The VO-OV split of Germanic languages

– a T3 & V2 production

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Abstract

With respect to their word order type, the sizeable Indo-European language families (Romance, Slavic) are homogenous, except for the Germanic family. Germanic is the only Indo-European language family that has split into an OV group (continental West-Germanic, with head-final VPs and APs), and a VO-group (head-initial phrases only). The predecessor languages of the modern Indo-European languages in general and of the Germanic languages in particular, are neither OV nor VO, but they are representative of a third type (T3), as will be argued. A single Germanic language, namely Yiddish, has preserved (or regained) its type III quality (amidst other T3 Slavic languages).

Latin, the mother of all Romance languages has been T3, too. The descendant languages are VO without exception. The Slavic languages have conserved their T3 grammars. Germanic appears to be exceptional. What is it that has triggered or facilitated the Germanic split?

The answer involves a second 'exceptional' trait of Germanic. Germanic is the only Indo-European language family that has developed and maintained the V2 property, with a single language 'left behind', namely English. It is the grammaticalization of the V2 property that facilitated the change and triggered the transition from T3 to OV and VO, respectively. It is a change from an *underspecified* to a *specified* directionality of complement selection by the head of the phrase. OV and VO are the immediate result and the equally likely outcome of fixing the unspecified directionality for identification between verbal head and its dependents in changing a T3 proto-grammar. This difference triggers an intricate set of structural differences: +/- mandatory functional subject, +/- compactness, -/+ scrambling, +/- edge effect, -/+ verb clustering (see Haider 2012, ch. 5) for head-initial and head-final phrases, respectively.

The idea that OV could be regarded a derivational continuation of VO (or vice versa) is empirically and theoretically inadequate. There is no evidence for a VO-proto language, and the VO-based clause structure is demonstrably more complex than the OV-based one. On the other hand, strict OV languages do not change into VO languages without external interference (e.g. creolization). Recognizing the hitherto overlooked T3 type as an independent type is not only the key for understanding the diachronic dynamics of the Germanic languages, it is also the key for a predictive theory of correlations between word order and phrase structure. What appears to be an exceptional VO language (e.g. Slavic), is not exceptional at all. It is merely a typical T3 language (see the analysis of Slavic languages, below).

1. The puzzle

The modern Germanic languages (with the exception of Yiddish) are all languages with a fixed directionality of heads. As for the VP and AP, there is a group with strictly head-*initial* directionality (Germanic VO languages) and a group with head-*final* directionality for V° and A° (Germanic OV languages), illustrated with German examples in (1a-c) and the ungrammatical serializations in (1d).

(1) a. [den Lesern$_{Dat}$ etwas$_{Acc}$ mitteilen$_{V°}$]$_{VP}$
the readers something tell
'tell the readers something'

b. [sich$_{Dat}$ seiner Sache$_{Gen}$ sicher$_{A°}$]$_{AP}$
oneself (of) one's subject certain
'to be sure about something'

c. [allen$_{Dat}$ an Wissen überlegen$_{A°}$]$_{AP}$
(to) everyone at knowledge superior
‚superior to everyone in knowledge'

d. *mitteilen den Lesern etwas; *sicher sich seiner Sache; *überlegen allen an Wissen

The modern Germanic languages (except for Yiddish) are either strictly head-initial, and thereby VO, or they are OV in the narrow sense, that is, the VP and the AP are head-final. Since VP and AP are the lexical phrases at the base of the clause structure, the Germanic OV languages share many syntactic properties with strict OV languages at the level of clause structure. The head-final group is the continental West Germanic group, plus an exported variety, namely Afrikaans. In this group, phrasal heads are head-initial, too, except for V° and A°. Only the head-final VPs and APs are responsible for the OV properties of the clause structure in theses languages.

The puzzle is this. The Germanic languages are exceptional as far as they developed into two entirely different syntactic types. The Romance languages are homogenously VO. Phrases are head-initial only. The Slavic languages are homogenous, too, but they are neither strictly VO nor strictly OV. They are typical examples (to be shown below) of the third type (T3), today and in the past. What is it that made just the Germanic group split into a VO and an OV group?

Surely, the cause of the split is not morphological decay, as linguistic folklore would have it. Icelandic is strictly VO, although it has retained all of the Germanic wealth of verbal and nominal inflection morphology. Afrikaans is OV, but it is the morphologically poorest among the Germanic languages. The facts are clear. Morphological decay cannot be the grammatical cause of a change towards VO. Why did the Germanic languages not develop in parallel to the Romance diachrony in targeting VO? Or, why did the Romance or the Slavic languages not develop an OV sub-group? This is the puzzle.

The solution of the puzzle has to take into consideration another characteristic peculiarity of Germanic languages, namely their V2-property. It is this property that permitted (and in fact facilitated) a change that eventually lead to the split. Without V2, the Germanic languages arguably would have entered the diachronic channel that the Romance languages passed, with a uniform VO clause structure as the outcome.

It is a fact that the predecessor languages of all the modern Germanic languages were neither OV nor VO. VO clause structures do not provide *preverbal* positions[1] for objects (2a); an OV clause structure, on the other hand, forbids postverbal nominal objects (2b).

(2) a. *This sentence would [[*grammatical restrictions*][clearly violate]$_{VP}$]
b. *Dieser Satz würde [[klarerweise verletzen] *grammatische Restriktionen*]$_{VP}$
this sentence would clearly violate grammatical restrictions

(3) presents representative examples from several Old Germanic languages (OE, older Nordic, Old High German) for the property of placing the verb amidst its nominal objects. This is excluded for OV as well as for VO. In VO, this order is a violation like in (2a), in OV it is as deviant as (2b). This order is grammatical in T3 and hence a characteristic order of the admissible orders in a third type (T3) language, to be explained below. In OV and VO the relative order of the head and its dependants is a consequence of a *directionality* property. In VO, the

[1] VO languages do not allow scrambling across the head of the VP. Apparent counter-evidence (e.g from Slavic languages) is misleading. These language are not VO-languages, but T3 languages, as will be shown below. For T3 languages, this property is predicted as a possible base order.

directionality of the head is 'progressive'; in OV it is 'regressive'. The complements of the head are placed within the directionality domain of the head, whence VO versus OV, respectively. In T3, however, the directionality of the verbal heads is *un(der)specified*. As a consequence, an object may precede (as in OV) or follow (as in VO) its head, even within the same phrase. If there is more than one object, the order as in (3) is one of the possible orders, with one object preceding and the other object following the head. (3b) is telling since here, the postverbal object is a pronoun. Pronouns would not target a clause-final position by movement to the right ('extraposition'), and on the other hand, pronouns are expected to be close to the phrase initial position.[2]

(3) a. Se mæssepreost sceal [mannum [*bodian* þone soþan geleafan]]$_{VP}$ Old English
the priest shall people *preach* the true belief (Ælet 2 (Wulfstan1) 175)
b. hafer Þu [Þinu lidi [*jatat* Þeim]]
have you your help *promised* them Hróarsdóttir (2000)
c. tánne sie [búrg-réht [*scûofen* demo líute]] (Notker, NB 64,13)
that they castle-shelter *granted* (to) the people

In all these languages, (3) is just one of several word order options in the clause. Alternatively, all objects may precede (as in OV) or follow the verb (as in VO). The primary change towards OV/VO has been the change from 'un(der)specified' (or flexible) to 'specified' directionality of the verbal head. The implementation of this change implies a decision on the *concrete* value of directionality, namely 'progressive' or 'regressive'. This choice by itself is a matter of chance. It is not externally determined. Any one of the two options is a feasible one. In this situation it is expected that both options find their implementation in one of the innovative dialects. Since the options are incompatible, the result is a split into two groups, with each of the two available variants as the new property of the grammars of the innovative dialects.

At first, this split has been partially masked, since the outputs of the two new grammars have been weakly equivalent to the old T3 grammar for big enough a set of utterances. On the one hand, one could easily map the new variants on one of the variants of the old setting. On the other hand, the split coincided with the development of V2, that is, the grammaticalization of fronting the finite verb. V2 was compatible, too, with a variant of T3, namely a 'fronted' order of the verb[3] that is licit in T3 (see example iii. in fn. 4).

Once V2 became grammaticalized,[4] the combination with T3 produced systematically ambiguous patterns. The fronted verb could be related to several alternative base positions, namely the alternatively available base positions of a T3 VP (see (4)). Fixing the verb position was a

[2] Even English embodies this property: i. has phoned *me* up; ii.*has phoned up *me*; has phoned up *two girls*

[3] Here are examples from the T3 language Latin:
i. 'OV': Caesar singulis legionibus singulos legatos et quaestorem *praefecit* [Caesar, Bell. Gall. 1,52]
ii. 'OVO': virtus [...] hominem *iungit* deo [Cicero Acad. 2,139]
iii. ‚V2': Nimirum *dabit* haec Thais mihi magnum malum [Terentius Eun. 508 (3,3,2)].
Doubtless will-give [this Thais] me big trouble
Thanks to my colleague Thomas Lindner for providing me the data. He informs me that (iii) is the least frequent pattern in classical Latin texts. Note that Terentius is a comedy writer who stages colloquial ('vulgar') Latin'.

[4] In the German terminology it is referred to as "die Entstehung der verbalen Klammer" (the origin of the verbal bracket), that is: The finite verb is placed into the topmost functional head position, with a single fronted phrase in this spec position (whence 'verb second'). The non-finite verbs remain in the head final position.

means of reducing these structural ambiguities. Fixing the head position meant a change from the underspecified directionality of T3 to a specified directionality of either head-initial or head-final. Both options have found their implementations, and a dialect split was the result.

Eventually, the answer for the splitting puzzle will be this. The Indo-European proto-languages are all T3. The Slavic branch has conserved this property. The Romance branch originated from the T3 language Latin. Romance languages are diachronic continuations of Latin that have fixed the directionality of the verbal head progressively. Neither of these languages is a V2 language. Only V2 offered the chance of fixing the directionality in either of two ways, without showing this in a large set of sentences, namely in finite sentences with a single verb. (4) lists the three VP verb patterns of a T3 VP with two objects in combination with fronting the finite verb to the V2 position:

(4) a. [XP [$V_{fin\text{-}i}$ [e_i (YP) (ZP)]]] VO (or T3)
b. [XP [$V_{fin\text{-}i}$ [(YP) (ZP) e_i]]] OV (or T3)
c. [XP [$V_{fin\text{-}i}$ [(YP) e_i (ZP)]]] T3 only (*VO, *OV)

Note that (4a-c) are *string-identical* for the terminals, but structurally different. The difference is the base position of the fronted finite verb in a V2 or a T3 sentence. This kind of indeterministic filler-gap relation is likely to be improved during language acquisition. Nevertheless, for a long period, that is for several generations, the old T3 system and the newly developing grammars, namely V2 plus fixed directionality could coexist with minor surface differences that are tolerable in dialectal variation situations. The time, when the structure underlying (4c) disappears in the corpora, is the time when the change from underspecified to specified directionality has become fully implemented.

2. T3 – the hitherto disregarded type

'OV' and 'VO' are recognized as the major word order syndromes in typological and in theoretical syntax. These acronyms are used both in a narrow sense (i.e. the head-final or head-initial organization with respect to the *verb* phrase), and in a broad sense (i.e. strictly head-initial vs. head-final organization, for any phrasal head in a given language).

Given the universal right-branching property[5] (Haider 1992, 2010, 2012), linear order and structural organisation harmonize in the case of OV. Structurally, a head-final organization amounts to a right-branching structure, with the head in the final foot position (5a). A head-initial organization, on the other hand, is more complicated than has been realized for quite some time. It is definitely *not* a left-branching structure (5b). It is a right-branching structure, too. But, the verb's canonical directionality ('regressive') mismatches the universal right-branching structure. The directionality domain is postverbal, but the branching direction is the converse. So, the verb cannot be both in the foot-position and *precede* its dependent phrases. Hence, in a complex, head-initial verb phrase, there must be more than one verb-position (5c).

(5) a. $[XP [YP [ZP V°]]]_{VP}$ head-*final* ('OV') organization of the verb phrase
b.*$[[[V° ZP] YP] XP]_{VP}$ *inexistent* left-branching structure of a verb phrase
c. $[XP [V_i° [YP [\text{-}_i ZP]]]_{VP}$ head-*initial* organization of a complex verb phrase

[5] BBC (= basic branching constraint) $=_{def.}$ the internal structuring of lexical projections (AP, NP, PP, VP) is *right-branching* (= left-associative). In other words, rightwards is downwards, and leftwards is upwards.

The inevitable result is the VP-shell structure for head-initial VPs.[6] Ample and diverse evidence for (5a,c) is discussed in detail in Haider (2010, ch.1; 2012, ch. 3). Let us pick out a single piece of evidence for an essential difference between (5a) and (5c), namely the predictable distribution of stranded verbal particles in particle-stranding VO-languages like English or the Scandinavian languages. Here is as a single, but instructive data point:

(6) a. … send me *up* a /drink /… (24.500.000 hits in a google search. April 5th, 2012)
b. … hand him *out* a /flyer /… (2.080.000 hits in a google search. April 5th, 2012)

Note that there is *no* OV language that allows stranding a verbal particle *between* two nominal arguments, for a simple reason: In OV, there would be no *intermediate* V-position between nominal arguments. In VO, this very stranding position (viz. the intermediate empty verb position in (5c)) is the structural foot position of the verb in (5c). OV and VO are outcomes of the alternative implementation of a *directionality* property on the very same universally right-branching structural scaffolding. In VO, the verb obligatorily precedes its dependants, in OV it follows.

T3, the third type, is the type with *un(der)specified* directionality of the (verbal) head. Directional licensing is *ambi-directional*, that is, the head is compatible with preceding dependants, or with dependants that follow, or with both. The result is the following *set* of patterns, *all of which* are grammatical[7] in T3:

(7) a. [XP [YP [ZP V°] head-final (the subset congruent with OV)
b. [XP [V_i° [YP [-$_i$ ZP]]]] head-initial (the subset congruent with VO)
c. [XP [YP [V° ZP]]] intermediate position (the subset of T3 only)

In typological syntax, T3 languages happen to be subsumed under languages with 'predominant SVO order', simply because (7b) is a frequent word order. Grammar theory of the Generative school treats T3 languages as highly exceptional VO languages. The attempts of covering their exceptional syntactic properties rely on the assumption of syntactic devices (fronting of nominal phrases across the verbal head) that are alien to genuine SVO languages, without supplying independent evidence for the assumed exceptional devices, though.

An exemplary case is the case of Slavic languages. They are standardly (mis)filed as VO languages, simply because the pattern (7b, 8a) is a highly frequent one, due to its information structure properties. But, (7a, 8b) and crucially (7c, 8c)) are grammatical as well. And on top of it, Slavic languages allow for constructions that are strictly ungrammatical in any uncontroversial VO language. Russian may serve as a representative language here. (8) illustrates the three T3 word order patterns for verb placement:

(8) a. čto Maša *pokazyvaet* Petru svoj dom (Russian)
that Mary *showed* Peter her house
b. čto Maša Petru svoj dom *pokazyvaet*

[6] Note that the VP-shell structure is an immediate consequence of the directionality mismatch between the licening head and the univeral branching structure of phrases. There is no need for inventing 'little v' and for dressing it with inherent grammatical properties. It comes for free.

[7] They are all grammatical, but that does not mean that they are equivalent in all other respects. They are typically not equivalent in information structure terms. Characteristically, information structuring recruits syntactic variants for its distinctions. It must not surprise that word order accounts for Slavic languages are typically framed in terms of information structure accounts (theme and rheme, topic and comment, focus and background, presupposed and asserted, etc.)

c. čto Maša Petru *pokazyvaet s*voj dom
that Mary Peter *showed* her house

Of course, there is a *technical* solution for integrating (8b) and (8c) into the confines of SVO. But, this device (fronting of arguments as the result of 'scrambling' arguments across the head of the VP) unmistakeably yields ungrammatical structures in uncontroversial VO languages. The real problem is that these apparent 'exceptions' are not language specific, and, even more importantly, that the preverbal phrases do not show the syntactic properties of phrases in derived position (see 9). The predictions of these derivational accounts are patently wrong.

Here are two cases that flatly contradict the assumption that Russian is a VO language, namely *extraction* out of *pre*verbal phrases and the absence of the *edge effect* for left-adjunction to a head-initial phrase, viz. the verb phrase.

In genuine VO languages, postverbal phrases are open for *extraction*, but *preverbal* phrases are not. Moreover, 'left-branch' extractions (9) are ungrammatical for head-initial phrases. In T3, both are licit. They are licit because the extraction site is within the directionality domain of the respective head, and because the NP in Slavic is T3, too.

(9) Kakuju$_i$ Ivan [-$_i$ mašinu] *kupil* svoej žene? Russian
which$_i$ Ivan [-$_i$ car] *bought* his wife
Which car did Ivan buy his wife

The property exemplified by (9) is a predictable property of a T3 language: First, the preverbal object is within the directionality domain of the verb, just like in OV, since the verb is ambi-directional in T3. Hence extraction is licit. The NP with the extraction site is T3, too (see below). Hence *left-branch extraction* out of a *preverbal phrase* is licit altogether.

As for the *edge-effect*, it is – on the descriptive level – a ban against *intervening* material between the head of the *left adjunct* of a head-*initial* phrase and the very phrase it is adjoined to. In English, the edge effect is found with preverbal adverbials as well as with adnominal adjuncts (10a,c). In German, it applies only to adnominal adjuncts (10d) but not the VP (10b). The explanation is clear. The NP is head-initial; hence the edge-effect is expected. The VP is head-final hence an edge effect does not apply.

(10) a. He has [[much more *impolite* (*than anyone else)] [criticised her]]
b. Er hat sie [[sehr viel *unhöflicher* (als jeder andere)] [kritisiert]] German
he has her much more impoliteley (than anyone else) criticised
c. the [[much *higher* (*than any other building)] [edifice][
d. das [[viele *höhere* (*als jedes andere Gebäude) [Bauwerk]] German
the much higher (than every other building) edifice

(11) V prošlom godu [[gorazdo bol´še *čem Igor*] *vyjgrala* tol´ko Maša] Russian
in previous year [much more *than Igor*] *won* only Mary
'Last year, only Mary has much more won than Igor'

If Russian were VO, it should pattern with (subsets of) English. But if Russian is T3, it will pattern with (subsets of) OV (as e.g. German), since then the head of the verb phrase is not head-*initial* (but ambi-directional). Russian (11) does pattern like OV (10), and not like English, contrary to its alleged VO status, but it contains an 'English' subset of word order patterns (unlike OV languages).

The T3 property (ambidirectional licensing) is not constrained to verbal heads (as already announced above). In Slavic languages, NPs are T3 as well. This means that not only VPs but also NPs display T3 properties. First, we expect ambidirectional licensing. For NPs that means that a complement (viz. genitival DP) is expected to occur either pre- or post-verbally. This is an acknowledged fact for Slavic languages. The typological survey WALS[8] (world atlas of language structures) characterizes the N plus Genitive order for Bulgarian, Croatian, Czech, Macedonian, and Serbian as follows: "no dominant order").

Another crucial prediction is the *absence* of the *edge-effect* for prenominal adjuncts. This is exactly what Giusti & Dimitrova-Vulchnova (1995:128) note in passing for Bulgarian. Native informants tell me that this is true for Polish and Russian, and other Slavic languages, too.

(12) a. [vernij-at na žena si] muž — Bulgarian
truthful-the to wife $poss_{REFL}$ man
'the man truthful to his wife
b. der [stolze (*auf seine Frau)] Mann — German
the proud (of his wife) man

The edge effect applies if an adjunct is adjoined outside the directionality domain. In a T3-phrase, a left adjunct is in the directionality domain. This accounts for the absence of the edge effect in (12a) in contrast to English and German with head-initial NPs.

Due to the ambi-directional headedness, T3 languages share many properties with OV, and lack many of the restrictions of VO, despite the actual but misleading frequency of VO-like serialization patterns. Classifying them as VO would contaminate a clear-cut syntactic typology for VO and significantly reduce the predictive power for theoretic or typological models of SVO.

3. The predecessor languages of the modern Germanic languages are T3 languages

For the clause structures in a lengthy period of the history of English (as the synchronically and diachronically best-investigated language among the Germanic languages), a paradoxical claim has been presented as a solution for an obvious grammatical enigma. The enigma is this: Structures known from VO as well as from OV structures seem to co-exist for quite some time. A *straightforward* solution for this apparently conflicting set of data was hard to imagine. So, this state of affairs was supposed to be the reflex of a transient state, a *grammars-in-competition* situation. The idea of grammar competition has been proposed by Kroch (1994:180): "*syntactic change proceeds via competition between grammatically incompatible options which substitute for one another in usage.*" Pintzuk (1991; 2002) as well as Kroch and Taylor (2000) proposed an account along this line. Pintzuk (1991, 2002), in particular, developed this idea into a specific claim: The speech community is assumed to have been 'bi-dialectal' = 'bi-lingual', and she surmised that OE had a 'double base': both the OV and the VO value of the relevant parameter were used, giving rise to two distinct, but co-existing grammars through the OE period, with a sort of institutionalized bi-grammatical speech community. Even if this account were correct, it is not what one would call a straightforward one.

[8] http://wals.info/languoid/lect/wals_code_bul

The enigma disappears immediately, however, once one realizes that the question "*Was OE OV or VO*?" is ill-posed, and that its presupposition (OE is either OV or VO) is wrong. The straightforward answer is this. OE is T3. Hence OV patterns and VO patterns are predicted to co-exist, and moreover, there is an additional pattern, viz. the characteristic pattern for T3, with the verb sandwiched by nominal objects. The following sets of examples illustrate the three patterns for a handful of Germanic languages. The following *Old English* data are quoted by Fischer & van Kemenade & Koopman & van der Wurff (2000:51).

(13) a. Se mæssepreost *sceal* [mannum [*bodian* þone soþan geleafan]]$_{VP}$
the priest *must* [people [*preach* the true faith]] (*Ælet* 2 (Wulfstan1) 175)
b. þæt hi [urum godum [*geoffrian magon* ðancwurðe onsægednysse]]
that they our god *offer may* thankful offering (ÆC Hom I, 38.592.31)
c. Ac he sceal [þa sacfullan *gesibbian*]
but he *must* the contenders *reconsile* (*Ælet* 2 (Wulfstan1) 188.256)
d. Se *wolde* [*gelytlian* þone lyfigendan hælend]
he *wanted humiliate* the living saviour (*Ælet* 2 (Wulfstan1) 55.98)

(13a) and (13b) illustrate the flanked position of the verbs. The indirect object precedes, the direct object follows. (13c) and (13d) illustrates the head-final and the head-initial option, respectively. (13) represents the set of serialization variation for the non-finite verb in a grammar of the third type. The frequent patterns (13c) and (13d) motivated the competing grammar hypothesis mentioned above.

According to Fischer et als. (2000:172), the development towards a rigid VO organization of the clause structure took quite some time. T3 properties are still observable in the texts from the 13th to the 15th century. They (2000:162) point out that it is "only after about 1300 that clauses with VO order begin to vastly outnumber those with OV order."[9]

The following examples from the Old High German text of *Notker* (for an extensive documentation see Schallert 2006:139, 172) once more illustrate the three predictged patterns of licit verb positioning, namely VP-final (14a), VP-initial (14b), and intermediate (14c,d):

(14) a. Úbe dû [dero érdo$_{DAT}$ [dînen sâmen$_{AKK}$ *beuúlehîst*]] (NB 47,4)
whether you [the earth [your seed give]]
b. áz sie [nîoman [*nenôti* des chóufes]] (NB 22,13)
that they [nobody NEG-urged the purchase$_{Gen}$
c. tánne sie [búrg-réht [*scûofen* demo líute]] (NB 64,13)
that they civil-right granted the people
d. Tisêr ûzero ordo [...] mûoze [*duingen*$_i$ [mit sînero unuuendigi
[e$_i$ [diu uuendigen ding]]]] (NB 217,20)
this external order must conquer with its infinity the finite things

Finally**,** it is easy to find specimens for each of the three positions in *older Icelandic* texts as well (see Hróarsdóttir 2000). (15a) shows the verb in the intermediate position. (15b) has a

[9] They give, among others, the following late example of OV order, from Chaucer:
i. I may my persone and myn hous so *kepen* and *deffenden*
'I can keep and defend myself and my house in such a way.' (Melibee 1334; Fischer et al. 2000: 163).

head-final VP, and in (15c) the verb is in the head-initial position of the VP. Note, that in (15a), the postverbal element is a pronoun. This cannot be a result of movement to the right since pronouns are fronted, not extraposed. On the other hand, if the preverbal direct object would be a scrambled DP, the pronoun would have been fronted as well, like in (15b). So, (15a) and (15b) are minimal pairs, with pronouns immediately to the right or to the left of the verb. This is fine for T3, but very odd for VO.

(15) a. hafer Þu [Þinu lidi [*jatat* Þeim]]
have you [your help [promised them]]
b. Því eg get ekki [meiri liðsem [Þér *veitt*]]
since I can not [anymore help [offer you]]
c. hefir hann [*ritað* sýslungum sínum bréf]
has he [written countrymen his (a) letter]

In sum, the predicted properties of the third type show in texts of the diachronic predecessor languages of today's Germanic language. The characteristic (and easy to identify) property[10] is the particular intermediate position of the lexical verb. Arguments may precede, follow or occur on both sides simultaneously. It is the latter property that is the signature property of the third type. It has been overlooked or explained away for quite some time, but it is the key for understanding the diachronic dynamics. The languages did not change from OV to VO or conversely. They changed from T3 to VO or OV. The bifurcation is the consequence of a change from *underspecified* to *specified* directionality. Specified directionality means the choice of one of the alternative values of directionality, viz. *precede* or *follow*. A grammar with a specified directionality for V° is either an OV or a VO language.

4. T3 plus V2 is an invitation for change

Slavic languages are persisting T3 languages. Romance languages, on the other hand, ended up as VO, starting from a T3 proto-language, namely Latin. The VO outcome would not be surprising for the Romance languages that developed outside of the Italian peninsula, since they developed in multilingual environments, with Latin as a second language. Here, creolization effects favour VO. Italian, however, is in a direct continuation relation to Latin (at least in many of its dialects), but nevertheless it does not carry on T3 properties of Latin. Viewed from this perspective, the Germanic languages could have ended up as a homogenous VO language family that have developed a V2-poperty, as represented by the modern North Germanic group. What was it that enabled the split into a VO and an OV dialect as proto-varieties for the diachronic development of the VO and the OV group?

The facilitating factor is this very V2-property. On the one hand, V2 introduces a high degree of structural ambiguity for identifying the filler-gap relation between the fronted verb and its T3 base positions. On the other hand, V2 facilitates the on-going grammatical change and its bifurcation into VO and OV by making the output of the novel grammars compatible with the output of the existing T3 grammar. They are string identical for a large class of sentences. It is

[10] For other characteristic properties of T3 languages that are found with older Germanic languages, please consult Haider (2012, ch. 5). One property is the variation in the order of the lexical verb, auxiliaries and quasi auxiliaries in a simple clause. In VO, the relative order is strict. In Germanic OV and T3, there is order variation, as in modern German or Dutch: lesen können *wird* (= read be-able-to shall); lesen *wird* können; *wird* lesen können) Dutch: gesproken *zou* hebben (spoken would have); *zou* hebben gesproken, zou gesproken hebben.

highly unlikely that the split in OV and VO could have occurred without the simultaneous development of the V2 property. What is the offending property that makes V2 plus T3 a grammatically unstable equilibrium? Here it is: Any parse of a sentence with a single verb becomes structurally ambiguous. (16) illustrates this for a verb with two complements. The gap positions in (16a-c) are the possible verb positions in the VP structure of a T3 language.

(16) a. … V_i [$_{VP}$ e_i XP ZP] T3 (and VO)
b. … V_i [$_{VP}$ XP e_i ZP] T3
c. … V_i [$_{VP}$ XP ZP e_i] T3 (and OV)

Note that the structures (16a-c) are string identical for the terminals. This situation invites a change towards a deterministic parse for the learners. (S)he is to assume a fixed verb position and thereby to introduce a change. The uncertainty about the base position of the verb could not arise in the T3 situation. Here, each of the three surface positions in (7) is a possible base position. Only when the initial position got grammaticalised as the V2 position, a filler-gap problem appeared, and it became the trigger for a change, namely the change towards a unique base position.

The base position of the verb is easy to parse in a language with a fixed verb position in the VP. A fixed verb position is either head-initial or head-final. So, fixing the verb position in either way amounts to cancelling the option (16c). The result is the split. (16a) is the structure of a VO V2 structure, while (16c) is the OV structure.

The change is a change from flexible verb position to a fixed verb position in the VP. In grammar theoretical terms, the change is a change from the underspecified directionality of T3 to a fixed directionality. Fixing the directionality is a choice with two options, namely head-final or head-initial. In other words, it is a matter of tossing a coin. If two options are equally available, usually each option finds a sustainable implementation. This is the birth of the OV and the VO group of the Germanic languages. However, the OV option got its chance only because of V2. It is the availability of (16c) that paved the way to OV, in combination with the OV subset of T3 properties.

The fact that T3 languages are misidentified as VO languages merely proves that the pattern with the verb preceding its object (7b) is frequent. This is the pattern favoured by parsing, namely the early presentation of the head of the phrase and the pattern favoured by information structure, with objects as the typically asserted elements in a clearly demarcated subtree. The grammaticalization of V2 was the essential interfering moment. On the one hand, it opened an alternative way for the early presenting of the main verb for sentences with a single verb, and on the other hand it masked the base position. This context provided the habitat for the split. Both, the OV variant as well as the VO variant could coexist, since they were string identical for simple sentences with a single verb, and both variant could persist and develop further.

5. Yiddish – a relic of the Germanic T3 past

Even today, a Germanic T3 grammar can be studied with a living language. It is the grammar of Yiddish. The fact that the surrounding languages, viz. Slavic languages, are T3 apparently contributed to the stabilization of the otherwise unstable equilibrium of a V2 + T3 grammar.

Yiddish is the typical case of a T3 language that has been analysed as an exceptional VO language by some linguists (Diesing 1997) and as an exceptional OV language by other linguists (Geilfuß 1991). Vikner (2002) surveys several independent syntactic properties and concludes that the evidence confirms the OV status of Yiddish, except for its verb order property regarding the order of the objects relative to the verbal head. The examples (17) are taken from Diesing (1997). Note that Yiddish is V2, hence the fronted '*hot*'. What is interesting here is only the position of the verb '*give*'.

(17) a. Maks hot [Rifken dos bukh *gegebn*] $_{VP}$ T3 (OV subset)
Max has Rebecca the book given
b. Maks hot [Rifken *gegebn* dos bukh]$_{VP}$ T3 only
c. Maks hot [*gegebn* Rifken das bukh]$_{VP}$ T3 (VO subset)

(17a-c) are instantiating the T3 patterns of (7). Diesing's and Geilfuß's question was "I Yiddish VO or OV?" This is a misleading question and it leads to a misleading answer, since in any case, Yiddish would be 'exceptional'. For Diesing (1997), Yiddish is SVO, for Geilfuß (1991) it is SOV. Diesing assumes (17c) to be the base order and derives (17a,b) by fronting the objects ('Scrambling'). For Geilfuß, (17a) is the base order, with exceptional extraposition as the source of (17b,c). They do not provide independent evidence for their claims. Jacobs et al. (1994: 411) blame it on history, as if this language was an inconsistent VO language due to the miraculous conservation of OV properties of the past: It "*has significant relics of earlier SOV order: the syntax of passive, of periphrastic words, and of separable prefixes, and clitic floating/climbing.*" Why did no other Germanic VO language conserve its relics? There is nothing to be conserved. The 'relics' are not relics but straightforward T3 properties.

Obviously, Yiddish is neither a strict SVO nor a strict SOV language. It is, like every Germanic language (except English) a V2-language, but it differs both from the SVO subfamily (North Germanic) as well as from the SOV subfamily (continental West-Germanic) in its clause structure below the V2 position: It is T3. Its T3 property arguably is a continuation of the T3 property of all older Germanic languages, maintained in the environment of other T3 languages, namely Slavic languages.

For the understanding of the Germanic split it is helpful to briefly discuss a T3 property shared with OV languages, namely the optional 'reordering' of verbs in a clause. In VO, the relative order is strict. In OV and T3, the order of main verb, auxiliaries and quasi-auxiliaries is variable. The following examples are listed in Vikner (2002:66). Marked, though grammatical, orders are indicated by the "%" sign. The unmarked orders are those in which the *finite* verb *precedes* the indefinite object. The verb position serves as a reference point for a division used for information structuring.

(18) a.% az Jonas a hoyz *koyfn vil* O V Aux (data from Vikner 2002:66)
that Jonas a house *buy will*
b. az Jonas vil koyfn a hoyz Aux V O
c. az Jonas vil a hoyz koyfn Aux O V
d.% az Jonas a hoyz *vil koyfn* O Aux V
e.% az Jonas *koyfn vil* a hoyz O Aux V

A comparison with English is sufficient for identifying the *verb orders* that are incompatible with VO, namely (18a) and (18e), with the main verb preceding the auxiliary. These are orders that can be found in any Germanic OV language, see (19a) and (19d), respectively.

(19) a. dass Jonas ein Haus kaufen müssen wird — German
that Jonas a house buy have-to shall
b. dass Jonas ein Haus kaufen wird müssen
c. dat Jonas een huis gekocht zal hebben — Dutch
that Jona a house bought shall have
d. dat Jonas een huis zal gekocht hebben
e. dat Jonas een huis zal hebben gekocht

The grammatical reason behind the order variation is as follows (see Haider 2010, ch. 7.5 for an extensive explication). In OV, the mirror image of the VO complementation (20a), that is, verbs selecting VPs as complements, would produce centre-embedded structures (20b). Verb clustering reduces the recursive domain of centre embedding (i.e. the VPs) to a single VP with a verb cluster resulting from head-to-head adjunction (20c).

(20) a. $[V_1\ [V_2\ [V_3\ XP]]]$
b.*$[[[XP\ V_3]\ V_2\ ]\ V_1]$
c. $[_{VP}\ XP\ [[V_3\ V_2]\ V_1]_{VC}]$

The verb cluster in (20c), however, is still a left-branching structure. What we see in the Germanic languages is a syntactic repair operation that replaces the left-branching cluster structure. In Dutch, the German V_3-V_2-V_1 order may be completely mirrored and turned into a regular right-branching structure (19e). The German order, that is the entirely left-branching struture, is ungrammatical in Dutch.

6. The split and the drift thereafter

Even today, there is geographical variation in terms of the rearrangement of the verbs in and out of the cluster. Southern German varieties prefer the order (21a) whereas Northern varieties prefer the variant (20b). A similar stratification is true for Northern and Southern Dutch (Flemish), as illustrated by (20c) and (20d), with (20c) as the preferred variant in the Netherlands, and (20d) as the favoured order in Flemish, according to ANS (= Algemene Nederlandse Sprakkunst, 1997:1069). Let me emphasize that each pattern is fully grammatical, though.

(21) a. dass man es nicht besser [machen *hätte* können]
that one it not better [make had been-able-to] (‘had been able to make it better’)
b. dass man es nicht *hätte* besser [machen können]
c. dat hij niets [gezien *kann* hebben]
that he nothing seen *can* have
d. dat hij niets *kann* gezien hebben

Now, imagine a dialectal situation for the *T3 proto-language* with one dialect preferring the patterns corresponding to (21a,c), and another dialect that prefers the pattern (21b,d). When V2 gets entrenched, one dialect will stick to its preferred base order and choose a cluster-internal gap position for the fronted verb. The other dialect will prefer the fronted position.

And here is the crucial moment. When the directionality of the verbs get fixed, the fronting dialect will have grammaticalised it in the VO style since the fronted V-position in T3 precedes an object. The other dialect with the preferred cluster internal position will end up as a language with an OV order for the verb and its objects. The cluster is always clause-final, hence the dialect with the cluster-internal trace will place the verb in positions following the objects. The rest is a matter of grammatical drift.

Once the grammar has been set as a grammar with fixed directionality, the universal principles (embodied in a learners brain) that constrain the system space of human language grammars will filter out the structures that do not match the novel grammar. They will not become part of the active competence anymore and will not be passed on to the following generation of learner. This amounts to a constant selection that feeds a drift towards a consistent language-grammar relation. For a period of several generations, varieties may co-exist in the speech community. There are still speakers of the old dialect, but if the change is vital, their success in passing on their grammar gets cut back by the success of the new grammar (see Haider 2012, ch.1, on the cognitive evolution of grammars).

So, the first innovative step of the Germanic languages, namely V2, triggered the second step, viz. the fixing of the directionality. This change was a change from an unstable equilibrium to a stable equilibrium in terms of identifying the base position of the fronted finite verb. On the other hand, the fronting of the verb made the two grammars (the OV and VO one) compatible with a much bigger set of utterance than without V2. One and the same sentence was compatible with OV on the one hand, but also with VO on the other hand since the positioning of the trace had no effect on the order of the terminals. So, each of the new-born dialects had a chance to gain momentum, since the major difference they entailed remained concealed for a sufficiently large amount of sentences.

Why was V2 essential? Without the development of V2, a T3 language would change into a VO language. In grammar change, this is a frequent development (see Romance languages), but it is predictable, too. OV languages are structurally simple, but the price for parsing is the late presentation of the head of the phrase (see Haider 2012, chapter 2). For a sentence, the crucial head-element is the head of the VP. Parsing prefers an early presentation of the head. Hence, a change from T3 to fixed directionality would have favoured the patterns with the fronted verb. This is the basis for grammaticalization as VO. V2, however, offered a means for the early presentation of a lexical head and thereby remove the disadvantage of grammaticalising a head-final VP-structure. We do not know of a language that has changed from T3 to OV (in the absence of V2 or V1).

7. Summary

Intially, there was a puzzle, namely the typological split in the diachronic development of the Germanic languages. The puzzle disappears when the two main ingredients of the diachronic dynamics are appreciated. One ingredient is the T3 status of the grammars of the predecessor languages. These languages had been misidentified as exceptional OV or exceptional VO languages. But, they are run-of-the-mill T3 languages. The trigger of the change was the grammaticalization of the V2 property. When the V2 position got grammaticalised, this introduced a filler-gap relation for the fronted verb. In combination with T3, the resulting grammar was

in an unstable equilibrium. There were too many alternative gap positions. Reducing this uncertainty (in the course of language acquisition) meant fixing the base position of the verb, and this in turn amounted to a change from underdetermined directionality of the verbal head to fixed directionality. Fixed directionality is either head-final or head-initial. This nearly forced choice is the source of the split and it has been triggered by the V2 innovation. As a consequence, it is not accidental that the Germanic family is the only sub-family in the Indo-European language family that split into a VO and an OV group. It was the only family that had a chance to split because it is the only family that has developed V2.

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