LTAG and Raising to Subject in Breton

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Abstract

Breton is a Celtic VSO language that contains a process of raising to subject and a verb second requirement for main clauses. This paper shows that raised subjects must also be topicalized. An LTAG account of raising to subject offers a particularly elegant solution to this limitation because the raised subject must satisfy the verb second requirement in the elementary tree, while the raised subject and the raising predicate do not belong to the same local tree.

1 Introduction

The analysis of VSO languages and the syntactic properties of their subjects in particular have been important in the development of LTAG. For example, Harley and Kulick (1998) show that raising to subject in Welsh (a process classically described as moving the subject of an infinitival clause to become derived subject of an embedding clause) requires augmentation of standard formulations of TAG: auxiliary trees available for adjunction need to be comprised of multiple components, as in Multiple Component LTAG (MC-LTAG) of Joshi and Schabes (1997) and Chen-Main and Joshi (2008) This paper focuses on exploring raising to subject in Breton, a language closely related to Welsh. I demonstrate that raising to subject constructions in Breton must input the topicalization process in the language. The theoretical question of how best to understand this fact is addressed. Contrary to Hendrick (1988) where a discourse explanation is suggested but not formalized, I argue that this asymmetry can be neatly explained by the way in which a MC-LTAG like that advanced in (Frank, 2002) and (Frank, 2006). More specifically, the derivation of raising to subject constructions interacts with the way in which the language's verb second requirement is satisfied in elementary trees to enforce "raised" subjects to necessarily be topicalized as well.

2 Some General Properties of Breton Word Order

2.1 Preverbal Particles and Verb Second

Breton finite verbs are introduced by preverbal particles, affirmative *a* and *e*, and negative *ne*. In affirmative clauses the particle *a* is preceded by a subject or object DP while *e* appears otherwise; this alternation is visible in the contrast between the examples in (1) –(2) and that in (3).

(1) levriou a lenn ar vugale
books PRT read-PRES-3SNG the children
er gegin
in-the kitchen
the children read books in the kitchen

(2) ar vugale a lenn levriou
the children PRT read-PRES-3SNG books
er gegin
in-the kitchen
the children read books in the kitchen

(3) er gegin e lenn ar
in-the kitchen PRT read-PRES-3SNG the
vugale levriou
children books
In the kitchen the children read books

Breton main clauses show a verb second effect in affirmative declaratives (cf (Schafer, 1995)). Thus, a simple Breton sentence like (1)–(3) must have some constituent before the preverbal particle and finite verb. Sentences like (1) satisfy this requirement and are grammatical, but sentence (4) has no sentence initial constituent and is ungrammatical.

(4) *a/e lenn ar vugale levriou er gegin

(5) ne lenn ar vugale levriou
NEG read-PRES-3SNG the children books

er gegin.
in-the kitchen
The children don't read books in the kitchen

In negative clauses like (5) no initial topicalized phrase is required.[1] For the purposes of exposition, I will assume that the affirmative preverbal particles are in C and require a specifier in CP in the spirit of Emonds (1980).

2.2 The Distribution of Agreement

Finite verbs are indexed to reflect certain grammatical properties of their subjects. Phonologically unexpressed pronominal subjects co-occur with tensed verbs inflected for person, gender and number as in (6-a)–(6-b). [2]

(6) Finite verbs agree with phonologically null pronominal subjects

a. Bemdez e lennont eul levr.
everyday PRT read-PRES-3PL a book
They read a book everyday.

b. Warc'hoaz e lennint eul levr.
tomorrow PRT read-FUT-3PL a book
they will read a book tomorrow.

With one important exception, finite verbs in the language are not inflected to agree with person and number of an overt subject on their right, as illustrated in the contrast between (6-a) and (7-a)–(7-b).[3]

(7) Finite verbs do not agree with overt postverbal subject

a. *Bemdez e lennont ar
everyday PRT read-PRES-3PL the
vugale eul levr.
children a book
The kids read a book everyday

b. Bemdez e lenn Yannig/ar
everyday PRT read-PRES Yannig/the
vugale eul levr.
children a book
Johnny/the kids read a book everyday.

Subjects appearing in clause initial 'topic' position (i.e. specifier of CP) to the left of the finite verb also do not trigger agreement on their verb, as in (8).

(8) Finite verbs do not agree with preverbal subject

a. int/Yannig/ar vugale a
they/Yannig/the children PRT
lenn eul levr bemdez.
read-PRES a book everyday
They/Yannig/the children read a book everyday.

b. Me a
I PRT
lenno/*lennin eul
read-FUT-3SNG/read-FUT-1SNG a
levr warc'hoaz.
book tomorrow
I will read a book tomorrow.

Sentence initial topics functioning as subjects co-occur with *a zo*, a special form of the copular *bezañ*. Non subject topics co-occur with *eo*.

(9) Yannig a zo o vont ganit
Yannig PRT be-PRES PRT go with-2SNG
Yannig is coming with you

(10) bremañ eo Yannig o vont
now be-PRES Yannig PRT go
ganit
with-2SNG
Yannig is coming with you now

The verb *kaout* (have) agrees in person, number and gender with its subject as an exception to this general property of tensed verbs, and this property holds whether the subject is to the left or the right of its verb (cf. (Trépos, 1980), (Press, 1986)).[4]

(11) Verb *kaout* (have) agrees with all DP subjects

a. N'em eus ket gwelet
Neg have-PRES-1PL NEG seen
anezhañ
of-3SNG-MASC
We haven't seen him.

b. Ar c'higer en-doa
The butcher have-3SNG-MASC
kuzet ac'hanom.
hidden of-1PL

[1] I assume that the negative particle is not lexically specified to require a filled specifier, in contrast to its affirmative counterparts.

[2] In these glossed examples, the following abbreviations are used: PRT=particle, PRES=present, 3=third person, 1=first person, PL=plural, FUT=future, SNG=singular, MASC=masculine, FEM=feminine, INF=infinitive.

[3] These examples are adapted from Anderson (1982). There are competing orthographic conventions for representing Breton, and I have not tried to standardize the examples provided here.

[4] Again, these examples are adapted from Anderson (1982).

The butcher had hidden us.

We can summarize this sketch of Breton word order by saying that subjects in the language have the properties in (12).

(12) Properties of Breton Subjects

a. The finite verb *en deus* exhibits agreement in person, number and gender with pre- and post-verbal subjects.

b. *bezañ* (be) surfaces in the present tense as *a zo* when the subject preceeds and *eo*[5]

c. The preverbal particle (treated here as occupying C) surfaces as *a* when a subject or object DP preceds it and *e* elsewhere. These particles require an overt specifier in main clauses.

These properties of subjects will be important in the next subsection where we show that the subjects of some Breton verbs appear to owe their origins in a different clause.

2.3 Breton Raising to Subject

Breton contains a small set of verbs including *seblantout* (seem), *plijout* (please) and *krog* (begin) that are raising to subject predicates (cf. (Hendrick, 1988)).

It is useful to introduce an idiomatic verb phrase in Breton, *reiñ pour glas* (to flatter). This expression is idiomatic with respect to the co-occurrence requirements placed on its sub-constituents, and the way in which they come to have the meanings they do. Usually singular common nouns in Breton require Ds but *pour glas* occurs without one. Its semantic value is also idiomatic, with *pour glas* having a literal meaning distant from the value of the collocation. For these reasons, there is something strained or arch about using *pour glas* as the subject of other predicates as in (14).

(13) Yann en deus roet pour glas da Vona.
Yann 3SNG-MASC have-PRES give leek blue to Mona
Yann flattered Mona.

(14) pour glas a zo speredek.
leek blue PRT be-PRES clever
Flattery is clever.

In this context it is significant that the idiomatic expression *reiñ pour glas* can naturally serve as the subject of the raising to subject predicates like *krog* and *seblantout*:

(15) pour glas a zo krog da vezañ roet da Vona.
leek blue PRT be-PRES began to be given to Mona
Mona began to be flattered.

(16) pour glas en deus seblantet bezañ roet da Vona.
leek blue 3SNG-MASC have-PRES begin to be given to Mona.
Mona began to be flattered.

The ability of the idiom in the infinitive to extend and have one its chunks to the left of *krog* and *seblantout* is exactly the pattern of syntactic behavior that the movement analysis of raising to subject constructions is designed to capture.

Breton contains another set of verbs that lack a thematic subject and instead have a thematic argument (usually an experiencer) within a PP. The verb *plijout (to please)*, as in (17), is an example. Note that the (singular) verb *en deus* does not agree with the (plural) object of the preposition *ar vugale*.

(17) plijet en deus d'ar vugale sellout ouzh an tele.
pleased 3SNG-MASC have to-the children look at the TV
The children were pleased to watch TV.

However, it is possible for this argument to raise to serve as the subject of the clause and control verb agreement, as shown in (18).

(18) ar vugale o deus plijet dezho sellout ouzh Mona.
the children 3PL have-PRES pleased to-3PL look at Mona
The children were pleased to watch Mona.

2.4 Raising to Subject and Topicalization

While it is possible to raise to subject position as in (18), raising is blocked unless the raised subject is also topicalized, as shown by the contrast between (18) and (19), where some constituent other than the raised subject is topicalized.

[5]The verb *bezañ* has the shape *emañ*) when a definite subject is to its right. This difference in shape will not be part of the manipulations in this paper.

(19) *plijet o deus ar vugale dezho
pleased have-PRES-3PL the children to-3PL
sellout ouzh Mona
at Mona
The children were pleased to watch Mona.

The requirement that raising to subject involve topicalization is equally true of structures involving multiple clauses.

(20) Ar vugale o deus
the children have-PRES-3PL seemed
seblantet plijout dezho sellout ouzh an tele
please to-3PL look at the TV
The children seem pleased to watch TV

(21) *seblantet o deus ar
seemed have-PRES-3PL seemed please
vugale plijout dezho sellout ouzh an tele
to-3PL look at the TV
The children seemed pleased to watch TV

MC-LTAG offers a neat explanation for this otherwise unexpected restriction on raising to subject. Let us assume that (18) has the elementary tree in (22). Notice the topicalization of the embedded clause's subject to specifier of CP, which ultimately gives the verb second property of the derived tree. Let us also assume that (18) has, following the analysis of Welsh in Harley and Kulick (1998), a composite auxiliary tree like (23) and (24) adjoined to it. [6] When the auxiliary tree in (23)–(24) adjoins, yielding the raising to subject structure in (20) *ar vugale* will surface to the left to the auxiliary tree material. It is the topicalization of the infinitival clause's subject to specifier of CP in the elementary tree (22), which ultimately gives the verb second property to the derived tree. [7] If instead of (22) the elementary tree were (25), the adjunction of the auxiliary tree in (23) would never yield the observed (20). This way of deriving (20) automatically accounts for the ungrammaticality of (21) since the auxiliary tree cannot adjoin *ar vugale* within itself.

[6] It is still possible that the VP Internal Subject Hypothesis of Koopman and Sportiche (1991) is on the right track and that subjects move to specifier to TP from some position in the VP or vP, as in Jouitteau (2005).

[7] Long distance topicalization would need to have access to multiple component adjunction, as in Kallmeyer and Yoon (2004), but topicalization in these raising structures is never unbounded and we invoke topicalization only to derive the verb second property of Breton clauses.

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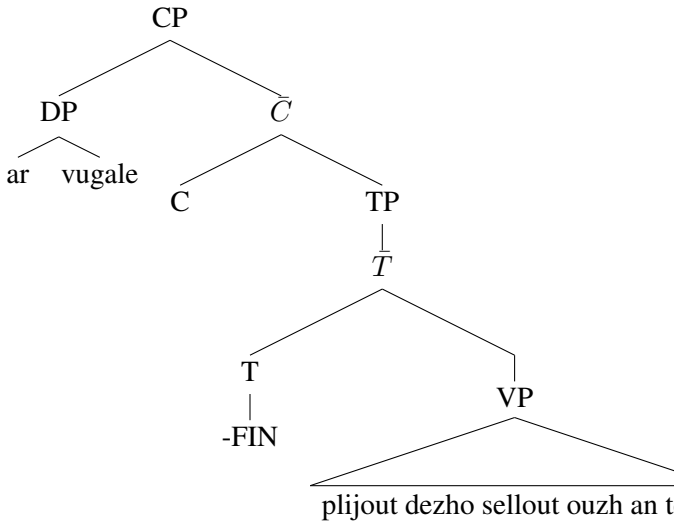

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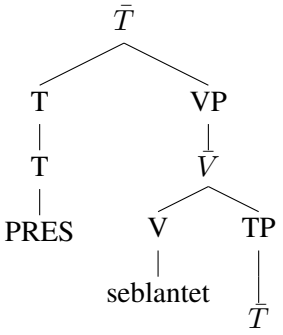

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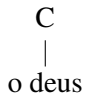

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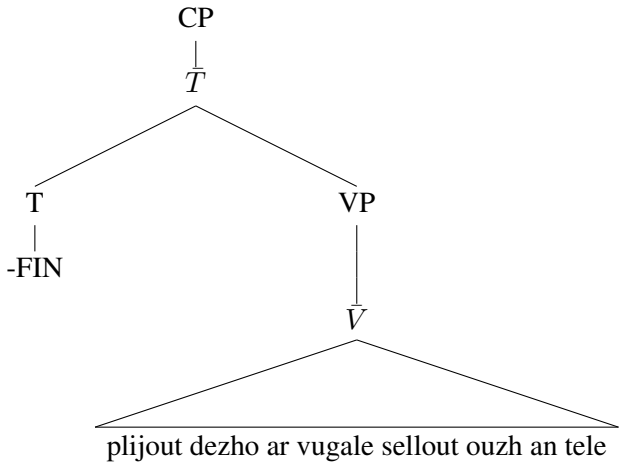


3 Accounting for Agreement

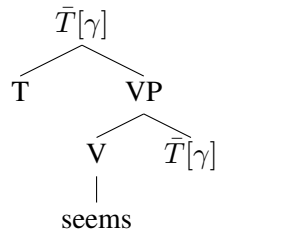
In order to generate *o deus*, the agreeing form of the auxiliary *kaout*, the subject *ar vugale* must be in the same local tree as *o deus*, presumably in the specifier of TP (or the specifier of VP) under our assumptions. However, in order for our LTAG explanation of why topicalization and raising co-occur to go through, it is not possible for the subject *ar vugale* to occupy the position in the local tree typically associated with subject verb agree-

ment. This problem is also presented by English, where raising to subject and verb agreement in biclausal structures interact, as seen in (26).

(26) a. She seems to like music.
b. They seem to like music.

Frank (2002) suggests that grammatical features γ relevant to agreement could be passed to the head of an auxiliary tree in the process of adjunction to an elementary tree in order to effect the interaction between the subject and *seem* in (26). Frank (2006) offers an alternative account in which the auxiliary tree introducing the raising predicate requires matching of agreement features between its head and its foot. Consider, for example, (26-a) . Using the system of Frank (2006), if we pass the grammatical features γ between the elementary and auxiliary trees in (27) and (28) we will force agreement between *she* and *seems* even though they are not in the same local tree.

(27)



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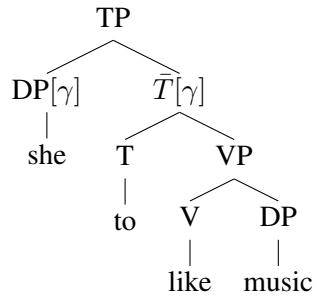


We could say that the same mechanism of feature passing is available in (22) and (23). If *o deus* occupies C position, the feature passing mechanism of Frank (2006) will insure that the verb agrees with the topicalized DP. [8]

4 Further Consequences

4.1 Other Topicalized Arguments

If the analysis of the interaction of raising to subject and topicalization sketched above is correct, it is possible to imagine that some phrase other than the subject of the infinitive is in the specifier of CP position of the elementary tree. After adjunction of the composite tree for the raising predicate we would produce sentences like (29), where *Mona*, the object of the preposition in the infinitive, is topicalized.

(29) Mona a hañval Yann komz anezhi
Mona PRT seem-PRES Yann talk about-3SNG-FEM
Yann seems to be talking about Mona

The MC-LTAG analysis predicts that *Yann* cannot be in the same clause as the raising predicate *hanñval*. Nothing in (29) allows us to infer which clause *Yann* occupies. One might think that we could use the agreeing form of *kaout* to diagnose whether a post-verbal DP is in the same clause as the raising predicate, but the feature passing mechanism introduced in the preceding section will defeat that reasoning.[9] We can, however, test this claim by examining utterances with two raising predicates. The MC-LTAG analysis predicts that only one DP can be raised and topicalized. Any other DP that occurs as the subject of a raising predicate should make an utterance ungrammatical. This claim is borne out in the contrast between (30) and (31), where *ar vugale* is raised out of its prepositional phrase.[10] The contrast between (32) and (33) where a raised idiomatic subject is provided for *krog(begin* illustrate the generalization as well.

(30) Mona he deus seblantet
Mona be-PRES-3SNG-FEM seemed

[8] If *o deus* were treated as occupying T, rather than C, the system of Frank (2002) would be required, since the C head of the auxiliary tree will not have the relevant features [γ].

[9] Hendrick (1988) observes examples like

(i) seblantet he deus Mona karout ar vugale
seem be-PRES-3SNG-FEM Mona love the children
Mona seems to love the children.

Examples like this, which involve a topicalized participle, would need to prevent the "raising" of *Mona*. We, thus, predict that *Mona* should remain in specifier of TP in the elementary tree headed by *karout*. I know of no evidence that favors or disfavors this claim. The example also suggests that by topicalizing the participle either an auxiliary tree can also satisfy the verb second requirement of the language, or that such topicalizations require the infinitive to be treated as an auxiliary tree. I leave this decision and its consequences unexplored here.

[10] (ii) cannot be improved by placing *ar vugale* to the left of *plijout* or by omitting the agreement inflection of the preposition.

plijout d'ar vugale sellout
pleased to-the children look
outi
at-3SNG-FEM
The children have seemed pleased to watch Mona.

(31) *Mona he deus
Mona be-PRES-3SNG-FEM seemed
seblantet plijout ar vugale
pleased children to-3PL watch
dezho sellout outi
to-3SNG-FEM
The children have seemed pleased to watch Mona.

(32) Mona a seblant e krog da vezañ
Mona PRT seem-PRES PRT begin to be
roet pour glas dezhi
given leek blue to-3SNG-FEM
Mona seems to begin to be flattered.

(33) *Mona a seblant e krog pour
Mona PRT seem-PRES PRT begin leek
glas da vevañ roet dezhi
blue to be given to-3SNG-FEM
Mona seems to begin to be flattered.

The feature passing mechanism discussed in the previous subsection allows an inflected form of the raising predicate to surface grammatically, as in (34). Only raising predicates with overt subjects are prevented from occurring.

(34) Mona a hañvalas bezañ gwelet
Mona PRT seem-PRES-2SNG be seen
e Kemper
in Kemper
You seem to have seen Mona in Kemper.

4.2 Without Verb Second

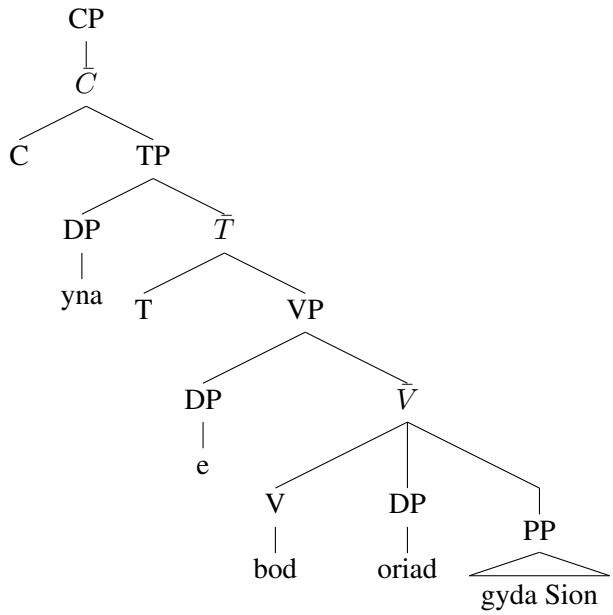
Welsh allows raising to subject to target a position to the right of the affirmative finite verb (cf Borsley et al. (2007)). In (35) an expletive subject *yna* serves as the subject of a possessive construction. Although this expletive is generally excluded from thematic argument positions with other verbs, it can appear as the subject of the raising to subject predicate (36).

(35) mae yna oriad gyda Sion
be-PRES-3SNG there key with Sion
Sion has a key

(36) ?mae yna dygwydd bod oriad
be-PRES-3SNG there happen be key
gyda Sion
with Sion
Sion happens to have a key

What is worth noting in (36) is that *yna* is able to appear to the right of the finite verb *mae*. This aspect of Welsh contrasts starkly with Breton raising to subject constructions where the raised subject must appear in clause initial topic position. The basis of this contrast resides in the absence of a verb second requirement in Welsh. Following the spirit of Harley and Kulick (1998), let us posit an elementary tree like (37) for the Welsh raising to subject construction, in addition to the composite auxiliary tree in (38) and (39). [11]

(37)



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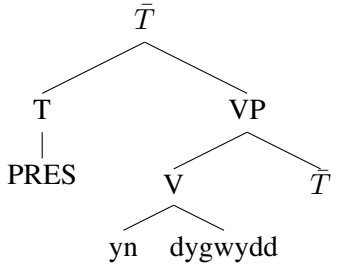

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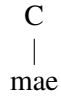


This analysis does not require a constituent to appear in specifier of CP to enforce a verb second requirement. Instead the subject appears in specifier of TP. Since this (or, in some analyses, the specifier of VP where it first enters a derivation)

[11] Harley and Kulick (1998) posit elementary trees Welsh raising to subject construction that place the subject in specifier to the tense node, which they label I. Adjunction of the auxiliary tree is then adjunction to that phrase, IP, with *mae* inserted in C. I have updated their category labels to TP. I have, like them, also ignored the syntactic status of *yn*.

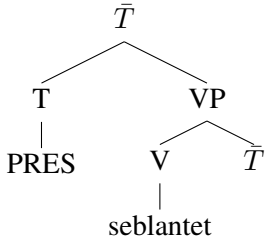
is a position available for verb agreement we predict that Welsh raising can co-occur with subject verb agreement. While Welsh verbs, like their Breton counterparts, generally do not show subject verb agreement with subjects to their right, there is one limited context in which they do: the negative form of the verb *bod/be* agrees with the definiteness/indefiniteness of a subject to its right. Raising to subject co-occurs with a form of *bod(be)* agreeing in indefiniteness with a subject to its right in examples such as (40).

(40) does neb yn ymddangos
Neg-be-Pres-INDEF noone PRT seem
i ofalu fod pawb chwerthin
C care be-INFIN everyone laugh
no one seemed to care that everyone laughed

At this point it is worth recalling that the verb second requirement in Breton is not fully general and that negative sentences such as (5) in particular do not share this restriction. This fact means that nothing forces elementary trees introduced by the negative C *ne* to have a filled specifier of CP. A subject of such an elementary tree could in principle remain in specifier of TP (or VP). If the auxiliary tree headed by the Breton raising predicate was in fact a composite tree similar to the Welsh (38)–(39), it would resemble (42)-(43). Adjoining this composite auxiliary tree to the elementary tree in in (44), we generate (41).

(41) n'en deus ket Yann seblantet
NEG-be-PRES-3PL NEG Yann seemed
karout ar vugale
love the children
Yann doesn't seem to love the children

(42)



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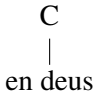

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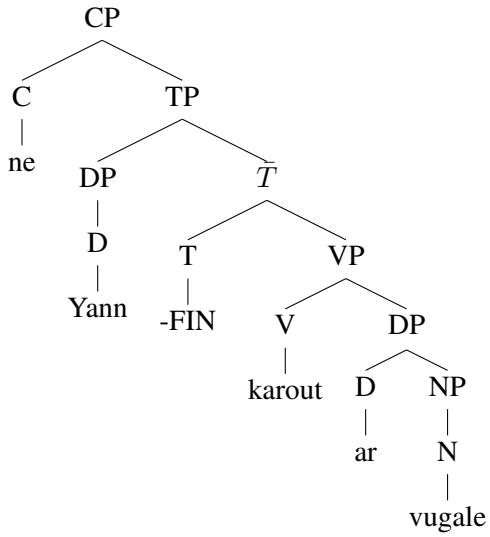

Such sentences are reported in Hendrick (1990). Note that (44) has a subject to the right of an agreeing verb, just like the Welsh (40).

5 Conclusion

The curious restriction that prevents raised subjects in Breton unless the subject is also topicalized can be given an elegant explanation within MC-LTAG terms. It reflects the principal TAG claim about raising to subject structures: the raised subject and the raising predicate are not in the same local tree in either the elementary or auxiliary tree. Subject verb agreement is enforced by passing of person and number features between trees in a uniform way cross-linguistically. The need to satisfy the verb second requirement in an elementary tree is sufficient to derive the rather subtle differences in the class of acceptable structures of Breton as contrasted to those of Welsh or English.

MC-TAG grammars (and LTAG grammars more generally) conceptualize recursion as resulting exclusively from adjunction structures that combine elementary trees, whereas 'standard' theories of human languages since Chomsky (1965) have allowed recursion potentially in all syntactic positions. I believe that these 'standard' grammatical theories have a more difficult time explaining the complex interaction described in this paper. An alternative explanation could appeal to a distinction between A and $\bar{A}$ positions, introduced in Chomsky (1993). If the specifier of VP is an A position and specifier of CP is an $\bar{A}$ position, we could stipulate that A positions cannot bind $\bar{A}$ positions. This conjecture will successfully allow (23) and exclude (22). It does not explain why

specifier of CP is an $\bar{A}$ position but specifier of TP is not. In Chomsky (1993) that was related to potential θ marking, a hypothesis that was undercut by subsequent work on VP-internal subjects. At the same time, this rival line of explanation does not explain why $\bar{A}$ positions can bind A positions but A positions cannot bind $\bar{A}$ positions. The asymmetry in their behavior is apparently stipulated and not connected conceptually to any other claim. For these reasons, such a line of explanation seems merely to restate the facts described as a diacritic might and does not allow us to deduce anything further. Within minimalist theories the interaction is equally curious. One might be able to frame an explanation in terms of Kratzer (2009) where one provides distinct means of operator binding within CP and vP, but again such an appeal will be led to an equally stipulative account.

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