

The morpho-syntax of OE verbs: The role of T(ense) and the role of *v* (=stem)

Concha Castillo, University of Málaga

Within the framework of minimalist syntax, I argue (i) that the derivation/computation of weak verbs in OE, and all through the first half of ME, differs from that strong verbs in that T is the (novel) functional head or Probe that *interprets* [+past]  $\tau$ -features on weak verbs (which features expone as a /d/ suffix), whereas *v* *interprets* itself [+/-past]  $\tau$ -features on strong verbs (which features expone as ablaut), and (ii) that T has one other head or Probe, specifically one that similarly *interprets*  $\tau$ -features, but  $\tau$ -features that are additionally endowed with agreement or  $\varphi$ -*interpretation* (person/number). This second head, which is called [*TAgrT*] here, to distinguish it from the (ordinary) [*TT*] head mentioned above, is in charge of *interpreting* [+/-past]  $\tau$ -features for all verbs in the language generally speaking, and it happens not to be redundant since, as just mentioned, the relevant features are also the locus for verbal  $\varphi$ - in the system. The cited combination of  $\tau$ - and  $\varphi$ - in the same T head or Probe is argued to correspond with the mechanism of co-variation between tense and agreement ruling verbal paradigms in the language. Since [*TAgrT*] is necessarily present in the computation of all verbs in the language, it is the head responsible for T's configurationality (in OE and arguably in all languages in general descending from PIE). To (i) and (ii) I would like to add a third issue which, though being actually a component part of (ii), deserves to be referred to in a separate way. Thus, I also argue in this paper (iii) that defending that *impoverishment* could apply in the derivation of the Present of weak verbs does not contribute to the explanation of the processing or computation of the cited forms, and actually of all the forms in the paradigm of weak verbs and of strong verbs.

Core assumptions that I endorse from minimalist theory are as follows: The licensing of  $\tau$ - and  $\varphi$ -features works according to *valuation* and *interpretability* within the *Agree* operation (Chomsky 2000, 2001; Pesetsky & Torrego 2004/2007); more specifically,  $\tau$ -features are *valued* on *v* (in e.g. PDE) and they are *interpreted* on T;  $\varphi$ -features are both *valued* and *interpreted* on the nominal, and they are valued on *v*: a way for T to borrow  $\varphi$ -interpretation in order to value this against *v* is through prior *Checking* with the nominal. // As in *Distributed Morphology*, the licensing of  $\tau$ - and  $\varphi$ -features on verbs is a morpho-syntactic operation, which serves subsequently as the input to the morpho-phonological component. // Also regarding DM: I assume that roots abide by early insertion (as in Embick 2000, 2010; Marantz 2007).

An example of OE paradigms to be employed throughout the discussion: *scīnan* 'shine' and *hīeran* 'hear':

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

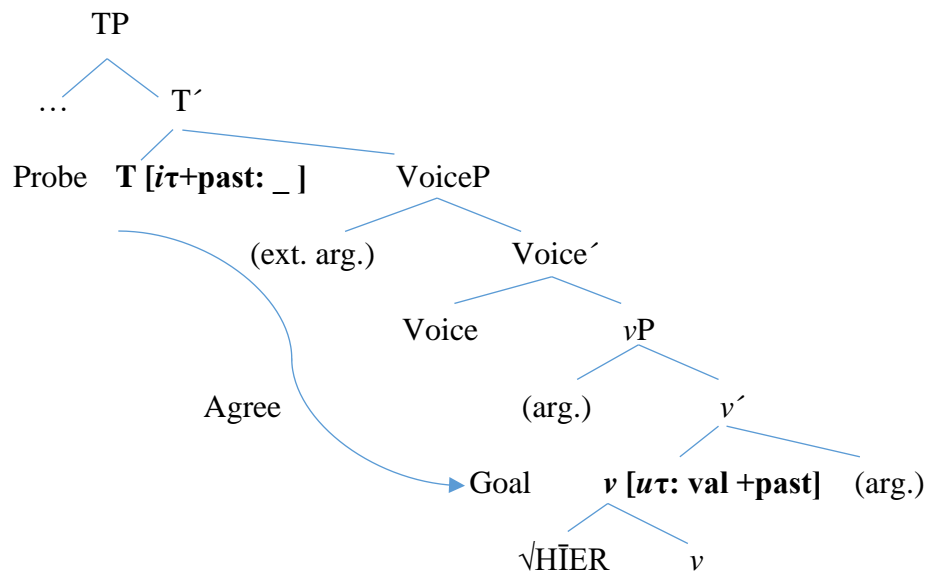
### A. Weak verbs in the Past (partial derivation)

I would like to begin by analyzing the Past forms of weak verbs in OE given that the *-ed-* segment appearing in the Past of regular verbs in PDE corresponds in a straightforward way with the *-d-* segment of the Past of the cited OE verbs.

As regards the T(ense) head (or rather the TP projection) that occurs at the top of the tree-diagrams to be provided below, I would like to note the following. It is widely-known that generative theory (ever since the GB framework) postulates that a superordinate T head (formerly I(nflection)) is to be considered a (quasi-)universal property governing the derivation/computation of linguistic structures. Though later in the theory the C(omplementizer) head, or the so-called left-periphery domain, has become a generalized site vertebrating discourse properties, T is arguably indispensable as regards the licensing of the morpho-syntactic properties of verbs. On the other hand, as is discussed in the historical and/or philological literature (Monteil 1992, Hewson & Bubenik 1997, Mailhammer 2007, Fulk 2018,...), the verbal system in P(roto-)I(ndo-)E(uropean) undergoes a generalized change from being aspect-based to being tense-based in the various language families, among this of course the Germanic family.

Assuming then that T is the head in PDE that interprets [+past] –features that expone as a *-d-* segment for regular verbs, it seems legitimate to assume (2). The relevant licensing appears in the tree-diagram below in bold-face.

(2)



### B. Strong verbs in the Past and also in the Present (partial derivation)

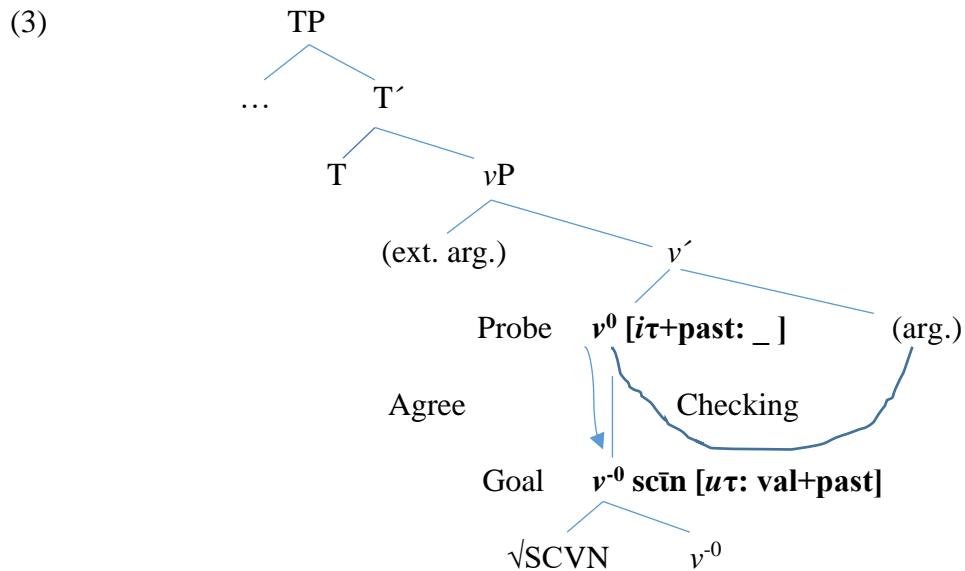
As widely-attested in the philological and historical literature, these verbs exhibit two Pasts - Preterite 1 and Preterite 2- with so-called *vowel 2* and *vowel 3*, respectively: in a crucial way, this differentiation depends on whether the nominal to become Subject is first or third person sg (Preterite 1) or otherwise second person sg or any person in the plural (Preterite 2). This means that the differentiation is syntactically derived, since *Checking* of person/number with the nominal is needed.

The functional head to act as Probe for the interpretation of the cited [+past] τ-features does not seem to be T, since the /d/ suffix is not determined in any way by person or number: the relevant head must then be v. v is then to be identified as the *stem* in morpho-syntactic terms: in other words, the stem is not only a morpho-phonological segment but it is also a morpho-syntactic entity (in core syntax), namely the entity in charge of *interpreting* [+past] τ-features for strong verbs. And not only [+past] τ-features but also [-past] τ-features, since the stem-alternation also affects of course Present forms for strong verbs (as e.g. the forms of *scīnan* in the column to the right in (1)).

Further, for v to be a Probe *interpreting* τ-features requires the presence of further space that contributes the portion of *valuation* proper: that is, for v to be a Probe demands an element that acts as its Goal. In (3) below, v (or more properly, v<sup>0</sup>) is shown to interpret the τ-features that come valued from a head that could be characterized as v<sup>0</sup>, and that could be taken as a 'stem-by-default'. In contrast to the vowel in the root (√) for weak verbs, the vowel in the root

(√) for strong verbs is unspecified: note the use of  $\underline{V}$ , which stands for vowel, in the cited  $\sqrt{\quad}$  node in (3).

And also important is the issue of the lack of VoiceP in (3).  $v$  needs a (more) local element with which to establish *Checking* and it so seems to be the case that a Voice head would be an obstacle in this context. I would like to insist, however, that this is an issue that would need to be explored further.



**C. Co-variation between tense and agreement for all verbs in the language:  $\tau$ -features with an additional  $\varphi$ -interpretation, which are the task of an  $[TAggrT]$  Probe.**

The remaining morpho-syntactic feature that is part of the computation of verbs in OE (and ME) is the one that expones as the last segment in (1), and that is illustrated in isolation in (4) (from Lass (1992: 134)).

(4)

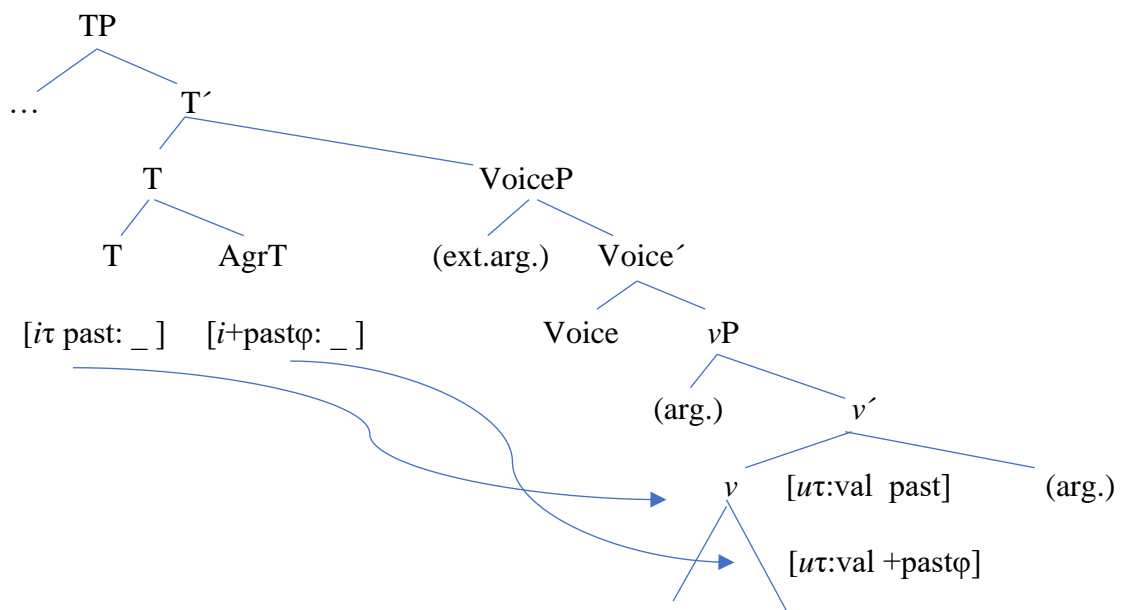
	Present		Past	
	Strong	Weak	Strong	Weak
1	-e	-e	-∅	-e
2	-(e)st	-e(st)	-e	-(e)st
3	-eþ	-eþ	-∅	-e
pl	-aþ	-aþ	-on	-on

These are commonly referred to as *subject agreement* endings, and I take them to correspond in core or narrow syntax with  $\tau$ -features proper, though ones with additional  $\phi$ -interpretation, basing upon:

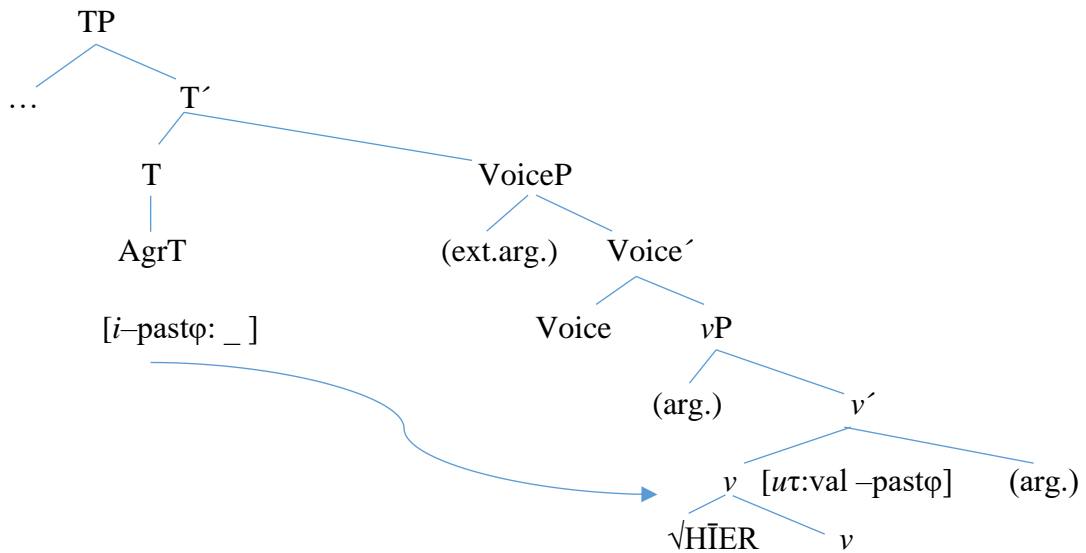
(a) Present tense forms would rely on just this one segment (aside from the stem segment) which must then be a  $\tau$ -feature proper. Interestingly, this would entail for the  $\tau$ -features shown in (2) above to be interpreted by the  $[\tau T]$  Probe not to be binary features: they would have to be identified as *[past]*, rather than *[+past]*, since they are not opposed to corresponding features for Present forms. The latter are the task of the one other T head or Probe argued for here to combine  $\tau$ - and  $\phi$ -interpretation, namely  $[\tau Agr T]$ .

(b) The mechanism of co-variation between tense and agreement that shows itself in (4), and that, despite the two cases of syncretism in the cited paradigm, could be characterized as: *distinct subject agreement endings within each tense and across both tenses*. This co-variation has been described before in the literature (as in Lahiri 2003: 99, in connection specifically to phonological theory). My proposal is that this mechanism corresponds with the above-cited  $\tau$ -features as *interpreted* by  $[\tau Agr T]$  in the processing or computation of verbs. Such features are the ones in charge of providing the language with its *configurational* status, which must be put in connection with the observations preceding the tree-diagram in (2) above: the features in question, which are part of the computation of all verbs in the language, are thus always present in the functional head (namely, T) that would be responsible for the (relatively) fixed position of finite verbs with respect to their subjects (and also their objects). See the complete derivations in (5).

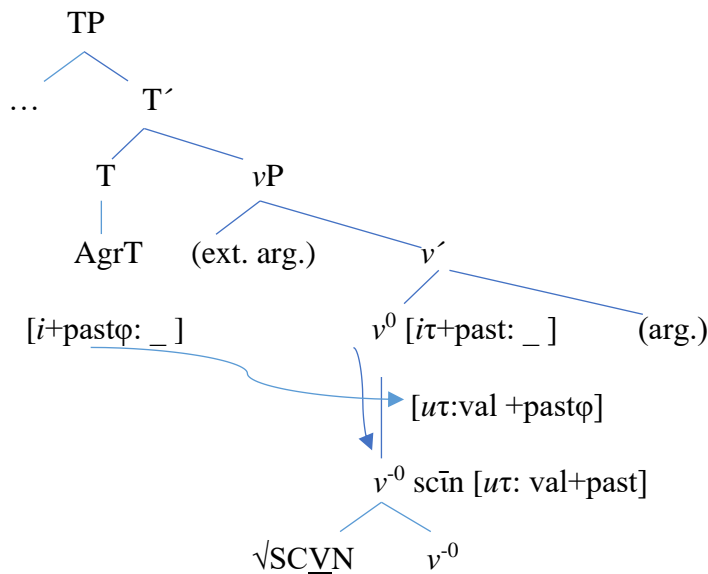
(5) a. Weak verbs in the Past



b. Weak verbs in the Present



c. Strong verbs in the Past (in the Present: [i-pastφ: \_]...)



In the above I have argued for the issues specified as (i) and (ii) at the very beginning of the paper. As observed on that occasion, there is one other issue that I would like to deal with, namely (iii), which consists in rejecting a zero segment in the Present forms of weak verbs, which would be the counterpart of the *-d-* segment of Past forms. I would like to reject this possibility, which would be identified as an *impoverishment rule* with a result as in e.g. *hĕr-*

*Ø-e*. I will argue that invoking this kind of analysis for the old periods of Germanic languages (see Bobaljik & Thráinsson (1998) and later Bobaljik (2003) in relation to Old Icelandic) is not historically supported, and that it appears to be above all a theoretical artifact.

By way of conclusion I would like to note that it appears to be worth while highlighting the contrasts that exist between the processing or computation of verbs in OE on the one hand and that in PDE on the other. Actually, as observed at the beginning, the discussion also includes reference to the first half of ME. In effect, the main points argued for in the paper would apply also in the cited period, despite the loss or attrition of exponents that begins already at the end of OE. If there is enough time, I will present the paradigm in ME (with corresponding dialectal variations) that would follow that of the standard West Saxon OE paradigm in (4) above.

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