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Nominal Properties of *v*Ps in Breton,

A hypothesis for the Typology of VSO Languages*

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Celtic and Semitic languages show the following clustering of typological properties: (i) the Complementarity Principle in the verbal agreement system; (ii) licensing of a genitive dependent by a construct state; (iii) a verbal construction whose object bears genitive. The aim of this paper is to show how (i-iii) are derived in one of these languages taken as a case study. I will show that in the Breton language (Continental Celtic), the three properties mentioned above follow straightforwardly from one parameter: the interpretability of the [D] feature on *v* as represented in (1a), where *v* is a functional projection similar to D in a DP structure in (1b).

(1) a. $[_{vP}$ Subject ***v*** **[D- φ 3.SG]** [VP]]

b. $[_{DP}$ ….. D [NP]]

The fact that infinitival Celtic verbs show extensive nominal properties has long been discussed in the literature. A range of analyses (Anderson 1981, Stephens 1982, Timm 1990) even proposes

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Abbreviations: Preverbal particles are noted ® for *rannig-verb*, the traditional Brythonic terminology meaning literally ‘little piece of a verb’. Preverbal particles form a constituent with the inflected verb (they can be dropped in modern Breton and only remain interpretable by the Consonant mutation they trigger on the following verb). They have to be distinguished from matrix particles (Prt) that trigger V1 orders (Jouitteau 2003).

that there are no verbs in Breton, all verbal structures being basically nouns. My analysis is less radical: infinitives or tensed verbs are formed of a *v*P Larsonian structure that only resembles DPs in having an interpretable [D] feature on v^{i}. Notice that the parameter is anchored into the verbal structure and thus predicts nominal properties not only of infinitives but also of tensed verbs. Notice also that the internal argument of *v* is a VP as opposed to a nominal category. As such, it enters into Move or Agree relations with Infl (see Massam, this volume). In contrast with other VSO languages in which the differentiation between categories is called into question (see Gil, Koopman, Massam, this volume), all nominal properties of Breton verbs are reduced to the parameterization of *v*. This proposal makes a strong and precise prediction: all properties traditionally related to the features of the D element in the DP structure should be found in a *v*P system as well. This entails that *v* triggers construct state configurations (providing genitive Case to its internal arguments), that *v* needs Case itself, and that, bearing interpretable 3.SG φ features, it can enter an agreement relation with T, in competition with the subject in its specifier. I will demonstrate how this predicts the Complementary Principle in the agreement system together with the exceptional agreement pattern of *have.*

The article is organized in three sections: each of them explores a distinct prediction of the 'interpretable [D] feature on *v*' hypothesis. Section 1 will be devoted to the most striking prediction my proposal makes: the instantiation of the construct state in a verbal system. N-to-D movement is responsible for GEN case assignment to the internal argument of a DP. Like D, the functional projection *v* fails to assign ACC Case and is a position responsible for GEN assignment to internal arguments. V-to-*v* movement will be shown to provide GEN to the DP object. In section 2, I explore the prediction that like D, *v* shows Case filter effects. *v*Ps like DPs have to be Case licensed. Section 3 briefly sketches the results of *v* entering into an agreement relation with the probe in T. Like D, *v* can enter an agreement relation (bears interpretable φ-

features). *v*Ps should then be able to compete with a DP subject for agreement feature checking. We will see how this account predicts the exact pattern of the verbal agreement system of Breton.

1. The internal argument of DP and *v*P are Case-licensed in the same way

The claim that the internal arguments of DPs and verbal nouns are Case licensed in the same way has been explored in Irish by Guilfoyle (1988), and Duffield (1995). The parallelism with Semitic has been focused by Duffield (1996). In the same line of thought, I will demonstrate in this section that the widely assumed ACC hypothesis for the Case licensing of objects in Breton cannot be maintained and that a GEN hypothesis is to be preferred. The examples in (2,3) below illustrate a construct state configuration in the DP system. Both the DP theme in (2) and the DP possessor in (3) occur in a post head position. (4) and (5) show an infinitival and an inflected verb respectively sharing the same ordering with respect to their internal DP argument. Internal DP arguments are then uniformly in post-head position in the DP system and in the *v*P system.

(2) distruj an avaloù — Noun head and its DP theme
destruction the apples
"(the) destruction (of) the apples"

(3) kroc'hen an avaloù — Noun head and its DP possessor
skin the apples
"(the) skin (of) the apples"

(4) debriñ an avaloù Infinitive

to-eat the apples

"to eat the apples"

(5) Buan e tebr an avaloù. Tensed verb

rapidly ® he-eat the apples

"He eats rapidly the apples."

The morphology on the internal argument is identical in all cases because Breton does not show overt Case morphology on DPs (as opposed to other Celtic languages such as Scottish Gaelic or Irish). The null hypothesis so far is that two different cases would be realized without morphological overt distinction: on the one hand a non overt GEN case is assigned by the nominal head in the DP and on the other hand, a distinct non overt ACC Case is assigned by the verbal head in VP. However, this hypothesis is first called into question by pronominal objects. Surprisingly, object free standing pronouns are illicit in a post-verbal position. We see, in (4,5), that the post-verbal lexical DP theme of a verb appears with abstract direct case[ii] whereas its pronominal counterpart in (6) is ungrammatical.

(6) Herve a zebr *** int**.

Herve ® eat *** 3.PL**

"Herve eats them."

The unavailability of post-verbal freestanding pronouns is reducible to internal properties of clitics. With essentially data from Celtic and Semitic languages, Roberts and Shlonsky (1996) notice that VSO systems favor enclisis of weak/clitic pronouns. Freestanding pronouns are licensed in Breton but occur only in focus positions in Breton (preverbal focus position as in (7), objects of imperatives or echoic pronouns).

(7) **Int** (an hini eo) a zebr Herve.
3.PL (the one it is) ® eats Herve
"(It is) them (that) Herve eats."

This is evidence that only strong pronouns can avoid enclisis in the language (Cardinaletti and Starke 1999). Whatever could explain this restriction on the distribution of freestanding pronouns, it bans post-verbal freestanding pronominal objects because the post-verbal position in (6) is simply not associated with focus. The paradigm in (8-10) checks that no post-head focus position licenses freestanding pronouns. The presence vs. absence of a determiner does not rescue the structure in the DP system.

(8) (an) distruj *** int** Noun head and its DP theme
destruction **3.PL**
"their destruction"

(9) (ar) groc'henn *** int** Noun head and its DP possessor
(the) skin **3.PL**
"their color"

(10) debriñ *** int** Infinitive

to-eat **3.PL**

"to eat them"

Let us investigate now the positive evidence, that is, how non-focused object pronouns are in fact licensed. The object pronoun surfaces either pre-verbally as in (11) or incorporated into a preposition as in (12).

(11) Herve **o** debr.

Herve **3.PL** eat

"Herve eats them."

(12) Herve a zebr **anez-ho**.

Herve ® eat **P-3.PL**

"Herve eats them."

Two options are available in order for the object pronouns to pass the Case filter: cliticisation into the verbal head as in (11) or incorporation into a dummy preposition as in (12). The prepositional alternative in (12) is a relatively new creation in the language. In 1947, in his normative grammar of Breton, Kervella (1947:§428) qualifies the inflected preposition as "very long, heavy and ugly" in comparison with the cliticisation option that had to be preferred in his view of standard Breton. However, he had to recognize at the same time that the prepositional alternative was fast gaining influence in the spoken language. Indeed, it is now the most common form. One

important point is to be noted: neither partitive reading nor aspectual difference is induced by it. The inflected preposition in (12) is available for the entire paradigm and is completely semantically equivalent to the proclitic, that is to say the P has no semantical impact. I assume because of this, that the preposition is present exclusively for Case assignment purposes. As shown in (13), in an obligatory focus position for an object (topicalization[iii] or clefting), the preposition alternative is illicit, pointing again toward the P as a last resort Case assignment strategy.

(13) ***Anezho** (an hini eo) a zebr Herve.
*** P-3.PL** (the one it is) ® eats Herve
"(It is) them (that) Herve eats."

In the DP system where no ACC is present anyway, the pronominal internal argument of a noun needs the same Case assigner to be inserted, as illustrated in (14-16).

(14) an distruj **anez-hi** Noun head and its DP theme
the destruction **P-3.SG.F**
"its/her destruction"

(15) an tal **anez-hi** Noun head and its DP possessor
the forehead **P-3.SG.F**
"her forehead"

(16) debriñ **anez-hi** Infinitive

to-eat **P-3.SG.F**

"to eat it (*of it)"

The only way to maintain the ACC hypothesis would be to assume that the inflected preposition is reanalyzed in Modern Breton as the morpho-phonological realization of accusative Case in a split-accusative system as proposed for Hebrew or Turkish (Falk 1998). This hypothesis would face two major problems. First, it would not be easy to derive the ban against an accusative object from appearing in the preverbal position, as shown in (13). Second, the distribution of accusative in split accusative systems is grounded on semantic differences such as [+/- definite] for Hebrew or [+/-specific] for Turkish.

(17) ra'iti yeled. Hebrew, Falk (1998)

saw. 1.SG child

"I saw a child."

(18) ra'iti et Gabi.

saw.1.SG ACC Gabi

"I saw Gabi."

(19) Hasan öküz-ü aldi. Turkish, Blake (1994)

Hasan ox-ACC bought

"Hasan bought the ox."

(20) Hasan bir öküz aldi.

Hasan a ox bought

"Hasan bought an ox." (non-specific)

In contrast to this, in Breton, all semantic types of post-verbal object pronouns appear into a preposition, whereas only 'partitive' lexical DPs can. The conditioning factor is thus [+/-pronominal] and lacks any semantic dimension[iv]. All these arguments suggest that the ACC hypothesis should be abandoned and I will now provide evidence for the genitive alternative instead. Proclitic objects provide such evidence. As noted by Sproat (1985) for Welsh, objects pronouns show the same morphology as possessive pronouns in that language[v].

(21) Fe ' **m** welodd y dyn (**i**) Rouveret (1994)

Prt 1.Sg saw the man me

'The man saw me.'

(22) i '**m** taro

to 1.Sg hit

'to hit me.'

In Breton, whenever case is morphologically realized on the object in a verbal system, this case is identical to the case of possessive pronouns as illustrated in (23-26).

(23) **o** distruj

"**their** destruction"

(24) **o** dal

"**their** forehead"

(25) **o** debriñ

their to-eat

"to eat them"

(26) Alies **o** debr Yann.

often **their** eat Yann

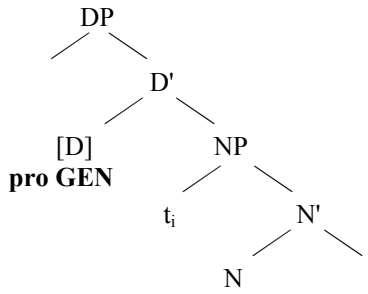
"Yann eats them often."

This holds true for the entire paradigm. The different mutations triggered by the possessive pronouns on their nouns are all identical to those triggered by the object proclitics on their verbs for the same person. I generalize the genitive hypothesis to object lexical DPs and assume that the case distributed to lexical object DPs is genitive too. The construction known in Celtic and Semitic languages as construct state is instantiated in Breton in the verbal system: the DP object of a tensed verb is assigned GEN Case by construct state. In the following section, I analyze the interpretable [D] feature present in DP and *v*P structures as illustrated in (1a,b) as responsible for the common Case licensing behavior. Each construction will be illustrated for DPs and *v*Ps in parallel.

1.1 Case assignment to Object pronouns

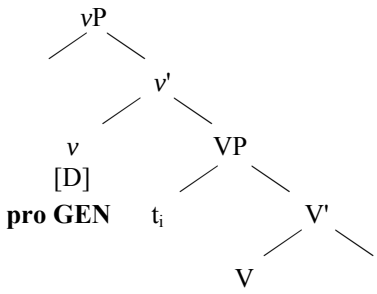
When the pronoun incorporates into the functional head; it surfaces with genitive as in (27).

(27) a. Breton nouns



GEN pro$_{poss/theme}$ N

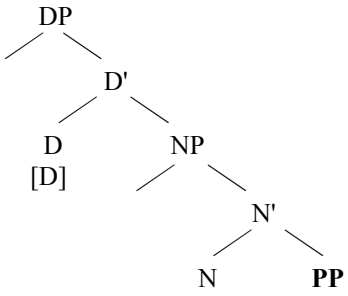
b. Breton verbs



GEN pro$_{theme}$ V

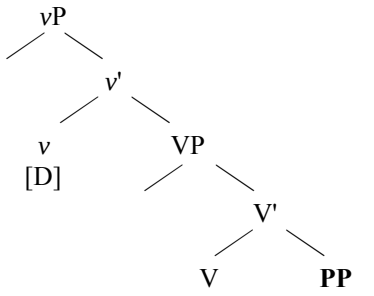
The alternative to GEN proclitics is to insert a P to Case license the pronoun poss/theme as illustrated in (28).

(28) a. Breton nouns



N **[PP [P + pro$_{poss/theme}$]]**

b. Breton verbs

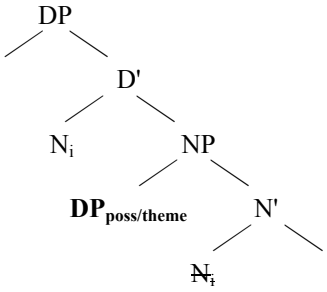


V **[PP [P + pro$_{theme}$]]**

1.2 Case assignment to object DPs by construct state:

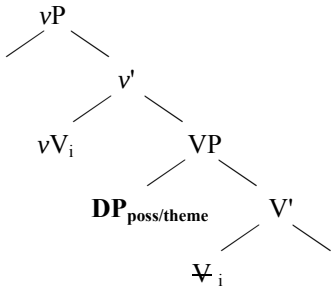
The construct state is classically analyzed as the result of N to D movement. (Guilfoyle 1988 for Irish, Ritter 1988 for Hebrew, Mohammad 1988 for classical Arabic, Duffield 1995, 1996 for Maltese and Irish, Longobardi 1996, Roberts 2001 for Welsh, see also Borer 1996 for general? discussion). The [D] interpretable feature on *v* is responsible for case assignment of the object, just as a D is in a nominal system. In the same fashion N moves to its functional D head, Case licensing its internal argument, V moves to its functional head *v* with interpretable [D] feature, Case licensing its internal argument as in (29).

(29) a. Breton nouns



N **$DP_{poss/theme}$**

b. Breton verbs



V **DP_{theme}**

In the classic account, raising of N to D yields N DP_{theme} order and the Case assignment of the DP_{theme} arises under government of the moved nominal head into the D projection. In my extension of the classic account, raising to *v* yields V DP_{theme} order and the Case assignment of the DP_{theme} arises under government of the moved verbal head into *v*. This has one important theorical implication: it undermines a phonological approach of construct state as proposed by

Siloni (2000). The [N/$DP_{poss/theme}$] adjacency in the construct state becomes a purely accidental fact. Nothing attracts the nominal head out of the DP, and by contrast, the *v*V head is attracted into T in tensed clauses. The nominal head is simply never attracted out of the DP domain and remain adjacent to its internal argument. In the verbal system, however, the V head in *v* in (29b) will raise further into T. As seen in (30), intervening material like the subject appears linearly between the verbal head and the object it has provided Case to.

(30) Bemdez e toure **Anngaelle** [$_{vP}$ t_{vV} ma louzoù]
everyday ® water.3.SG Anngaelle my plants
"Anngaelle watered my plants everyday."

Construct state is a Case assignment strategy for both N and V in the course of the derivation because their functional projection has interpretable [D] features. Linear adjacency in a construct state configuration arises whenever the elements remain in the construct state configuration and are not further derived.

2. *v*Ps like DPs show Case filter effects.

The second implication of the interpretability of the [D] feature on *v* in Breton is that if the D head of a DP is taken to be responsible for the case filter effects of DPs, then the [D] feature on *v* means that *v*Ps should also receive case. In this section, I demonstrate that this predicts the distribution of preverbal prepositions. The preposition *da* is a case assigner. Such a preposition is always illicit when *v*Ps already have their case feature checked.

In the examples in (31) and (32) below, the *v*P occurs in subject positions where DPs canonically receive case. The examples in (33,34) show a construct state whose head is respectively nominal and verbal. As expected, the insertion of the preposition is consequently illicit in all cases.

(31) **(*da)** [$_{vP}$ lipat skorn buan] ‘vez poanius.
to to-leak ice rapidly is painful
‘It is painful to leak ice rapidly.’

(32) Fellout a ra din **(*da)** [$_{vP}$ kanañ gant Kristen].
please ® does to-me (*P) to-sing with Kristen
litt: “singing with Kristen pleases to me.”, “I feel like singing with Kristen.”

(33) ur c'hlask **(*da)** [$_{vP}$ kompren]
a research (*P) to-understand
‘a research of understanding’

(34) Gwelloc’h ‘ vez klask **(*da)** [$_{vP}$ kompren].
better ® is search (*P) to-understand
“It is better to try to understand.”

A prepositional Case-assigning projection appears only as a last resort as in (35):

(5) Start ‘vez ar skorn *(da) lipat buan.

hard is the ice to to-leak rapidly

In order to account for tensed verbs also, I assume that in finite clauses, the Case Filter requirement of *v* is met by incorporation into T. The movement of *v* into T could even eventually be motivated by this need for case. Whenever *v* reaches no canonical case position and does not incorporate into T, only the insertion of a preposition can license it. The facts are particularly clear in the case of ECM structures. In (36), case has been assigned by the past participle *lakaet* to its *v*P object in a construct state configuration before moving further into the pre-verbal position. The last resort preposition is illicit. But as soon as the Case provided by construct state is absorbed by either *Yann* in (37) or *un ti* in (38), this case assigner is required.

(36) Lakaet$_i$ em eus t_i **(*da)** [$_{vP}$ sevel un ti].
put I have (*P) to-build a house
"I had a house built."

(37) Lakaet$_i$ em eus t_i **Yann *(da)** [$_{vP}$ sevel un ti].
put I have Yann *(P) to-build a house
litt: "I have put Yann to build a house."; "I had Yann build a house."

(38) Lakaet$_i$ em eus t_i **un ti *(da)** [$_{vP}$ sevel].
put I have a house *(P) to-build
"I had a house built."

Contrast the examples in (36) to (38) with the behavior of English or French ECM infinitives, which do not need to receive case and therefore do not show such variation. I take this as evidence that *v*P structures need case in Breton just as DPs do.

2.1 Raising structures, Wrong Subject Constructions and apparent counterexamples.

An apparent problem, pointed out to me by a reviewer, seems to hold with infinitives embedded under raising verbs as in (39).

(39) Mona$_i$ a hañval Yann [$_{vP}$ komz anezhi$_i$].
Mona ® seems Yann to-talk P-3.SG.F
"Yann seems to be talking about Mona."

No Case-assigning preposition is licensed and the three nominal elements underlined here seem to be provided direct Case. In an analysis where 'Mona' has raised from the object position of the preposition and consequently absorbs Nominative, only one Case should remain available to the two post-verbal nominal elements, shedding doubt on the need for the *v*P structure to get Case. Notice first that, by Condition B of Binding Theory, the licit pronoun in (39) is likely to be bound by 'Mona' from a non-A position. Contrast this with (40) where the preverbal element is in an A position and consequently cannot corefer with the IP internal pronoun.

(40) Mona$_i$ a hañval *(da) Yann [$_{vP}$ komz anezhi$_{*i/j}$].
Mona ® seems to Yann to-talk P-3.SG.F
"Mona seems to Yann to be talking about her."

The example in (40) is thus more representative of a canonical raising construction into an A position. Notice that the insertion of a preposition is obligatory. In fact, it is the insertion of this Case assigning preposition that has changed the meaning of the sentence in making the preverbal element a 'real' subject in an A position. In view of this, I argue that (40) is an instantiation of raising, in contrast to (39) which is an example of the so called 'Wrong Subject Construction' that instantiates not raising, but the merging of 'Mona' as an expletive (see Jouitteau forthcoming and Rezac 2004 for discussion of these structures). One of the (various) ways to satisfy the EPP in Breton is by merging a preverbal DP coreferent with an internal IP pronoun as in (41).

(41) Mona$_i$ a zebr he$_i$ c'hoar kaviar bemdez.
Mona ® eat her sister caviar everyday.
"As for Mona, her sister eats caviar everyday."

Under this analysis, the sentence in (39) differs minimally with a canonical Expletive+VSO order as shown in (42) below. The choice of the particular expletive strategy is related to an Ā reading of 'Mona' as made clear by the English translation of (41).

(42) Bez' e hañval Yann [$_{vP}$ komz anezhi]. Expletive +VSO
Expl ® seems Yann to-talk P-3.SG.F
"Yann seems to be talking about her."

Both the subject and the infinitival object receive direct Case as in canonical VSO orders. If (39) and (42) remain puzzling in terms of Case assignment, the problem lies in the way expletives receive Case, a problem I leave aside for now (see Lasnik 1999:30-37, 74-97 for discussion).
So far, we have seen that the *v*P structure provides GEN internally to its internal argument and needs Case itself, all properties commonly associated with DPs. Finally, we turn to the behavior of agreement and show now this is evidence for the interpretability of the '[D] feature on *v*' hypothesis.

3. *v*Ps bear interpretable underspecified φ-features[vi]

Consistent with the idea that *v*Ps have interpretable [D] features, they bear interpretable φ-features. Like other nominal elements (e.g. expletives, nominalizations, and clauses), *v*Ps lack semantic φ-features, and like them, their inherent φ default value is 3.SG. Consequently, they can enter into an agreement relation with the probe in T, exactly as a DP subject would.
Breton is subject to the Complementarity Principle which requires complementary distribution of overt DPs and agreement morphology on Infl (see McCloskey and Hale 1984, Doron 1988 for discussion of the same phenomenon in Irish). Either we get a null DP subject and *rich* morphology on the verb as in (43), or we the DP subject and *poor* morphology on the verb as in (44)[vii].

(43) Gant o mamm e karf**ent / *-e** bezañ.
with their mother ® would.love.**3.PL/* 3.SG** be
"They would like to be with their mother."

(44) Gant o mamm e karf**e** **/*ent** Azenor ha Iona bezañ.
with their mother ® would-love-**3.SG /*3.PL** Azenor and Iona be
"Azenor and Iona would like to be with their mother."

This holds true with preverbal subjects also (with both A or Ā readings):[viii]

(45) Azenor ha Iona a garf**e** **/*ent** t_S bezañ gant o mamm.
Azenor and Iona ® would-love-**3.SG /*3.PL** t_S be with their mother
"(it is) Azenor and Iona (who) would like to be with their mother."

Notice that the so-called *poor* morphology in (44) and (45) takes from the morphology of a 3.SG marker. The agreement pattern illustrated here is absolutely regular in the language. The case of *have* stands out amidst such complete regularity. In (46) we see that wherever the subject is located, *have* shows up with the features of the lexical DP possessor.

(46) Bremañ (,Azenor ha Iona) **o** deus (Azenor ha Iona) un ti.
now (,Azenor ha Iona) **3.PL** have (Azenor ha Iona) a house
"Azenor and Iona have a house now."

3.1 Previous analyses

Two main lines of analysis have been explored so far for the Complementarity Principle in Breton, those two lines being organized around a traditional opposition between incorporation and agreement.

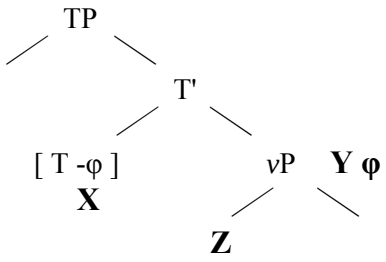
Anderson (1982) claims that the *rich* morphology is the spell-out of incorporated pronominal subjects. In this view, the Complementarity Principle is predicted by the θ-criterion; that is, we never see rich morphology together with a full lexical DP just because we cannot have two subjects in a sentence. This elegantly reduces the difference of agreement pattern between pronominal and lexical subjects to the fact lexical DPs cannot incorporate. In minimalist terms, we can recast this as the lack of a probe in T. The 3.SG marking of *poor* morphology in (44) and (45) has to be purely accidental because there is no agreement relation to be considered. Finally, any occurrence of subjects together with *rich* morphology becomes a problem for the incorporation analysis: the exceptional pattern of *have* in particular.

The other traditional line of analysis of the Complementarity Principle is the agreement analysis of Stump (1984, 1989) - see also McCloskey & Hale (1984) for Irish. On this view, the *rich* morphology of inflection is always the result of an agreement relation with *pro*. Complementarity occurs because agreement has to govern an empty position. In Minimalist terms, Breton has a probe in T like French or Greek, the variation arises from this probe needing to govern an empty category. I set aside the theorical implications this would have for our understanding of probes, turning to the predictions it makes: neither the facts of *have* nor the 3.SG marking of the *poor* morphology are accounted for.

I now turn to the main proposal of this section. From the agreement analysis, the idea that there is always a probe in T looking for φ features to agree with is maintained. From the incorporation analysis, we retain the idea that the parameter distinguishing Lexical DPs from pronouns is the ability of the latter to incorporate. Pronominal subjects incorporate and agree

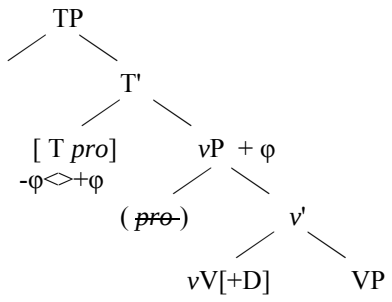
with the φ-Probe in T. Lexical subjects on the other hand never incorporate and are blocked from agreeing with the probe in T by the intervening φ-features of *v*. This reduces the Complementarity Principle to a Relativized Minimality Effect (Rizzi 1990, 2004). The selection of the φ features that the probe will agree with is entirely predicted by locality. This is illustrated in (47) below where the φ-Probe in T tracks the closest set of φ features.

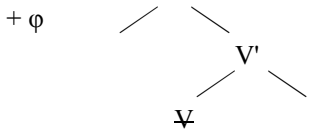
(47) **Locality**



The [-φ] probe in T looks first at the internal position X in case something has incorporated into it, then at its sister in position Y, and finally at Spec*v*P in position Z. Now, apart from the assumption that *v* bears interpretable φ-features (3.SG), we only need to assume that the φ-features of *v* percolate to the maximal projection. Recall that freestanding pronouns are only licit under focus. When the Subject is *pro* as in (48), it needs to pass the Case filter and incorporates under T. An incorporated *pro* in the position X in the locality diagram in (47) will always be the closest [+φ] set for the probe -φ in T.

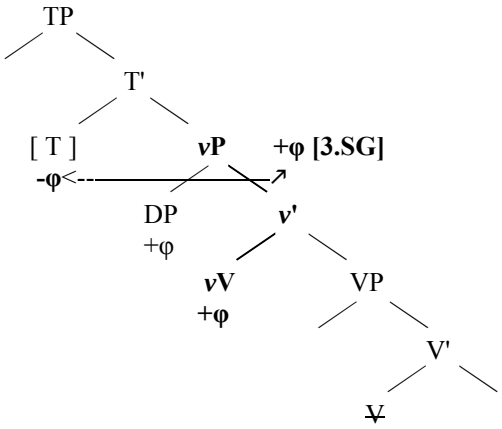
(48)





The *rich* morphology in (43) results from incorporation of a pronominal subject AND agreement with it. Contrary to pronouns, lexical DP subjects cannot incorporate and will never reach the position X in the locality diagram. They remain in Z. The maximal projection of *v* bearing interpretable φ-features dominates it and consequently counts as closer to T. As illustrated in (49), the φ-features in T agree with the projected φ-features of *v*.

(49)



The so-called *poor* morphology spells out an agreement relation with the φ features of *v*P. The so-called poor/weak/analytic agreement form is a consequence of a Relativized Minimality effect, whereby the maximal projection of *v* intervenes between T and Spec*v*P in languages where *v* is nominal and has φ-features. The Complementarity Principle arises because *pro*-incorporation into T brings *pro* close enough to the φ-Probe of T so that a projection of *v* no longer intervenes.

Our analysis predicts that a lexical DP subject and agreement *rich* morphology can be found together only in cases where the maximal projection whose Specifier holds the Subject and

its set of φ-features will not be a functional category with an interpretable [D] feature. This is precisely what we argue happens with *have.*

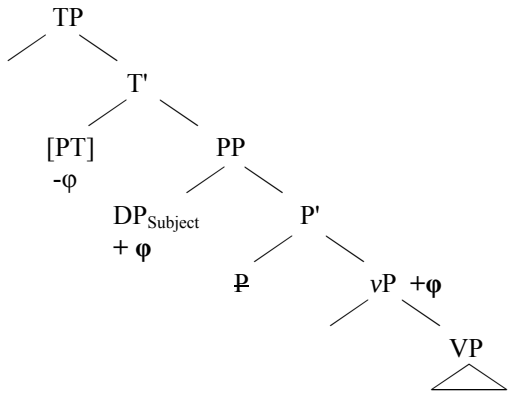
3.2 Deriving *have*

Recall that *have* never shows up with *poor* agreement morphology. The example in (46) is repeated here as (50).

(50) Bremañ (,Azenor ha Iona) **o** d*eus* (Azenor ha Iona) un ti.
now (,Azenor ha Iona) **3.SG** have (Azenor ha Iona) un ti
"Azenor and Iona have a house now."

In a prepositional analysis of *have* (Freeze 1992, Kayne 1993; Schafer 1994 for Breton), the argument of *have* is in SpecPP. The argument DP in SpecPP is interpreted as the possessor for lexical *have*, and as a lexical argument for auxiliary *have*. This is illustrated in (51) for the auxiliary:

(51)



Both auxiliary and lexical *have* differ from other verbs in that the closest set of φ-features the probe in T will encounter is always the one of the DP in the specifier of the preposition in (51). The maximal projection PP does not trigger any Relativized Minimality effects because (in contrast to *v*), prepositions do not bear interpretable φ-features. Note that inflected prepositions instantiate the Complementarity Principle without exceptions. This can be accounted for in terms of simple incorporation of pronominal objects. In (51), P is predicted not to inflect because its object could not incorporate. As for *v* and its set of features, it is buried within the prepositional structure, and thus never intervenes for agreement between T and SpecPP. Therefore, we predict that *have*, as headed by a prepositional functional category, does not create any Relativized Minimality effect; deriving that *have* in Breton is the unique verb (auxiliary and lexical) not subject to the Complementarity Principle.

3.3 Morphological arguments for the prepositional analysis of *have*:

We add to this a morphological argument for our derivation of *have*. The prepositional analysis of *have* is morphologically transparent in Breton: the preposition is morphologically realized into the root of the verb in the present paradigm where no tense morphology covers it. Compare the paradigm of *have* in (52) with the preposition ***eus*,** 'of, from' in isolation in (53).

(52) Paradigm of *have* in the present tense[ix]:

	Stantard, written form	spoken Breton	other possible forms / dialects
1.SG	a/e m **eus**	'**meus**	'**beus**^{L}
2.SG	a/e z p**eus**'/c'h**eus**	'**teus**^{T,Ki}	'**peus**^{Aé,Ag} '**feus**^{Ph,Ku}
3.SG.F	he d**eus**^{W,L}	'**neus**	
3.SG.M	En d**eus**	'**deus**	'**neus**
1.PL	hon **eus**	'**meu**mp^{Ku,T}	'**beus**, '**neus** '**neus**omp^{Ki}
2.PL	ho p**eus**	'**peus**	'**peu**t & '**peu**c'h^{Aé,Ag} '**neus**oc'h^{Ki}, '**heus**^{L,Ph}
3.PL	o d**eus**^{W,L}	'**neu**nt	'**neus**ont^{Ki}, '**neus**^{Ph,Ki}, **neu**int^{Ku,T}, d**eu**nt, '**deus**

(53) a. **Eus** Venus on.
from Venus be.1.SG
"I'm from Venus."

b. Ur plac'h **eus** ar skol
a girl of the school
"a girl of the school"

The root *eus* in (52) is identical with the preposition *eus* 'from, of' in (53), and this identity has been preserved throughout the significant morphological restructuring it has undergone in the language. Agreement marking on *have* has evolved from proclitics in ancient forms to a more regular pattern marking agreement on the right in the spoken modern language. Despite this 'morphological storm', the root is preserved as *eus.* Note further that in (53) the abstract meaning of *eus* is the one of 'source'. This predicts for example that this preposition will never be merged with auxiliaries of passives structures: the auxiliary is then only *be*^{x}. I conclude that in Breton there is overt morphological evidence for the idea that *have* is headed by a prepositional functional head. This in turn predicts that no Relativized Minimality Effect ever arises with *have.* Furthermore, I take these facts to parallel the prepositional predicate of Egyptian Arabic in (54). See also Macaulay (this volume) for examples in Chalcatongo Mixtec.

(54) (hiyya) ma-ᶜ**and**-aha-š šuγl kuwayyis. Jelinek 2002

(she) NEG-with-POSS.3.SG.F-NEG job good

"She doesn't have a good job."

Jelinek (2002:80) underlines the verbal nature of the construction in noting that the sentential negation ᶜ*and* is associated with verbal agreement. Notice that in both cases, the verbal inflection is realized in taking from the morphology of possessive pronouns.

3.4 Typological Predictions

Our analysis of the Complementarity Principle as a Relativized Minimality effect makes several strong predictions. *Poor* morphology is expected to coincide with the under specified φ-features of *v*: [3.SG]. Languages as English, French or German where no intervening projections show nominal properties will not show such a rich/poor alternation in agreement relation. By contrast, a language that has interpretable features in a projection between T and Spec*v*P like Breton but whose pronouns do not incorporate should always satisfy the probe in T with the same underspecified features. Such a language should loose any evidence for the probe in T, since the 3.SG that the verb agrees with could not be compared to a rich morphology (cf. Massam's description of Niuean's agreement system, this volume).

3.5 Summary

The Complementarity Principle as a restriction on an agreement system is in need of a motivated, non-stipulative explanation, particularly in the Minimalist Program with its emphasis on agreement. On the other hand, an incorporation analysis strongly predicts that occurrences of subject marking is restricted by the θ-criterion. We derive the Complementarity Principle from the independent and pervasive principle of intervener-based locality (Relativized Minimality), operating over φ-features together with the incorporation properties of pronouns. Significantly, the prepositional analysis of *have* (which is morphologically so clear in Breton) correctly predicts that the preposition will not induce an intervention effect, letting T's φ-features correctly see the φ-features of SpecPP. Thus, the fact that *have* is an "exception" to the Complementarity Principle follows without any stipulations.

4. Conclusion:

The clustering of three typological properties that are instantiated in Celtic and Semitic languages have been shown to follow from the same parameter at least in one of these languages, i.e. Breton: (i) Complementarity Principle in the verbal agreement system; (ii) licensing of a genitive dependent by construct state; (iii) a verbal construction whose object bears genitive (iii). These properties were made to follow from the interpretable status of [D] on a functional projection; i.e. *v*. I motivated the interpretable [D] feature on *v* by making a parallel with the DP system: Case relations with the internal argument and *v*P's need for Case. The licensing of a genitive dependent by construct state (cf. (ii)) has been argued to hold in the verbal system as well. Infinitives and tensed verbs case license their internal arguments in the same way nouns do, that

is by construct state (cf. (iii)). Notice however that this analysis does not imply that the Breton verb is a noun. The structure proposed is not that of a DP; all the nominal behaviors of the verbal structure have been reduced to the interpretability of a feature on a Larsonian *v*P structure. The fact that the [D] feature on the *v* head is interpretable in this language does not change the ability of *v* to select an external argument, nor does it imply that its internal argument should be an NP as opposed to a VP. In that, I follow Stephens (1982), McCloskey (1983) and Sproat (1985) and argue against a radical verbo-nominal analysis of Celtic 'verbs', deriving among other differences that external arguments are obligatory with the verbs but not within real nominals, and that the possessive of real derived nominals can be either logical subject or object.

The presence of φ-features on *v*Ps + *pro*-drop parameter predicts the instantiation of the Complementarity Principle in the verbal agreement system (i). Therefore, in Breton the interpretable [D] feature on *v* predicts together the case assigned to objects in the verbal system, the distribution of dummy prepositions, and finally the agreement system with its exception *have.* From a typological perspective, the question arising is how this analysis could extend to other languages of the Celtic group on the one hand and the Semitic group on the other. Some difficulties immediately show up. The tensed verbs and even some infinitives in Scottish Gaelic assign direct Case to their object as in (56). See Carnie 1995 79-109, Doyle 2002:89 for discussion of similar facts in Irish.

(55) Tha mi a' bualadh a' chait. Adger (1996)
be.PRES I Prt hit. the.GEN cat.GEN
"I'm striking the cat."

(56) Tha mi air an cat a' bhualadh.

be.PRES I P the.DIR cat.DIR Prt hit.

"I'm striking the cat."

The word order change leads me to think that Spec*v*P is a possible host for the DP object to receive direct Case (see Carnie 1995 for a review of the analysis of object shift in Irish), a movement disallowed in Breton. The motivation for such a Celtic parameter however remains unclear to me. On the Semitic side, other parameters have to be taken into consideration. First, the reported data is not homogeneous. The case assigned to pronominal objects, for example, seem to vary: on the one hand, Roberts and Shlonsky (1996:175) say all clitics are incorporated on N, P or V hosts without manifesting any overt case distinctions. On the other hand, Jelinek (2002:89) points out an accusative/genitive alternation showing up for [2.SG]. The hypothesis of genitive case being assigned to Objects would thus be endangered and the core motivation for the Complementarity Principle disappear. I argue that the Complementarity Principle follows from Relativized Minimality in Modern Standard Arabic (MSA) as it does in Breton, but the difference lies within the identity of the intervener between the inflected verb and its subject.
Modern Standard Arabic shows a post-verbal locative expletive in existential constructions like (57).

(57) (* hunaaka) kaana (hunaaka) taalib-un fii l-hadiiqati Benmamoum (1999 :115).
there was there student.NOM in the garden
'There was a student in the garden.'

Benmamoun assumes that this expletive is in SpecIP, the inflected verb being in a higher focus position (Ouhalla 1992). I postulate a null counterpart to this expletive: an expletive *pro* bearing a

default specification [SG]. The subject remains internal to VP and gets case by its associative relation with the expletive in SpecTP. This predicts correctly the agreement facts by Relativized Minimality effects in (58) and (59):

(58) katab-at (*-aa) *pro* faatimat-u wa zaynab-un kitaab-an.
wrote-3F.**SG**-*DUAL EXPL.SG Fatima-NOM and Zainab.NOM book.ACC
'Fatima and Zainab wrote a book.'

(59) [faatimat-u wa zaynab-un]$_i$ katab-at-aa (*katab-at) **t$_i$** kitaab-an.
Fatima-NOM and Zainab-NOM wrote-3F**.DUAL** (*3F.SG) book-ACC
'Fatima and Zainab wrote a book.'

In (58), a null expletive is merged in SpecTP and agreement in number is achieved with the closest match for the Probe in T. The expletive completely lacks features of person and gender and the Probe finds there its match internally to VP. In (59), the SVO counterpart of (58), the subject has been attracted to the preverbal position and has passed threw SpecTP. Consequently, no expletive intervener can show up and agreement in number takes place with the DP subject. Such an analysis would automatically derive an asymmetry between Breton and Semitic languages: the SVO orders in Modern Standard Arabic (MSA), Egyptian Arabic and Hebrew show uniquely *rich* morphology (Demirdache 1987, Jongeling 2002:94) whereas the location of the subject is indifferent to the Complementarity Principle in Breton[xi].
Further research needs to be done to check whether the proposal sketched here could be followed or adapted for a deeper understanding of typological regularities among verb-initial languages.

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[i] Verbal structures as unaccusatives and passives need a similar account. These two structures need case and trigger Relativized Minimality effects. Two options are to be considered here. Either the *v* head is always projected in unaccusatives and passives, as proposed by Harley (1995) or Bowers (2002), or no *v* is projected but these structures are contained small clauses that have an interpretable [D] feature too. Significantly, unaccusatives and passives fail to assign genitive by Construct state. Notice that in the small clause hypothesis, the argument is generated in the specifier of the small clause, that is higher than the [D] feature. No movement into the head of the small clause can thus license genitive on the argument. (see Jouitteau and Rezac (forthcoming) for discussion.

[ii] The term ‘direct case’ is used only in opposition to ‘oblique case’.

[iii] Pre-verbal objects, as opposed to preverbal subjects, are always derived by topicalization and undergo obligatory Ā reading. See Jouitteau (forthcoming).

[iv] As pointed out to me by Thomas Leu and an anonymous reviewer, Swiss German, English or French show overt case morphology on pronouns, but not on lexical DPs. It is also possible that pronouns receive case in a manner different from lexical DPs. If so, the last argument is vacuous.

[v] There are alternations in both Scottish Gaelic and Irish with respect to the case objects receive from verbal noun heads. This alternation is usually stated in terms of an ACC/GEN variation. As far as I know, however, this alternation could be recast in terms of direct Case vs. GEN (Adger 1996, Doyle 2002) .

[vi] This last section relies on common work with Milan Rezac. See Jouitteau and Rezac (forthcoming) where we discuss the analysis in more details.

[vii] Setting aside the fact that the pre-negation subject, which always has an Ā-reading, co-occurs with full agreement. We analyze such cases as involving a resumptive *pro* inside the negation, picking up the Ā-positioned subject across the weak island created by the negation (cf. Schafer 1995); thus this is not an exception to the Complementarity Principle.

[viii] See Jouitteau (forthcoming), Rezac (2003) for analyses of movement in Breton to the pre-verbal position and the distinction between Ā and A/neutral movements to it.

[ix] This table arises from a synthesis of Davalan (1998) and Favereau (1997). This is meant to be illustrative, not exhaustive. Capitals refer to the Breton dialects: T = trégor, KI = Basse cornouaille, L = Léon, Ph = Poher, Aé = Arrée, Ag = Argoat, W = vannetais.

[x] See Jouitteau (2002) and Jouitteau (in preparation) for the derivation of compound tenses in Breton.

[xi] Minor pre-negation subjects, see note vii.