

Verb-Second and Clause Structure in Breton

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A number of years ago, I wrote some things about Breton clause structure, beginning with a paper written with Sandy Chung in 1977 and a later revision of that analysis in 1981, plus some remarks on Breton Agreement in a morphology paper in 1982. A substantial literature on Breton syntax has developed in the meantime, much of it is highly critical of my earlier analyses. In some respects I think these criticisms are well taken, though in others I still think I was right. But I don't mean to talk about all of those issues today.

What I would like to talk about is an apparent paradox in Breton word order: on the one hand, clause structure seems to be that of a VSO language, but on the other hand, most sentences in fact look like those of a Verb-second language. In recent work, I've been trying to work out an account of Verb-second within Optimality Theory, as a generalization of the mechanisms involved in getting second position clitics. The analysis that results from extending that account to Breton is similar to that offered in a talk at the 1999 LSA meeting by Hannahs and Tallerman.

1 Breton As a V-2 Language

In main clauses, Breton finite verbs — here the perfect auxiliary — are always preceded by something. That something may be the subject, an object or adverbial, an adjective, a non-finite verbal form, etc.

- (1) a. Yann en deus debret e voued er wetur
Yann he-has eaten his food in the car
Yann has eaten his food in the car
- b. E voued en deus debret Yann er wetur
his food he-has eaten Yann in the car
Yann has eaten his food in the car
- c. Skuizh int da c'hortoz
Tired they-are to wait
They're tired of waiting
- d. Debret en deus Yann e voued er wetur
eaten he-has Yann his food in the car
Yann has eaten his food in the car

The verb itself, on the other hand, CANNOT be first:

- (2)*a/e d/t/zebr Yann e voued er wetur
PRT eats Yann his food in the car
Yann eats his food in the car

Topicalized items have a particular discourse value - typically new information. When nothing in the sentence is appropriate for isolation in this way, there are two alternative constructions: one involves 'fronting' the verb, in infinitive form, and leaving an inflected form of ober 'do' behind. The other involves an empty expletive bezañ 'be'.

- (3) a. Debrñ a raio Yannig krapouezh hiziv
eat (VN) prt will-do Johnny crêpes today
Johnny'll eat crêpes today
- b. Bez' e vo pesketaer Yannig a-hed e vuhez
[BE] prt-he-will-be Yannig fisherman all his life
Yannig will be a fisherman all his life

- c. Bez' e tebr Mona he boued er gegin
 [BE] prt-eats Mona her food in-the kitchen
 Mona eats her food in the kitchen
- d. Bez' eo bet labourer-douar Yannig daou vloaz
 [BE] is been farm worker Yannig two years
 Yannig's been a farm worker for two years

Breton, like English, has three verbs *do*: main verb (*do the dishes*), *do so*, and an empty auxiliary (*I dont like that as much as you do*). Non-finite forms of one or another of these *do* verbs can also show up in initial position.

- (4) a. Debrñ en deus graet Yann e voued er wetur
 eat he-has done Yann his food in the car
 Yann has eaten his food in the car
- b. Debrñ e voued en deus graet Yann er wetur
 eat his food he-has done Yann in the car
 Yann has eaten his food in the car

What looks like the infinitive can appear in first position, with or without the object.

- (5) Debrñ krampouezh a raio Yannig hiziv
 eat crêpes prt-will-eat Johnny today
 Johnny will eat crêpes today

This looks like topicalization of a VP, and in our 1977 paper, Chung and I suggested that that was what it was. In 1981, I argued that what's actually involved is a nominalization with or without its complement. Other writers since then have argued at some length that I was right — or at least closer — the first time, and that these elements are in fact verbal in character. Despite this discussion, I remain convinced that these constituents are projections of NOMINAL forms of verbs, not verbal projections. There are a lot of arguments in favor of that proposition, and no real arguments against it, for Breton at least — though the corresponding constructions in Welsh may well be verbal in nature.

In compound tenses, a participle can be fronted by itself, but not together with its object (in either order). This is the auxiliary *do* and not the one that's parallel to English *do so*.

- (6) a. Kollet am eus ma hent
 lost I-have my road
 I have lost my way
- b.*kollet ma hent am eus
 lost my road I-have
 I have lost my way
- c.*ma hent kollet am eus
 my road lost I-have
 I have lost my way
- d. Ma hent am eus kollet
 my road I-have lost
 I have lost my way

The first part of the Breton 2-part negation also counts as making second position. Nothing else need be topicalized in negative sentences.

- (7) a. N' en deus ket lennet Tom al levr
 neg he-has neg read Tom the book
 Tom has not read the book
- b.*ne lennet en deus ket Tom al levr
 neg read he has neg Tom the book
 Tom has not read the book
- c.*lennet n' en deus ket Tom al levr
 read neg he has neg Tom the book
 Tom has not read the book
- d.*beza n' en deus ket lennet Tom al levr
 [BE] neg he-has neg read Tom the book
 Tom has not read the book

The generalization appears to be that the inflected finite verb in Breton appears at the left edge of some constituent — call this **IP** — and is preceded by exactly one element, either a phrase or a single word (including the first part of negation), but not both at the same time.

- (8) [_{CP} (XP) (X) [_{IP} V_{fin} ...]]

The XP here can be filled with any maximal projection, including the Verbal Noun and its complement. The X can be filled by a head like a participle or an adjective, or by the first element

of the negation. What matters is that the finite verb appears at the very left edge of IP, but second within CP.

Superficially at least, this is just like Icelandic or many other Verb-second languages.

How to describe these facts? As Hannahs & Tallerman 1999 show, previous purely syntactic accounts either involve unmotivated differences in where the finite Verb appears from one sentence type to another, or an arbitrary laundry list of licensing conditions for finite Verbs. All of these cases, on standard assumptions, involve (at least) movement of the verb. But we need to ask *why* the verb moves, as well as what else moves (or fails to move) and why. There are really two things to account for:

- (9) a. How is the position of the verb at the left edge of IP related to its basic position, and why?
- b. What principles govern (and limit) the appearance of pre-verbal material?

This whole complex of facts is typical for verb-second languages, although Breton shows some unique features of its own.

2 “Second Position

In a series of papers recently, I have argued (and Géraldine Legendre has also argued, independently) that the right way to describe second position phenomena, particularly second position clitics, is in terms of a system of constraints. We both regard clitics as phrase-level affixes, introduced into the PF representations of phrases and then located by finding the best match to a set of hierarchical, ranked constraints. These include at least:

- (1) **Edgemo**st constraints attract clitics toward left or right periphery;

NonInitial constraints may prevent clitics from appearing at absolute edge;

Domain parameter, independently specified in these constraints;

Integrity constraints specifying certain sorts of element that cannot be interrupted by a clitic; and

Phonology of Stray Adjunction operations defines surface prosodic affiliation.

In these terms, “Second Position means that an element is constrained to appear at the left edge of some domain (by high-ranking **LeftMost**), but also, and even more importantly, not to appear at the absolute left edge of that domain (via even higher ranking **NonInitial**).

If clitics are introduced into the PF forms of phrases by a generalization of essentially morphological mechanisms, and find their position within the form through a system of hierarchically ranked violable constraints, is there any relation between second position clitics and Verb-second, as Wackernagel proposed? Ignoring the conditions under which Verb second is found, as for instance the difference between main clauses and subordinate clauses with overt complementizers in German, the descriptive generalization which defines V-2 is the following:

- (2) **V-2**: The Verb which is marked for the Tense, Mood and Agreement properties of a clause appears immediately after the first constituent of the clause.

I.e., The formal markers of a clause’s relational properties appear as morphology on a Verb immediately after the the first element of the clause’s syntactic analysis.

This is not very different from the descriptive regularity governing second position clitics: these, too, appear immediately after the first (non-‘permeable’) constituent of the clause. And both finite main verbs and many sentential clitics represent the realization of the content of a clause’s inflectional features. From the present perspective, a V-2 language like, e.g., Icelandic differs from a

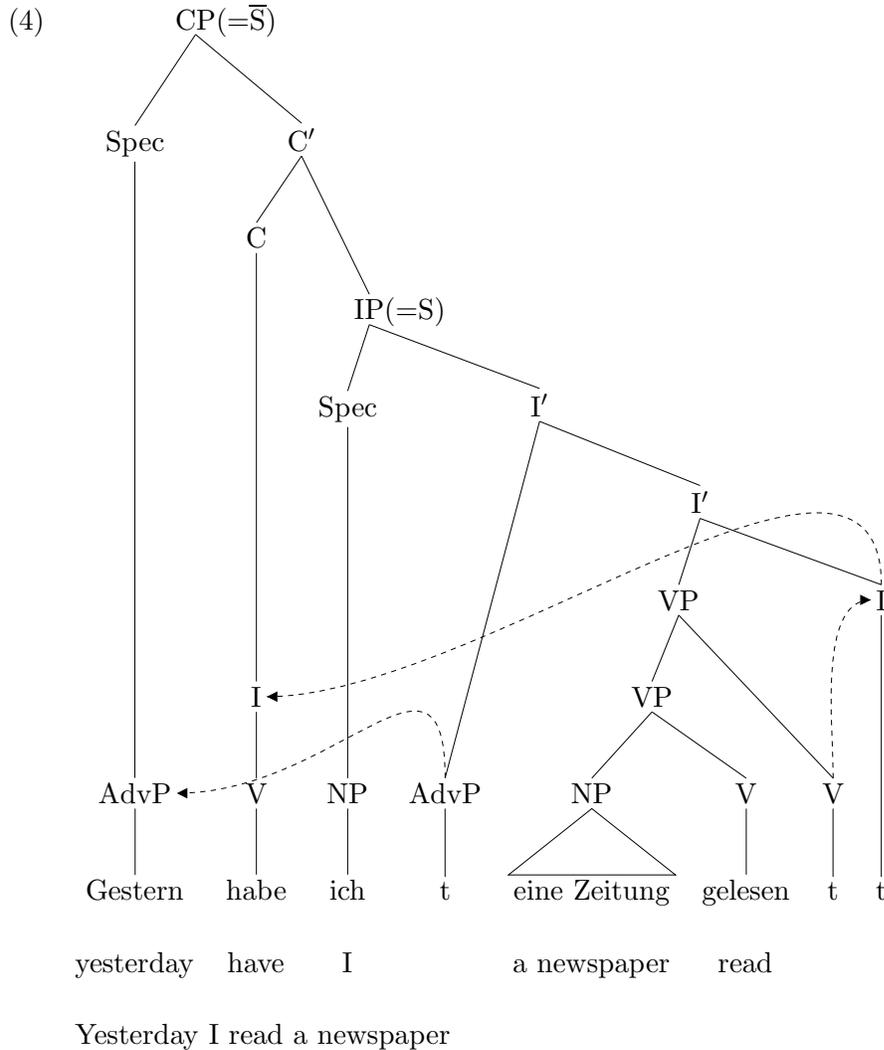
second-position clitic language like Tagalog in that the clause's grammatical features are realized by the inflectional form of the Verb in Icelandic, but by phrasal affixes (the Agreement clitics) in Tagalog.

Taking the analogy seriously, how are we to relate verb-second to the regularity of second position clitic placement? This is straightforward: We could characterize the position of the Verb in a V-2 structure by saying that the locus of realization of Tense, Aspect, Agreement, etc. is constrained as follows:

- (3) a. **NonInitial**($V_{\text{fin}}, \mathbf{S}$)
- b. **LeftMost**($V_{\text{fin}}, \mathbf{S}$)

This is obviously similar to second position clitic placement. What does it mean to think of V-2 in terms of constraints? Basically this: a structure in which constraints are met is to be preferred to one where they aren't. When constraints conflict, higher ranked is more important to observe.

What is the role of these constraints in the grammar? In the syntactic literature of the past 10 years or so, a derivation of V-2 clauses something like that indicated in the Phrase Marker below has come to be widely accepted. Assume as is common that German clauses are basically Verb-final, with the inflected Verb moving from final to second position. Ignore here the possibility that the Subject also moves from a Spec(VP) position to Spec(IP).



Movement of V to I simply represents the fact that this V bears finite inflection - the movement isn't needed on a view where functional content propagates as features rather than constituting a head of its own, as in various of my recent papers, though that isn't directly relevant here. What *is* crucial is the movement of the inflected Verb from I to C. Does such movement take place because of some property of the C position itself? Attempts to force this movement, e.g. by positing some feature-checking relation between the positions SpecCP and the Verb in C, or by requiring C to be lexically filled, etc., amount to camouflaged language-particular stipulations of the requirement

“Move I to C”. The movement remains, accordingly, without independent motivation.

Here's my proposal: movement isn't motivated by the need to check some abstract feature, but rather by the fact of second position itself. Movement to this position occurs when (a) it is syntactically possible, and violates no constraints of the syntactic computational system; and (b) the structures that result have fewer violations of the relevant alignment constraints than structures in which this movement has not taken place (and in which the Verb is thus farther from the left edge of the sentence).

The theory of V-2 I'm advocating here does not *per se* deny that V-2 involves movement of the Verb into a C position. It simply proposes that the reason for such movement is to get the Verb to be in second position, rather than to check a feature or to fill C. The thrust of the proposal concerns the motivation for the movement, not its mechanics.

Notice the similarity with second position clitics. In that case, I have argued that what unifies them is not occupancy of a consistent hierarchical position in phrase structure, as syntactic movement accounts predict (or assume), but rather the fact that they're in second position - as far to the left as they can get without being at the actual edge.

One last point: if V-2 results from a 'morphological' imperative, akin to clitic placement, rather than from a purely syntactic one, why don't we find languages in which the finite Verb appears (at least as an option) immediately after the first word of its clause? After all, the existence of such languages in the case of second position clitic placement forms an important part of the argument for a non-syntactic account of clitics.

The answer is: because the syntax cannot in general access this position. Clitics are placed by 'affixation' rules that modify the phonological shape of the form; it is thus possible for these rules to introduce material anywhere in the structure, subject only to the **Integrity(XP)** constraints.

Verb-second, on the other hand, is the result of syntactic movement, and the only structures the syntax provides for comparative evaluation by the constraint system are ones that instantiate well formed syntactic operations.

- (5) How does a constraint-based system work? Two parts: The computational system involves
- (1) a subsystem which produces a set of formally possible structures (usually referred to as ‘GEN’ in the OT literature); and
 - (2) a set of constraints on PF that choose the optimal one from among these various candidates.

Assume that GEN incorporates universal notions of syntactic well-formedness in that only structures conforming to fundamental principles such as those of \bar{X} -theory, and involving syntactically possible movements (as represented by well-formed antecedent-trace coindexing, e.g.), are presented for comparative evaluation by the constraint system. Thus, the only structures that are available for evaluation at PF (with respect to constraints such as **LeftMost**(V_{fin}, S) and **Non-Initial**(V_{fin}, S)) are ones that are syntactically well-formed in terms of these general principles. Insofar as syntactic movement of the Verb to a position after a sentence initial word but internal to a larger containing phrase is disallowed by the general nature of movement, candidate structures of this sort are not found in the output of GEN, and thus no language preferring them could exist.

3 Back to Breton

Breton, like other Celtic languages, is typically said to be ‘basically a VSO language. The evidence that is usually cited for this is the order which we find in subordinate clauses.

- (1) me 'lavar deoc'h e oa ar marc'h-se re gozh
 I say to-you PRT was the horse-DEM too old
 I tell you that horse is too old

Suppose that VSO is the internal structure of, say, IP, and it is found, in turn, inside of the larger domain of CP, how do we differentiate the order in main clauses from that in embedded clauses? Assuming the structure introduced above, what we need to do is require that within CP, exactly one of C and Spec,CP is filled. This effect could be obtained by saying that the finite Verb in Breton wants to be as far to the left as possible within IP (the ‘Verb-initial’ constraint), and also within CP, but doesn’t want to be actually initial within the whole sentence, or CP. The relevant constraints would then include at least:

- (2) a. **LeftMost** (V_{fin} , IP)
- b. **NonInitial**(V_{fin} , CP)
- c. **LeftMost** (V_{fin} , CP)

The last of these ensures that no more material precedes the V_{fin} within CP than is absolutely necessary to ensure that it isn’t initial within that constituent.

I assume that the position to which the Verb moves is uniform - initial within IP. The generalization about Verb second is not a structurally uniform one, however: it requires that the finite verb not be initial within CP, but this is not that because particular pre-verbal position must be filled: rather, exactly *one* pre-verbal position within CP must be filled, without regard to which one or what fills it.

Thus far, my analysis basically follows that of Hannahs & Tallerman 2000. We can note that the domain within which **Non-Initial** holds still warrants more discussion. If embedded clauses are CP’s, we must ensure that Verb-second is not enforced there. Some authors have suggested that the relevant difference does not depend on main *vs.* subordinate status but rather on initial *vs.* non-initial position within the entire sentence: the domain of **Non-Initial** thus might be a

prosodic one, consistent with Legendre’s proposal that **Non-Initial** (or ‘Tobler-Musaffaia’) effects are always relative to a prosodic rather than a grammatical domain. That seems unlikely, however, since the second of two coordinated clauses may often show Verb-second:

- (3) Me a breno ar sae, hogen c’hwi a wisko anezhi
 I PRT will buy the dress but you PRT will wear it
 I’ll buy the dress, but you’ll wear it

Another possibility would be to say that complements typically are just IP’s, and that there is thus no C or Spec,CP position available to be filled. Complements with overt complementizers might well be CP’s, but since their C position is filled, the constraints are satisfied without further topicalization.

Another complexity arises for the analysis of Hannahs & Tallerman 2000 from the facts of negative sentences, and this is not so easily eliminated. I have already noted that in negative sentences, we do not need to have any element preceding the negative particle *ne*; and in fact we cannot have a preposed participle or other single head in that position:

- (4) a. N’en deus ket gwellet Yann e vignonez
 hasn’t seen Yann his girlfriend
 Yann hasn’t seen his girlfriend
 b. Gwellet en deus Yann e vignonez
 seen has Yann his girlfriend
 Yann has seen his girlfriend
 c.*Gwellet n’ en deus ket Yann e vignonez
 seen hasn’t Yann his girlfriend
 Yann hasn’t seen his girlfriend

This is consistent with the consensus in the literature that the negative particle *ne*, unlike the other verbal particles *a*, *e* occupies the C position and thus (a) allows the Verb to be noninitial withn CP, and (b) precludes the movement of other elements to C. But we do find preposed topical material with negatives, when that material is phrasal:

- (5) Gwelout e vignonez ne reas ket Yann
 seeing his girlfriend didn't Yann
 Yann didn't see his girlfriend

Hannahs & Tallerman propose to account for this by saying that another constraint, requiring that *ne* appear in C, outranks all others, thus forcing *ne* to appear in this position even when there is a phrase in topic position. Notice, though, that this doesn't really solve the problem: If *ne* is in the C position, the rest of the constraints above will still prefer the structure without a topic phrase in Spec,CP, since the presence of such a phrase will produce an additional violation of **LeftMost(V,CP)** that could be avoided by dispensing with the topicalized constituent. It's not that *ne* is in C position that's the problem: rather, it's the possibility of simultaneously filling the associated Spec position.

A clue to the solution of this difficulty can be obtained from the facts of Agreement in Breton. Verbs show agreement only when the subject is not phonologically present, either in intra-clausal subject position or in the position of topic. When the subject NP is overt, the Verb appears in a uniform non-agreeing form homophonous with the 3rd person singular. The mechanisms of this 'dis-agreement' effect are not immediately relevant here, since what matters is its structural characterization.

- (6) a. Me a lenn al levr
 I PRT read the book
 I read the book
 b. Al levr a lennan
 the book PRT I-read
 I read the book
 c. Ar wazed a lenn al levr
 the men PRT read the book
 The men read the book
 d. Al levr a lenn ar wazed
 the book PRT read the men
 The men read the book

- e. Al levr a lennont
 the book PRT 3pl-read
 They read the book

In negative sentences, however, if an overt subject appears in preverbal position, the Verb agrees with it:

- (7) a. Ne lennan ket al levr
 I-don't-read the book
 I don't read the book
 b. Me ne lennan ket al levr
 I I-don't-read the book
I don't read the book
 c. Ar wazed ne lennont ket al levr
 the men they-don't-read the book
The men don't read the book

These facts suggest that the Subjects in such sentences are not actually in the topic position, and in that case, they would not provoke violations of the Verb-second regularity within CP. But if not, where are they? A number of authors have pointed out that the generalization of Anderson & Chung 1977 that only a single 'topicalization' is possible in a given sentence is incorrect. Initial topicalized phrases are found even when some other element must be present in C or Spec, CP:

- (8) Ha me, se en deus bet merket ac'hanon e-barz ma vuhez
 and I that has been marked of-me in my life
 And me, that marked me for the rest of my life

The existence of such left-dislocated structures with an additional sentence initial phrasal constituent, has been noted by a number of writers. It seems plausible to suggest that the left-dislocated constituent does not occupy the Spec,CP position, but is rather left-adjoined to the CP, in a position from which it does not block agreement:

- (9) Marhadizion amonenn ha uieu, deu e oent
 butter-and-eggs merchants two PRT 3pl-were
 Butter and eggs merchants, they were two

I suggest that pre-verbal subjects in negative sentences occupy this adjoined, left-dislocated position rather than Spec, CP.

Here is one more complication of the Verb-second phenomenon in Breton. The Verb *emañ* is a form of ‘to be’ used for locative and similar expressions, and also with a non-finite verbal form to make the progressive. Unlike other Verbs in Breton, this Verb can (and indeed, prefers to) appear in initial position:

- (10) Emañ va breur en ti
be-loc my brother in the house
My brother is in the house

Another peculiarity of this Verb is the fact that when preceded by a nominal topic, it is replaced by the normal form of ‘to be’ for non-situational contexts, *a zo*:

- (11) Va breur a zo en ti
my brother PRT be in house
My brother is in the house

Historically, this situation is understandable: the paradigm of *emañ* consists, essentially, of the element *hemañ* ‘here’ plus appropriate forms of the verb ‘to be.’ Presumably, the included element ‘here’ originally had the effect of satisfying the requirement that the Verb go in second position. When an overt NP topic appears, there is no longer a place for the ‘here’ element within the constraints of V-2, and the copula would be immediately preceded by the NP (presumably in Spec,CP position), which in turn would trigger the change to *(a) zo*.

There is little doubt, though, that *emañ* should be analyzed as a single verb in modern Breton, not a phrasal collocation, and that means that there is no obvious way to implement the generalization above by regarding an initial component of the Verb as being present in C. This is the kind of puzzle that restructuring in historical change often presents for the goal of a perfectly consistent

and elegant synchronic grammar. There doesn't seem to be any more elegant solution in this case than to require that *emañ* itself appear leftmost within CP, a specific edgemost constraint that outranks the general requirement that finite verbs be non-initial.

(12) **LeftMost** (*emañ*, CP)

A further historically based peculiarity involves the Verb 'have.' Unlike other Verbs in the language, this Verb inflects for person not through suffixes, but instead by altering its initial components:

(13)	Person	Present	future
	1sg	am eus	am bo
	2sg	az peus	az po
	3sg,m	en deus	en devo
	3sg, f	he deus	he devo
	1pl	hon eus	hor bo
	2pl	hoc'h eus	ho po
	3pl	o deus	o devo

A (historically related) syntactic peculiarity of this Verb is the fact that it shows agreement even in the presence of an overt subject, unlike others as mentioned above

- (14) a. Lennet en deus Yann al levr
 read has (M.) Yann the book
 Yann has read the book
- b. Lennet he deus Mari al levr
 read has (F.) Marie the book
 Marie has read the book

- c. Me am eus lennet al levr
 I have (1sg) read the book
 I have read the book

The historical basis of this behavior is the fact that the forms meaning ‘have’ were originally composed of an inflected preposition plus a non-agreeing form of the existential verb. As a result, the position corresponding to subject person marking was that of a prepositional object - presumably, standing in a different structural relation to the rest of the clause from the agreement material associated with other Verbs. But again it is difficult to see how to implement this in the description of modern Breton, since the forms are synchronically those of a simple Verb with unusual agreement (by prefix, rather than by suffix) and not as a phrasal collocation.

4 VP’s and Their Structure

We seem to have settled on the basic structure of the clause with Spec and head positions and an embedded IP. This latter, in turn, presumably has a head position at its left edge, and no relevant Specifier elements. But what of the structure of the clause itself? I shall assume the VP-internal subject hypothesis, according to which the base position of the subject is within VP, where VP is the constituent embedded under IP. Since the basic arguments V, S and O appear in that order, the possibility of a flat structure for this constituent has been raised by several authors (including myself). Apart from the problems that this would pose for the configurational definition of grammatical relations, and for the rationalization of subject-object asymmetries in the language, there is one major piece of evidence in favor of an SVO organization for the VP. This comes from the fact that non-finite clauses in the language, when they contain an overt subject, display SVO order:

- (1) a. Kavet am eus ur bluenn vat din da skrivañ gwelloc'h
 found I have a good pen for-1sg to write better
 I have found a good pen so that I can write better
- b. Pedin a reas Lennaig ar vugale dezho da zebrin krampouezh
 invite PRT did Lennaig the children for-3pl to eat crêpes
 Lennaig invited the children to eat crêpes
- c. Da Yann da welout e oant holl aze
 For Yann to see PRT were all there
 As far as Yann could see, they were all there

If we take this to be the basic structure, the occurrence of VSO will follow from Verb Movement to initial I, while movement of the reverse sort has no clear motivation.

- (2) a. Lennet en deus Yann al levr
 read has Yann the book
 Yann has read the book
- b. Kollet eo bet ar voutailh gant Lan
 lost has been the bottle by Lan
 The bottle has been lost by Lan
- c. Klask a raint o mignoned
 look for PRT they will do their friends
 They will look for their friends

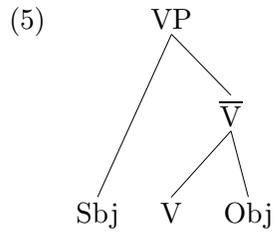
What of the analysis of auxiliaries, of which Breton has 3 (perfect, passive, and *ober* ‘do) at least? These might be regarded as Verbs taking VP complements, or as taking \bar{V} . In this connection, Hendrick observed that the position of the subject with multiple AUXs might give another argument for SVO.

- (3) a. [_{VP} V_{Aux} Sbj [_{VP} V NP NP]]
- b. [_{VP} Sbj [_{\bar{V}} V_{Aux} [_{\bar{V}} V NP]]]

Unfortunately, both of these sentences are attested. If we assume the second structure above (3b), apparently we have to have some sort of head movement that will attract the verbs into a sequence.

- (4) a. Al levr en deus Yann lennet anezhañ
 the book has John read it
 John has read the book
- b. Al levr en deus lennet Yann anezhañ
 the book has read John it
 John has read the book

Nonetheless, it seems that the best account of the Breton VP is as



This establishes the basic structure of clauses in the language.

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