shown in the tree-diagrams implemented. In connection with V-to-T, I assume, as many works in the literature do, that OE is such a language (see also Section 1):¹⁰ however, this circumstance is not relevant for the very discussion here (see at the bottom of Section 3 and also Section 4.2 for some reference to V-to-T).

With regard specifically to the architecture of the verbal phrase in OE, I assume an approach where a *VoiceP* projection is distinguished from a *vP* projection (see Pylkkänen 2008), though I argue that this is not so for one group of verbs, namely strong verbs. *Voice* introduces an external argument and licenses accusative Case, among other things, and *v* acts as the *verbalizer* of the root ($\sqrt{\text{ }}$), which typically lacks any specific category in approaches in the current literature. Aside from this role, I contend in this paper that *v* has a central task to carry out in the licensing of τ -features (again for the group of strong verbs).

2. Licensing of τ -features proper ([+/-past]) in OE and ME

Two main groups of verbs can be distinguished in OE, and likewise, quite clearly, in the first half of ME. These are of course the group of *strong* verbs and the group of *weak* verbs and, as is widely known, their distinction or opposition corresponds very neatly with a morpho-phonological trait. Strong verbs form their Past tense through the mechanism of *ablaut* or *apophony*, that is, through changing the vowel in the stem-segment: note the underlining in the corresponding Past forms of a verb like *scīnan* ‘shine’ in (2), which incidentally belongs to class I of the seven classes commonly distinguished within strong verbs. By contrast, weak verbs form their Past tense by adding a /d/ suffix to the stem-segment: note again the underlining in the forms of a verb like *hīeran* ‘hear’ in (3), which belongs to one of the two major classes of weak verbs. The agreement markers are the right-most segments or Vocabulary Items, and the Past markers or Vocabulary Items for the Past are *-d-* and the ablaut or apophonic vowel, respectively. Incidentally, the last segment in the first and third person pl of the strong Past actually has no phonological realization, that is it corresponds to the \emptyset -marker or \emptyset -Vocabulary Item.

(2)	scīnan	
	Present Indic.	Past Indic.
	1 sc-ī-n-e	sc-ā-n- \emptyset

⁸ I must note, nevertheless, that I do not assume *upward* probing, as in Bjorkman and Zeijlstra (2019). I endorse the standard or generalized view of probing as a *downward* operation.

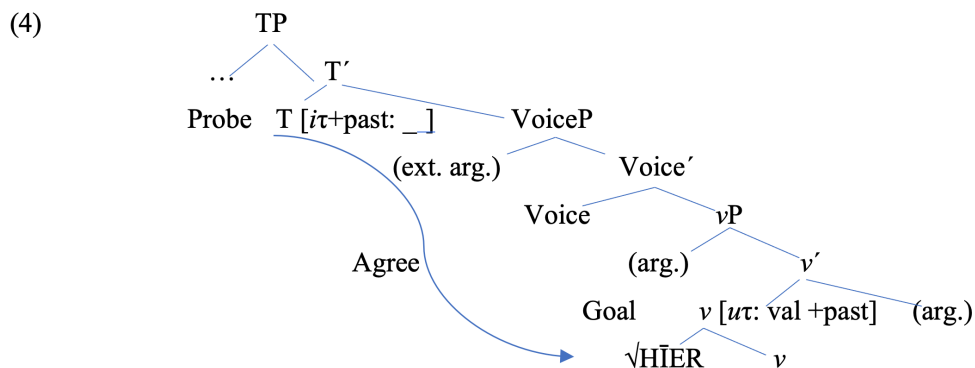
⁹ The account of the T Probes that is proposed in the present discussion actually renders the Subjunctive as a kind of impoverished paradigm as compared to the Indicative (as is logically expected for a Germanic language like OE). For reasons of space, however, I do not deal with the Subjunctive in this paper.

¹⁰ One exception would be Biberauer and Roberts (2010). On the other hand, there is generalized consensus that ME is a V-to-T language.

	2	sc-ī-n-st		sc-ī-n-e
	3	sc-ī-n-þ		sc-ǣ-n-∅
	pl	sc-ī-n-aþ		sc-ī-n-on
(3)			hīeran	
		Present Indic.		Past Indic.
	1	hīer-e		hīer- <u>d</u> -e
	2	hīer-est		hīer- <u>d</u> -est
	3	hīer-þ		hīer- <u>d</u> -e
	pl	hīer-aþ		hīer- <u>d</u> -on

The ablaut vowels in strong verbs correspond with: 1-the Present tense, the Infinitive and the Present Participle; 2-the first and the third person sg of the Past tense; 3-the second person sg and the plural of the Past tense, and 4-the Past Participle, and, as attested in the philological and historical literature (see e.g. Hewson and Bubenik 1997; Mailhammer 2007; Fulk 2018, and references cited therein) they have their origin in distinctions of *Aktionsart* or lexical aspect for roots in PIE and, above all, in aspectual distinctions that serve to build up stems out of roots according to a three-fold system of *imperfective*, *perfective* and *aorist* or *perfect*.¹¹ However, the cited ablaut variation is no longer supported by aspect in OE: rather, the ablaut variation in the forms on the right column in (2) (see *scān*, *scīne*,...) as compared to the forms on the left column (see *scīne*, *scīnst*,...) supports a tense distinction. In contrast to the mechanism of ablaut, the use of a suffix to indicate Past tense (the *-d-* segment that appears in (3)) is taken generally in the literature to be an innovation in PGmc (see the accounts in Bammesberger 1986: 36ff.; Lahiri 2003: 91ff.; Kastovsky 2006: 163).¹²

Since, from the perspective of the derivation in core syntax, T is the head in PDE in charge of interpreting the [+past] τ -features that expone (also) as a /d/ suffix for so-called regular or weak verbs, and on the assumption that T is available as such a head in OE (see Section 1), then it can be so considered that T is properly in charge of *interpreting* the [+past] τ -features for OE weak verbs. The derivation of a form like e.g. *hīerde* ‘I/you/he/she/it heard’ from (3) above as regards τ -features would be as shown in the tree-diagram in (4) below.¹³



The root ($\sqrt{\text{HĪER}}$) which, as observed in Section 1.1, is assumed in the present discussion to be merged in a phonological form (as postulated by a part of the literature) merges initially with a categorizing v head and it is the resulting v head that becomes the Goal of the T Probe once the latter (T) merges itself in the derivation. In effect, as would happen in PDE, T has *interpretable* τ -features (though, incidentally, reference is by now only to those with the specific interpretation [+past]) but these are not *valued* on T itself. The situation is the reverse with respect to v : the relevant features are to be *valued* on v , but they are *uninterpretable* on this head. The Probe-Goal connection between the two (T and v) is shown by means of a curved line with an arrow in the tree-diagram above. The notation to the right of v , namely [uτ: val +past], corresponds to the result of the *Agree* operation that applies between the two heads, that is the stage when the features on v have already received the interpretation [+past]. As observed also in Section 1.1, I assume a Voice head, distinct from v , as the one in charge of projecting the external argument. Incidentally, the external argument Merge site, as well as potential Merge sites for internal arguments, appear in (4) above within parentheses since their instantiation depends on the thematic properties of the verb. It is important to note that there is no need to refer at this moment to the potential role to be played by the DP (that is to become subject) in the Agree relation between T and v , since the very T head or Probe that is relevant now, the one that figures in (4) above, has no ϕ -specification. It will

¹¹ Kastovsky (2006: 162) refers to the basic structure of IE morphology as in (i).

(i) root (+root determinative) + stem formative + inflection proper

¹² Lahiri (2003: 94ff.) argues that the creation of the new Past tense is due to weak verb roots not matching the ablaut grades (of strong verbs) because of the effect of umlaut on them.

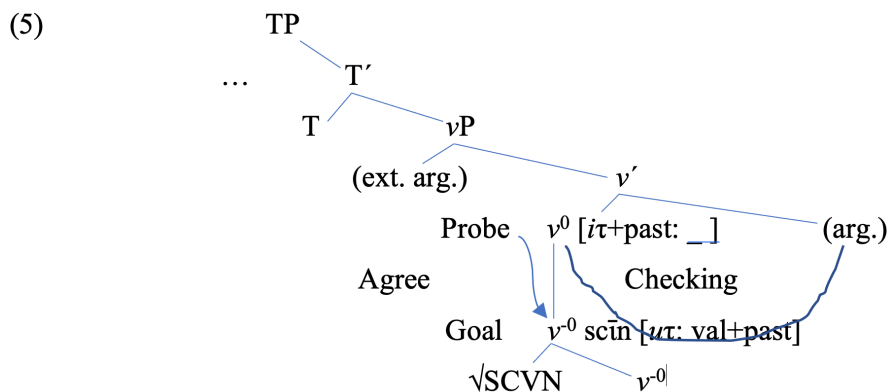
¹³ Let us recall that features serving the agreement or ϕ -interpretation are dealt with in Section 3.

be in Section 3 below, when I deal with the T Probe in charge of both τ - and ϕ -licensing that reference will be made to Checking between T and DP.¹⁴

The derivation in the syntax appears to be quite different for OE strong or ablaut verbs, that is those that exhibit morpho-phonological variation of the stem-segment, as in (2). To argue the case for these verbs, I would like to focus on the fact that they exhibit, as is well known, two Pasts –so called *Preterite 1* and *Preterite 2*, with vowels 2 and 3 from the set specified above in the section– and that this differentiation depends on whether the relevant nominal in the verb phrase (which will eventually become the DP subject) is first or third person sg (Preterite 1) or otherwise second person sg or any person in the plural (Preterite 2). Now, it does not seem natural to posit that T might have anything to do in this differentiation (which incidentally, as observed above, is postulated in the specialized literature to be a descendant from a PIE verbal system originally based on aspect),¹⁵ since no such differentiation is the case whatsoever within the group of weak verbs: in other words, the /d/ suffix does not co-vary with person and/or number.

In a crucial way, the differentiation in question must be syntactically derived, given that Checking of person/number with the relevant DP is needed prior to the potential head being able to articulate the corresponding τ -interpretation.¹⁶ It so appears to be the case that such a head is v : the capacity of v that, as I would like to propose, entails a stark contrast between former periods of the language and PDE is its role as a head that *interprets* τ -features. The morpho-phonological segment referred to as *stem* thus far in the discussion is therefore also a morpho-syntactic entity as concerns Past forms of strong verbs: in other words, the stem is an entity belonging to core syntax with regard to the derivation of Past forms of strong verbs in OE (and also for the most part of ME, as will be observed in Section 4). And there is of course no reason to suppose that the same does not apply to Present forms of these verbs: that is, if v (or, the same, the stem) *interprets* [+past] τ -features for the forms in the column to the right in (2), it must in a logical way be the case that v likewise *interprets* [–past] τ -features for the forms in the column to the left.

Now, for v (that is, the stem) to be a Probe *interpreting* τ -features requires the presence of further space which contributes to the portion of *valuation* proper, that is for v to be a Probe demands an element that acts as its Goal. The same as T *interprets* in the case of weak verbs in (4) above (and generally speaking for any verb in PDE) the τ -features that it finds valued on v , so v (or, more properly, v^0) *interprets* in the case of strong verbs the τ -features that come valued from a head that I will call v^0 and that could be characterized as a ‘stem-by-default’. In contrast to the vowel in the root ($\sqrt{\text{V}}$) for weak verbs (see tree-diagram in (4)), the vowel in the corresponding root ($\sqrt{\text{V}}$) for strong verbs is unspecified: note the use of $\underline{\text{V}}$, which stands for *vowel*, in the cited $\sqrt{\text{V}}$ node, at the bottom of the tree in (5) below.¹⁷ The relevant vowel becomes specified on the element acting as Goal, that is v^0 , as *vowel number 1* (the vowel for the Present). The Goal or v^0 thus consists of the consonantal segments of the root plus the vowel for the Present.



As suggested above, for v^0 of strong verbs to act as a Probe that so *interprets* τ -features, whether [+past] or [–past], it needs to establish a *Checking* relation with the corresponding nominal (note the irregular line in (5) connecting v^0 and (arg.)). Incidentally, as observed in Section 1.1, *Checking* ultimately contributes to licensing, but it is not itself a *valuation* operation (as is *Agree*). If the *nominal* in question with which v establishes *Checking* is e.g. third person sg, then the stem *scīn* as in (5) above will value the τ -feature (which happens to be marked [+past] in (5)) basing upon that information, and the result in the morpho-phonology will be *scān* ‘he/she/it shone’. If the form to be derived is e.g. *scīnaþ* ‘we/you/they shine’, then the same

¹⁴ I thank one anonymous reviewer for emphasizing the importance of clarifying the syntactic role that is adjudicated on the present account to the DP subject in this and subsequent tree-diagrams.

¹⁵ I would like to make clear that when I suggest that T has nothing to do in the relevant differentiation, I am referring to τ -features proper. T does have a crucial role to play regarding features endowed with ϕ -interpretation (see Section 3 below).

¹⁶ As is widely known, ablaut variation is strongly argued in the literature to be originally the phonological result of stress placement on endings (see e.g. Mailhammer 2007: 26ff.). However, that does not detract from it being syntactically motivated in the historical development after PIE.

¹⁷ This is precisely the notation used in the philological literature to refer to the vowel in the root of strong verbs.

stem *scīn* will value the [–past] τ -feature after *Checking* again with the relevant nominal. This entails that the external argument in the derivation of a strong verb (if it is the case that the verb in question selects for such an argument) cannot merge in the Spec of VoiceP (as would happen with a weak verb in (4)), since v needs a more local element to establish *Checking*: that is why VoiceP is missing from (5). But even more so, the *Checking* operation that will apply between v and an external argument, that is an argument in Spec, v (see the notation between parentheses (*ext.arg*) in (5)), is not based upon a structural relation of c-command, but upon a more *permissive* relation of m-command. In the specific case of (5), the *Checking* relation is shown to apply between v and an internal argument (which v would actually c-command) because a verb like *scīnan* ‘shine’ is to be considered typically unaccusative: however, as just observed, in the case of an agentive verb, then it is m-command that can only be invoked to apply. I am aware of the importance of this issue, and that resorting to m-command may not be fully explanatory, but the only suggestion that I am ready to make at this moment is that this structural allowance is perhaps part of the legacy of the PIE system available before the emergence of TP as a superordinate projection.

Given that the stem-variation in strong or ablaut verbs has been analyzed as involving a morpho-syntactic process, it is important to refer, albeit briefly, to the stem-variation that is found within the group of weak verbs. As is widely described and analyzed in the literature (see Hogg 1992: 157ff.; Lass 1992: 127-130; Kastovsky 2006: 164; Mengden 2012: 18ff.,...), weak verbs are divided into two major classes (with subclasses within),¹⁸ a division that corresponds with the effects of the original projection of a vocalic segment in between the root and inflectional markers (of tense and/or agreement). This segment is the so-called thematic vowel or theme vowel /i/ in the case of a verb like *hīeran* ‘hear’ or one like *herian* ‘ravage’, and a thematic vowel /o/ in a verb like *lōcian* ‘look’. In verbs like *hīeran*, the thematic vowel cannot be found any longer (in the standard West Saxon dialect of OE), but it surfaces as /e/ in the Past forms of verbs with a short vowel in the root like *herian* (note *her-ed-e* ‘I ravaged’ vs. *hīer-d-e* ‘I heard’ in (3) above), and it also produces a glide in the first person sg and in the plural forms of the Present (note *her-ie*, *her-iaþ*).¹⁹ In verbs like *lōcian*, the thematic vowel shows itself in the Past forms (*lōc-od-e*), and similarly a glide is produced in the first person sg and plural forms of the Present (*lōc-ig-e*).²⁰ The augmentation just described (which applies across classes except for the class represented by *hīeran*) would be characterized as stem-allomorphy proper, since there appears to be no morpho-syntactic factor involved. By contrast with the stem-variation that applies in the group of strong verbs, this one would belong to the morpho-phonological component. And likewise the Past of so-called irregular weak verbs, as in *sēcan-sōht-e* (‘seek’) or *tellan-teald-e* (‘tell’) (see also footnote 20), is a case of stem-allomorphy, that is of morpho-phonological variation. On this occasion, however, when the realization of the Past is the result of non-intervention of the original thematic vowel, the variation or allomorphy is much more extreme.

The discussion in this section has covered the aspect enunciated as (1b) in the Introduction, and repeated below with the same numeration.

(1b) capacity of v to interpret τ -features

More specifically, the analysis has covered [+past] τ -features for weak verbs (tree-diagram in (4)), for which T is the relevant Probe, and [+/-past] τ -features for strong or ablaut verbs (tree-diagram in (5)), where (1b) applies. The justification that has been offered for the contrast in the licensing of τ -features for weak verbs on the one hand and strong verbs on the other hinges upon the syntactic motivation that, as has been claimed, guides the computation of Preterite 1 vs. Preterite 2. Other than this, strong verbs behave in the syntactic sequence exactly as weak verbs (with regard e.g. to the plausible movement to T, or their position in relation to adverbs,...). In the above-cited work in preparation on modals, I argue that evidence that v is a locus with the capacity to *interpret* τ -features is to be found in connection with such elements (that is, modals) and further with forms of the copula.

It is the case now that there is one segment left to analyze from the columns in (2) and (3) above, namely the segment that occurs to the rightmost extreme in all forms. This entails a major asymmetry, since nothing has been said thus far of the derivation of [–past] τ -features for weak verbs, that is of the derivation of weak verbs in the Present: in effect, note in this respect that the forms for the Present of *hīeran* ‘hear’ are the only ones in (2)–(3) consisting of just two segments. A question to pose is therefore whether Present forms of weak verbs are possibly missing in [–past] τ -features proper (that is, [–past] features with sole τ -interpretation) which would incidentally render the above-described [+past] τ -features (those that expone as /d/) as privative [*past*] features. With regard to strong verbs, a question in the opposite direction comes to mind: if v itself *interprets* τ -features, as stated in (1b) and as shown in the diagram in (5), what is then the role of T in the derivation for these latter verbs, that is, for strong verbs themselves? The answer to both these questions must be sought in

¹⁸ Incidentally, van Gelderen (2000: 155) refers specifically to three classes and for his part, Mengden (2012) defends a five-way classification.

¹⁹ The second and third person sg do not exhibit the glide because of the effects of umlaut.

²⁰ Two other subclasses are the one with consonant gemination (as in *trymman* ‘strengthen’) and also a subclass referred to as irregular weak verbs, for which only the Present reflects the effects of umlaut (see e.g. *sēcan* ‘seek’, with the Past *sōhte*).

the account proposed here about the availability of a second Probe for T, one in charge of licensing τ -features which also contribute themselves agreement or ϕ -interpretation. Such is the focus of Section 3 immediately below.

3. Licensing of τ -features with an additional ϕ -interpretation in OE and ME

The issues raised at the end of the previous section center around the licensing of subject agreement or ϕ -interpretation as occurs on OE verbs, and are necessary in the first place in order to complete the derivation proposed in (4) and (5) for weak verbs and strong verbs, respectively. The relevance of such licensing is actually massive since, as I contend in my proposal (see Section 1), it is one and the same T Probe that is in charge of it for all verbs generally speaking in OE: such a T Probe (with both τ - and ϕ -interpretation) is then in a logical way to be held responsible for the central role of T as a functional head in OE: very importantly, a head whose Spec position becomes a canonical derived position for the subject. Let us begin by recalling (1a) from Section 1.

(1a) availability of two T Probes in OE and ME, to be specified as $[_T T]$ and $[_T Agr T]$

Now, whereas $[_T T]$ is the T Probe analyzed in Section 2 as being in charge of the licensing of [+past] τ -features for weak verbs (see also the corresponding node in the tree-diagram in (4)), $[_T Agr T]$ is the T Probe that is relevant on this occasion and one also in charge of licensing τ -features.

I would like to recall that the morpho-syntactic features to analyze in this section are those that expone as the last segment in the paradigms illustrated for convenience in (2) and (3). Paradigms or listings of such segments in isolation can be found in manifold works, and Lass (1992: 134) is a very good example. The set of forms in (6) are the endings provided by the author for strong verbs and for weak verbs in the (standard) West Saxon dialect. Van Gelderen (2000: 155-156) is similarly illustrative: see (7), where she incorporates different variants.

(6)	Present		Past	
	Strong	Weak	Strong	Weak
1	-e	-e	-Ø	-e
2	-(e)st	-(e)st	-e	-(e)st
3	-eþ	-eþ	-Ø	-e
pl	-aþ	-aþ	-on	-on

(7)	Present		Past	
	Strong	Weak	Strong	Weak
1	-e	-e	-Ø	-e
2	-(e)s(t)	-(e)s(t)	-e	-es(t)
3	-(e)ð	-(e)ð	-Ø	-e
pl	-að	-að	-un, -on, -an	-un, -on, -an

The relevant empirical observation to make is that the above segments indicate person and number on the one hand, and [+past] or [-past] on the other, which shows clearly in that exponency under the *Present* column does *not* coincide with that under *Past* (except for the syncretism in the first and second person sg in weak verbs: note *-e* and *-est*, respectively).²¹ An important issue to discuss is why the relevant features underlying the cited *co-variation between tense and agreement* should be identified as τ -features, as emphasized in the paragraph following (1a) above.

Now, I would like to note that there is no (historical) hint that can be used to support a segmentation as in (8), that is the availability of a -Ø-segment for the Present of weak verbs, which would plausibly result from a rule of *impoverishment* (namely, the mechanism cancelling out a feature computed in the syntax previous to the morpho-phonology, or the same, previous to Vocabulary Insertion).

²¹ Lahiri (2003: 99) highlights also the fact that “inflectional suffixes of the present and past tense of Germanic verbs are different”. She makes use though of the relevant generalization in order to support her phonological theory about the Germanic /d/ suffix originating as a verb, in a similar way as in Bengali.

- (8) hīeran
Present Indic.
1 hīer-Ø-e
2 hīer-Ø-est
(...)

On the other hand, positing such a \emptyset -segment for the Present of weak verbs in order to establish a parallelism with the Past of weak verbs (note e.g. *hīer-Ø-e* / *hīer-d-e*) is not explanatory at all: I contend in this respect that positing two functional projections for the computation of these verbal forms (whether one TP on top of another TP, or even an AgrP on top of TP) would lead to positing a kind of structural complexity which is not to bring with it any benefits, by which I mean that the same results can be obtained by positing that one and the same functional projection contains more than one head or Probe.²² But, above all, as suggested immediately above, if a \emptyset -segment or Vocabulary Item is to be postulated in a historical context, then its availability must be argued for in historical terms, a position that does not seem to be tenable in the case at hand.

Further, if the last segment in the Present (note *hīer-e*) is taken as the realization solely of φ -, then this should lead to weak verbs in the Present as relying on no τ -feature licensing, a situation that again does not appear to be acceptable.

I therefore propose in the present account that the last segment for all the forms in the paradigms (2) and (3), and for that matter, the segments in (6)/(7), are τ -features, that is features *interpreted* by T itself as [+/-past], though ones with additional φ -interpretation, that is with person and number interpretation, which must typically have its source in the relevant nominal (see below in this section). That is why the τ -features of the T Probe in question are characterized here as *AgrT*, a short form for *AgreeingTense*. Further, in a logical way, the rejection of a segment (more specifically, a \emptyset -segment) as in (8) above for the Present of weak verbs entails that the τ -features *interpreted* by the [_T] Probe described in Section 2 above, that is those features that correspond to the Vocabulary Item or segment /d/, are not *binary* features but *privative* features, that is they must be referred to as [*past*] τ -features.

The syntactic derivation of weak verbs in the Present would thus rely on a single T head, that is a single T Probe, namely AgrT, which appears formally characterized in (9a) below. By contrast with weak verbs in the Present, weak verbs in the Past count on the T Probe analyzed in Section 2 in charge of licensing τ -features proper (those that expone as a /d/ suffix) plus, in addition, the AgrT Probe in charge of licensing τ -features with φ -interpretation: note the double T head in (9b). Such is then the justification of a double T head, that is of the two T heads or Probes being located within the same TP that I would like to defend.

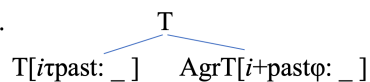
As for strong verbs, whose [+/-past] τ -features are *interpreted* by *v*, as argued in Section 2, the task of T is again to act as the Probe of relevant τ -features with φ -interpretation: note the AgrT head in both (9c) and (9d).

All instances of τ -features are binary, that is they are [+/-past] features, except those for the Past of weak verbs.

(9) a. AgrT[*i*-past φ : _]

T Probe for weak verbs in the present

b.



T Probes for weak verbs in the past

c. AgrT[*i*-past φ : _] (...plus the *v* Probe)

T Probe for strong verbs in the present

d. AgrT[*i*+past φ : _] (...plus the *v* Probe)

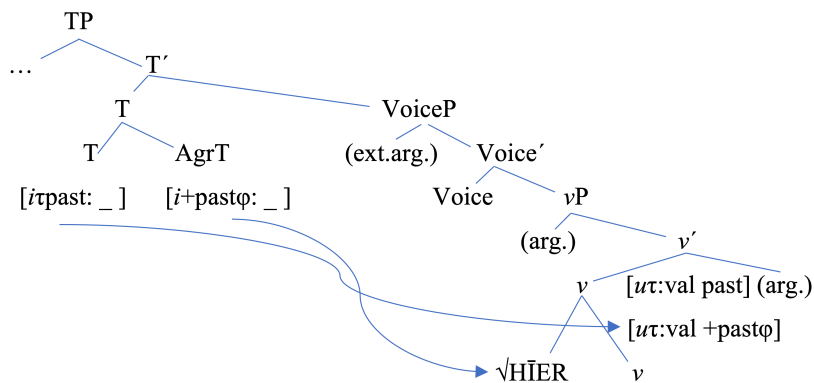
T Probe for strong verbs in the past

Incidentally, regarding the rejection of a \emptyset -segment for the Present of weak verbs as in (8), I would like to add that such an analysis cannot be taken to mean that morphology drives syntax (given that, in the case at hand, there is no segment pronounced and, as I defend, there is no syntactic feature computed). DM defends that there need not be correspondence between morpho-syntax and morpho-phonology, an idea that I endorse, but the correspondence can of course actually be the case.

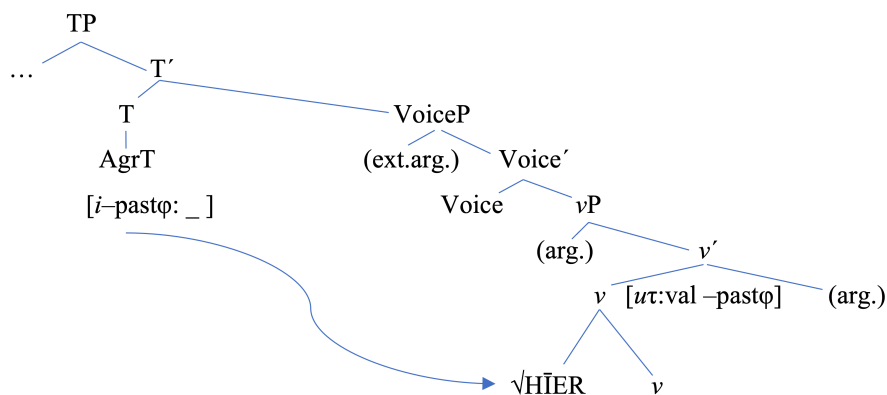
The characterization of the T Probes is incorporated in the derivations in the tree-diagrams below. That in (10) would correspond to the derivation of a weak verb in the Past, as in e.g. *ic hīerde* ‘I heard’ (compare with unfinished (4)); the tree-diagram in (11) would correspond to a weak verb in the Present, as in e.g. *ic hīere* ‘I hear’, and the tree-diagram in (12) would correspond to a strong verb in the Past, as in *hit scān* ‘it shone’ (compare with unfinished (5)). In connection with this last tree-diagram, the derivation would be identical for a strong verb in the Present (as in e.g. *hie scīnab* ‘they shine’) except for the Probe of *v*⁰ being [*i*:val-past],

²² I would also like to note that, as is well known, Agr heads have been deeply disfavoured generally speaking in minimalist syntax basing on the fact that φ -features are *interpreted* and *valued* on the relevant nominal. A different issue altogether is that of *FinP*: however TP is enough for the OE syntactic space that the present discussion is about.

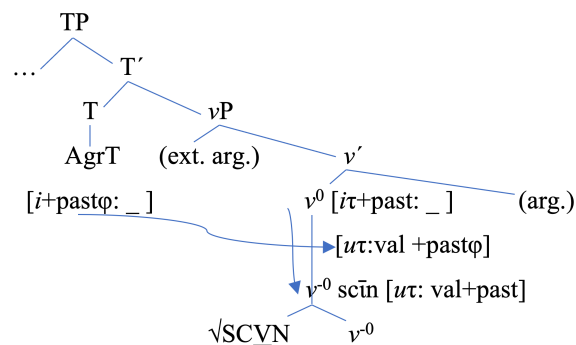
rather than $[i\tau:val+past]$. Incidentally, the *Agree* relations between Probe and Goal are indicated exclusively by a curved line, that is the very terms *Probe* and *Goal* do not appear for simplicity's sake. And likewise taken for granted is the relation of *Checking* that is to apply between T (specifically, the $[AgrT]$ T head) on the one hand, and the DP that is to become subject on the other. As observed above in this section, and also in Section 1.1, person and number interpretation belong inherently within the cited DP: in other words, ϕ -features are both *valued* and *interpreted* in the DP. However, the $[AgrT]$ head needs to be aware of the relevant ϕ -specification in order to have it valued against v (specifically, on the account proposed here, $[AgrT]$ is the one in charge of licensing τ -features with additional ϕ -interpretation). As described in Section 1.1, *Checking* between T and the DP would occur aside from (or maybe as part of, but not as an obstacle to) the *Agree* relation between T and DP, which arguably licenses Case for the latter.

(10) Weak verb in the Past²³

(11) Weak verb in the Present

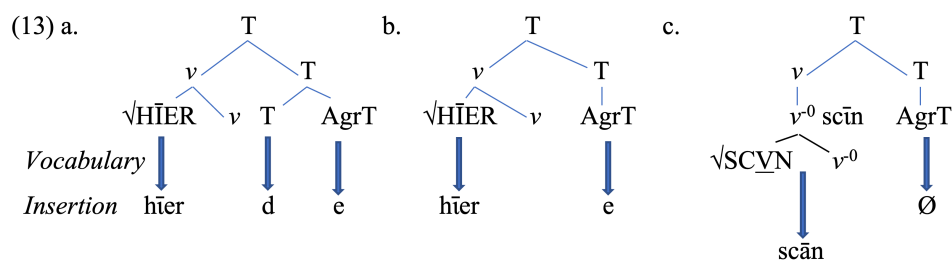


(12) Strong verb in the Past



In (13) below is represented the structure that would be the immediate input to *Vocabulary Insertion* for each case above. As observed in Section 1.1, the cited structure is actually quite straightforward due to the relative transparency of the forms in question. I assume in my research the widespread position in the literature that OE is a V-to-T language (hence the specific graphic below), though I am just interested in showing roughly speaking the coupling together of morpho-syntax and morpho-phonology.

²³ Note the notation $[past]$ rather than $[+past]$ in the characterization of the feature as *interpreted* by T and *valued* on v .



Emphasizing once more one of the main points discussed in the paper, T is such a head as ensures that all verbs in OE –whether weak or strong– receive formal licensing: namely, a T head with an AgrT Probe. In contrast with this situation, and as observed in Section 2 above, the specialized literature agrees that PIE itself appears to be a linguistic system that is based on aspect and not on tense (see widely-known works like Hewson and Bubenik (1997), Rice (2006), Mailhammer (2007), Fulk (2008), or also Monteil (1992)). The strong verb phenomenon or ablaut phenomenon is typically brandished to refer to this contrast, since the relevant stem-variation is a direct descendant of aspectual distinctions having been reconverted to tense distinctions, in the case at hand in OE (or possibly already in PGmc).

I would like to highlight on this occasion the major differences existing between the agreement segments in OE verbs on the one hand, which have just been accounted for here in terms of τ -features with additional φ -interpretation, and the (reconstructed) agreement segments in PIE as appear illustrated and described in a monumentally documented handbook like Weiss (2009: 384, 386), or also in Fulk (2008: 249-250), on the other hand. Though this is of course an issue that deserves more attention than I am prepared to give to it here, I would like to observe that no combination of agreement and tense would seem to sanction (as yet) T, or just tense, as a superordinate projection in the PIE system when such a combination consists in that *the same* (person and number) segments are implemented in the Present (Indicative) (see (14) below), and similarly in the Imperfect and the Aorist (see (15)). The difference lies in that Present forms add a particle (the so-called *hic et nunc* particle) to the person and number segment. There is thus in the first place no co-variation between agreement and tense.

(14)	SINGULAR	PLURAL
1	*-m-i	*-me/o-s
2	*-s-i	*-t(h ₂)e-s
3	*-t-i	*-ent-i, * η -t-i

(Weiss 2009: 384)

(15)	SINGULAR	PLURAL
1	*-m	*-me/o-(n)
2	*-s	*-te
3	*-t	*-ent, * η -t-

(Weiss 2009: 386)

4. Changes affecting the licensing of τ -features in ME

It is widely known that ME and EMnE are periods in which the verbal system of the language undergoes massive changes. The philological and the diachronic literature put the emphasis, on the one hand, on the generalized loss of morphological markers on almost any possible front (inflectional class with regard to both strong and weak verbs, ablaut distinction with regard specifically to strong verbs, subject agreement endings again for both strong and weak verbs) and on the recategorization of modals, the loss of V-to-T and the emergence of periphrastic *do*, on the other. In my research I relate the recategorization of modals and of the finite copula on the one hand (with corresponding repercussions on *have*), and the loss of V-to-T movement on the other, to changes affecting (1b) and (1a), respectively. Nevertheless, as I observed in Section 1 and in Section 2, I deal with these issues in a separate paper.

The aim of Sections 4.1 and 4.2 below is to account for the way in which the licensing of features dealt with in Sections 2 and 3 above changes in the course of ME.

4.1. Loss of v 's licensing capabilities

An acute process of morpho-phonological loss is attested to affect the group of strong verbs during the ME period, which consists variously in the mixing up of elements from one ablauting class to another, the conversion

(of strong verbs) into weak verbs and, very prominently from the perspective of the present discussion, the loss of the so-called Preterite 1/Preterite 2 distinction (see e.g. Mossé 1952: 69; Lass 1992: 131ff.; Lass 1997: 166ff.).²⁴ Lass (1992: 132) refers explicitly to the circumstance that the levelling to a single ablaut vowel for the past of these verbs shows in a generalized way after ca. 1450, hence the dating that appears incorporated in (1c), which I repeat below from Section 1. Incidentally, though variation is amply recorded about the preponderance of one of the two vowels over the other according to dialect, a clear tendency exists for the vocalic segment in Preterite 1 to win over that in Preterite 2.

(1c) loss of the capacity of v to interpret τ -features (after ca. 1450)

Now, the relevance of the disappearance of the Preterite 1/Preterite 2 distinction for the present account consists in that such a distinction was argued in Section 2 to indicate that v itself is the Probe that so *interprets* [+/-past] τ -features for strong verbs (hence (1c) itself). The v -architecture that was proposed to be necessary for v to be such a Probe (and consequently to behave as a syntactic stem proper) (namely, $\sqrt{\quad} \rightarrow v^0 \rightarrow v^o$) and similarly a derivation like (5)/(12) above then disappear from the system.²⁵ Strong verbs pass on to be derived exactly as weak verbs, exclusively *via* the Probes of T, which are the focus of Section 4.2 below.²⁶ This means that ablaut or stem-alternation (as in e.g. *shine–shone*) is no longer the result or output of formal features (that is, of τ -features as computed by T) but is to be analyzed as the result of post-syntactic *readjustment rules*. As is well known, the precise implementation of *readjustment rules* and/or the way these are to be constrained is a controversial and fruitful issue of discussion in current DM theory.

4.2. The T Probes in the course of ME

On the account proposed in the paper, strong verbs are derived in the specific way argued for in Sections 2 and 3 from the beginning of ME up to 1450. The change affecting v by means of which the latter loses the ability to *interpret* [+/-past] τ -features (Section 4.1 above) entails that strong verbs pass on to be derived as weak verbs from the middle of the fifteenth century onwards. Focusing then on weak verbs, the relevant issue to consider is (1d) from Section 1.

(1d) the T Probes in the course of ME

The case to argue is that both of the T Probes that have been claimed to be implemented in OE syntax (see (9a, b), repeated below from Section 3) keep on in principle through the ME period: on the one hand, $[_T T]$, which *interprets* the privative feature [past] and, on the other hand, $[_T AgrT]$, which *interprets* both [-past] and [+past] plus, in addition, subject agreement or ϕ . However, one of the processes of loss mentioned at the beginning of Section 4 is actually to be put in connection with the *AgrT* Probe, the core aspect to acknowledge being whether it has fatal morpho-syntactic repercussions. In other words, the core aspect to acknowledge is whether *co-variation between tense and agreement*, which is the very interpretation of $[_T AgrT]$, is still the case.

(9) a. $AgrT[i-past\phi: _]$ b. $\begin{array}{c} T \\ \diagdown \quad \diagup \\ T[i\tau past: _] \quad AgrT[i+past\phi: _] \end{array}$

In effect, the morpho-phonological realization of $[_T AgrT]$, namely what is generally referred to in the philological literature as *subject agreement endings* or *markers* and was the focus of morpho-syntactic analysis in Section 3 above, initiates a process of erosion already at the end of OE and all through ME, which consists in the generalized weakening of vowels to *-e-* (/ə/), and their disappearance in certain dialects, and in the frequent and/or dialectal disappearance of the consonantal segment *-n*. Incidentally, it is of course a well-known fact that the only *subject agreement ending* ultimately surviving in PDE is *-s-* for the third person sg. in the Present, which spreads specifically from the Northern dialect, but the relevant period right now is ME.

In order to be able to acknowledge whether the process of morpho-phonological attrition indicates a similar process of morpho-syntactic attrition, let us consider the paradigm of the relevant endings by Late ME as provided by Lass (1992: 137–138) or also Lass (1997: 160). Incidentally, another relevant reference is Fernández (1982: 321, 329).

²⁴ To these changes, and triggering actually some of them, must of course be added the fifteenth century phonological phenomenon known as the *Great Vowel Shift*.

²⁵ A process of attrition similarly affects the group of weak verbs from the end of OE and gets very strong in the second half of ME, with the result that only one class of weak verbs remains by the end of this period. Nevertheless, the reduction or loss of stem-variation for weak verbs would not belong to core syntax but exclusively to the morpho-phonology (see Section 2).

²⁶ In immediate work in preparation, I analyze the recategorization of English modals by invoking the disappearance of the v node as a site of interpretation of τ -features (see also Section 2 above).

The paradigm in (16) is actually a portion of the splendid graphics provided by R. Lass according to historical periods. The forms in (16) are only those considered minimally relevant for the present proposal as based on core syntax. The use of the slash indicates dialectal differences.

(16)	Present Indic.	Past Indic.
1	-e / -Ø	-(e)
2	-st	-st
3	-th / -s	-(e)
pl	-n / -s / -th	-e(n)

A comparison with the list or paradigm for OE in (6)/(7) (Section 3) is clear proof of the cited morpho-phonological erosion, which incidentally affects the Past more acutely than the Present. However, the specific circumstance about the derivation of verbs in ME that I would to highlight for the present discussion is that [+/-past] τ -features that additionally incorporate in themselves ϕ -interpretation, which features have been argued here to be the task of a [_TAgrT] Probe, keep on being active throughout the relevant period. That this is so is shown by the variation or opposition between the third person sg in the Present (-th, -s) and the Past (-e). Further, there applies variation or opposition in the plural though subject to dialectal differentiation: more specifically, there is clear variation between the Present and the Past plural whenever the former is -s or -th, but there is no variation in the system of a speaker that computes -n for the Present and -en for the Past. This way then, the mechanism of *co-variation between tense and agreement*, and therefore the very *interpretation* of [_TAgrT] as has been defended in the paper, must be considered to be still active.

In my current research, I analyze the timing of the de-activation of [_TAgrT] as such a Probe of [+/-past] τ -features with additional ϕ -interpretation, both in English and in Mainland Scandinavian (Danish, Swedish, Norwegian) which languages undergo a similar process to the former. Likewise, my focus is on the parametric contrasts existing between the T Probes in Germanic vs. Romance.

Aside from the above-described [_TAgrT], the [_TT] Probe for verbs throughout ME correlates with a /d/ segment or Vocabulary Item for weak verbs and with various forms of ablaut in the case of strong (or irregular) verbs. Let us recall from Section 4.1 above that for [_TT] to be in charge of [past] features of these latter verbs is due to the disappearance of the Probe of v .

5. Conclusion

I have argued in this paper that the derivation of verbs in OE and in ME (up to approx. 1450) is regulated by two T Probes plus a v Probe, all of which are in charge of *interpreting* τ -features.

Starting with the latter, I have argued that v acts as Probe of v^0 in order to *interpret* [+/-past] τ -features for strong verbs. This capacity of v can be proven by ablaut in Pret. 1 vs. Pret. 2, and it exhibits v itself as a close descendant from stems in PIE. This situation comes to an end in the period ca. 1450. I argue in work in preparation that the recategorization or reanalysis of English modals is triggered precisely by v ceasing to be identified as a site where τ -features are interpreted, which loss reflects itself overtly in the loss of the above-mentioned ablaut Pret. 1/Pret. 2 distinction. From the perspective of syntactic theory, the capacity that is imputed in the present paper to v as a head acting itself as a Probe (in the interpretation of τ -features for strong verbs in OE and ME) entails that v , that is the stem, is active at core or narrow syntax.

As regards the T Probes, I have argued that [_TT], which expones specifically as a /d/ suffix, is in charge of *interpreting* [past] τ -features for weak verbs. The other T Probe has been labelled here [_TAgrT], and is in charge of interpreting [+/-past] τ -features with an additional ϕ -interpretation. The relevance of [_TAgrT] is massive since, as I have contended in the discussion, [+/-past] τ -features with an additional ϕ -interpretation is the case for all verbs in the language, whether these are weak verbs or strong verbs (or also, incidentally, modals and/or predecessors of modals in OE). For tense (that is, [+/-past]) to co-vary with agreement (person and number) has been noted before in the literature but it has not, to my knowledge, been held specifically responsible for the superordinate position of T and the role of the latter in determining in a systematic way the position of the subject. I deal in work in preparation with the full development of [_TAgrT] in English and in the rest of Germanic languages, and likewise with core parametric contrasts in this domain between Germanic and Romance.

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