

Phasing in Mixed Categories: Evidence From Irish

Andrew Carnie*

ABSTRACT:

In this short squib, I look at the phenomenon of "mixed category" verbal nouns in Irish. I argue that the verbal character of these elements follows primarily from their internal semantics as predicates. Unlike previous accounts I argue that nominal characteristics of these categories follows from two sources. In one group, they are nominal because, following Borsley and Kornfilt (2000), they have nominal functional morphology. In the other group, there is no nominal functional structure and the "nominality" of verbal nouns is epiphenomenal. So-called nominal characteristics follow from their status as heads of semantically and phonologically complete units.

0. INTRODUCTION:

Baker (2003) proposes a set of absolute definitions of lexical categories. He defines verbs as categories that license specifiers without a functional head, nouns as categories with referential indices and adjectives are categories with neither properties. Mixed categories, like the Irish verbal noun¹ (henceforth VN) example in (1), are a serious challenge to such approach.

- 1) Tá Seamus ag canadh an amhráin (Irish)
be.pres James prog sing.vn the.gen song.gen
"James is singing the song"

We find that the VN *canadh* in (1) has properties of both verbs and nouns: It takes arguments like a tensed verb (the arguments are unambiguous and obligatory); it bears inflectional marking; it shows verb like

* Many thanks to Bob Borsley, Heidi Harley, Amy Fountain, Simin Karimi, Jaklin Kornfilt [OTHERS TO BE ADDED] and the audiences at the Syracuse Cornell workshop on mixed categories, the University of Arizona SLAT roundtable, the University of Arizona Syntax Salon and the Arizona State University Linguistics Colloquium.

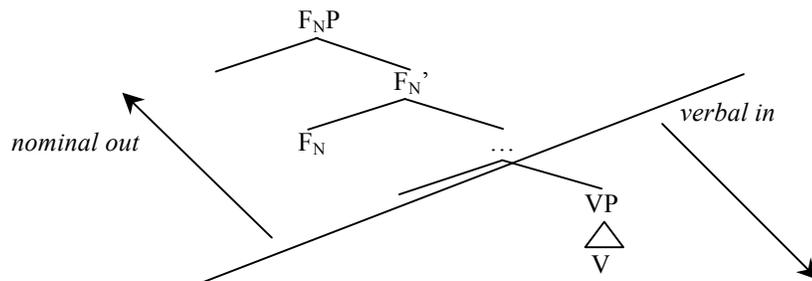
¹ I use the term Verbal Noun here following the tradition in descriptive Irish linguistics. However, given the analysis in this paper, they might be better viewed as "nominal verbs" or "nominalized verbs".

Phasing in Mixed Categories.

agreement (not seen in this example); it takes can take adverbial modification (not seen in this example) and it can assign structural cases (not seen in 1, but present in other constructions). On the other hand, it has number of properties that make it look more like a noun: in (1) we see that its complement takes genitive case; the aspect marker is homographically identical to the preposition meaning ‘at’. In other examples, which we’ll see below, the VN exhibits nominal emphatic and reflexive marking. In circumstances slightly different from those presented in (1) the VN can itself bear case-marking – a hallmark of nominals, and its pronominal complements are realized as possessive pronouns. There is clearly more going on with these VN categories than is predicted by Baker’s account.

Much of the early literature on VN categories attempts to find a single category for the forms (see for example, Willis (1988), Borsley (1993, 1997), and Guilfoyle (1997)). Borsley and Kornfilt (2000) (henceforth B&K), building upon work by Rouveret (1994), Zaring and Hirschbuhler (1997), offer an interesting account of mixed categories in Welsh and Turkish. They suggest that such categories are underlyingly verbal, but have a nominal functional category, such as a determiner or other nominal functional structure, dominating the VP.

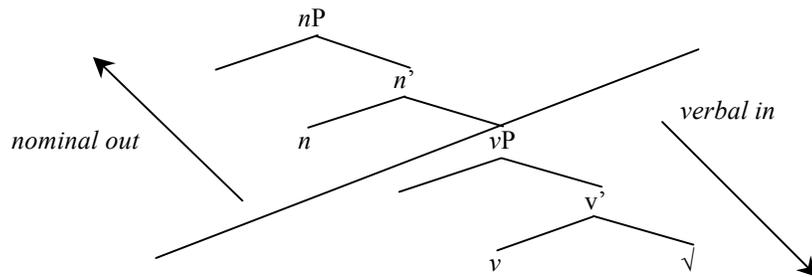
2)



A variant on this approach can be found in the literature from Distributed Morphology (see for example, Fu, Roeper and Borer 2001, Alexiadou 2001, to appear), where an acategorial root is dominated by both a verbalizing *v* category and a nominalizing *n* category:

Mixed Categories: A phase bounded approach

3)



As B&K themselves note and defend, this kind of analysis predicts that that VNs should not exhibit any of the internal properties of N heads -- only the properties associated with the nominal functional category.

For example, VNs should not assign genitive case if they also take adverbs: inside these are Vs. Similarly, VNs should not exhibit any outwards verbal properties: Outside these are Ns. Adopting a distinction

proposed by Borsley (1993) distinguishing between argument (AVN²) and predicative (PVN) uses of VNs

(4), I claim that both of these predictions are at least partly false.

4) **Argument VNs (AVN)**

- a) Chuala mé an canadh (Irish)
 heard I the singing
 "I heard the singing"

Predicative VNs (PVN)

- b) Tá Seamus ag canadh an amhráin (Irish)
 Is James prog sing the song
 "James is singing the song"

Predicative verbal nouns show no external nominal properties, and behave like true verbs outwardly, with the exception that they are untensed. I claim that these forms lack a nominal functional structure, and have fully verbal functional categories on them, they simply defective in tense morphology and fail to undergo an agree relation with T. I also claim that both kinds of VN appear to show both internal verbal and internal nominal properties, such as genitive case marking on objects. But I claim these internal "nominal" properties find their source not in category, but instead are the result of the VN lacking a dependence on the T node, as such the vP containing them is a full phase rather than a defective one. In section 3, I will show how the inwardly nominal properties of VNs is a consequence of the complete phase structure.

In (5), I present a summary of the categorial behavior of the two kinds of verbal nouns is cashed out.

² AVN and PVN are my coinages, but the distinction is discussed at length in Borsley (1993)

Phasing in Mixed Categories.

5)

	AVN	PVN
Outwardly Nominal	a) Y	d) No
Outwardly Verbal	b) No	e) Y
Inwardly Nominal	c) Y	f) Y

B&K's analysis accounts for (5a, b) but fail to capture (5c, d, e, f). The structure of this paper parallels the structure of my analysis. We will first investigate “outwardly” nominal behaviors of VNs. In section 1, I show that B&K are correct about AVNs (5a) and (5b). They do indeed clearly show the behavior of a nominal functional categories. In section 2, I show that PVNs have all the properties we might expect of real verbs, except that they are untensed (5d) and (5e). Next, we will investigate the “inward” properties of VNs. Finally, in sections 3 and 4, I show that the apparently inwardly nominal properties of both types of VN (5c) and (5f), actually fall out from the fact that the verb is not dependent upon the T head, and thus the verb and its complements are contained within an internally complete phase (ICP). A summary of the types of explanation is shown in (6)

6)

	AVN	PVN
N-out	F_N	Lack of F_N
V-out		
N-in	ICP effects	

1.0 AVNS NOMINAL OUT (YES), VERBAL OUT (NO)

I start with a brief summary of the properties of VNs that appear in argument, and provide some brief comments on why these properties are expected to fall out from B&K's analysis. These are all properties of having a nominal functional category.

First, it goes without saying as the first relevant property is definitional, but AVNs serve as arguments and refer to states or events. In this regard, AVNs behave like DPs. They are saturated and referring. This is a property we typically associate with determiners or quantifiers.

Similarly tautological to B&K's analysis is the fact that AVNs appear with determiners (such as *an/na* in Irish):

7)

Chuala mé an canadh
 Heard I the singing
 “I heard the singing”

(Irish AVN)

Phasing in Mixed Categories.

11)	Masculine:	<i>Singular</i>	<i>Plural</i>
	<i>Common</i>	an ^T	na ^H
	<i>Genitive</i>	an ^{L2}	na ^{E1}
	<i>Vocative</i>	a ^{L1}	a ^{L1}
	<i>Prepositional</i>	an ^{E2}	na ^H
	Feminine:	<i>Singular</i>	<i>Plural</i>
	<i>Common</i>	an ^{L2}	na ^H
	<i>Genitive</i>	na ^H	na ^{E1}
	<i>Vocative</i>	a ^{L1}	a ^{L1}
	<i>Prepositional</i>	an ^{E3}	na ^H

The ability to bear a case assignment seems to be a diagnostic then for nominal functional structure, such as determiners.

The realization of arguments, would at first blush, appear to be an “inward” property since argument structure is typically seen as a lexical property. Nevertheless, there is a good argument to be made that the realization of arguments is best construed as an outward property. For example, it is typically assumed that even in control constructions, transitive and unergative constructions assign external arguments. But the non-finite T in control constructions doesn’t license the realization of this argument. The arguments in nominalizations in English have a unique pattern of argument realization. Arguments are optional (12a) and (12b), and when realized can be ambiguous in their interpretation as agents or themes (12c):

- 12)
- a) The singing
 - b) John’s singing
 - c) His beating was horrible (ambiguous)

The same facts hold true of Irish AVNs. Arguments are optional and ambiguous (Guilfoyle 1997).

- 13)
- a) Tá an canadh go deas (Irish AVN)
Is the singing adv nice
“the singing is nice”
 - b) Is maith liom canadh Seáin (Irish AVN)
Cop good with.1s. singing John-gen
“I like John’s singing”
 - c) Tá a mbualadh go huafásach (Irish AVN)
Is his beating adv horrible
“His beating was horrible”
(reading 1: his = theme, reading 2: his = agent)

Mixed Categories: A phase bounded approach

The data presented in this section offer confirming evidence for B&K's analysis, at least as it applies to AVNs, where VNs are verbal categories dominated by a nominal functional category. This is seen in the argument structure and overt determiners of AVMs, in the fact that they bear case take adjectives instead of adverbs and realize their arguments in a pattern consistent with nominal functional structure.

2.0 PVNs NOMINAL OUT (NO), VERBAL OUT (YES)

In this section we consider PVNs, which behave not as if they have nominal functional structure, but instead verbal functional structure (except tense). These properties should fall out from either not having a nominal functional category dominating it or having a verbal functional structure instead.

Again tautologically, PVNs cannot be arguments, but can be predicates. For example, PVNs cannot be the subject of a passive, or any other argument position that is limited to DPs and excludes DPs.

- 14) a) Ceisiodd pawb ganu'r anthem (Welsh PVN⁵)
tried everyone sing the anthem
Everyone tried to sing the anthem
- b) *Cafodd canu'r anthem ei geisio gan bawb
got sing 'the anthem 3sm try by everyone
Singing the anthem was tried by everyone

Borsley (1993) shows that PVNs in Welsh can appear in a variety of positions that other NPs cannot, such as non-finite complements to modals (16a), as the complements to auxiliaries in periphrastic tenses (16b) and as the complements to certain control and raising predicates (16d–e)

- 15) a) Dylai Gwyn ddisgrifio 'r llun
ought Gwen describe the picture
"Gwyn ought to describe the picture"
- b) Mae Gwyn yn disgrifio 'r llun
Is Gwyn prog describe the picture
"Gwen is describing the picture"
- c) Mae Gwyn yn debyg o ddisgrifio 'r llun
Is Gwyn pred likely of describe-vn the picture
"Gwyn is likely to describe the picture"

⁵ All data from Welsh is taken from Borsley (1993), unless otherwise noted.

Phasing in Mixed Categories.

- d) Mae Gwyn yn awyddus i ddisgrifio ‘r llun
Is Gwyn pred eager to describe the book
“Gwyn is eager to describe-vn the book.”
- e) Disgwylodd Gwyn I Emrys ddisgrifio o‘r llun
expected Gwyn to Emrys describe the picture
“Gwyn expected Emrys to describe the picture.”

In terms of functional categories, PVNs cannot appear with a determiners (16), but can appear with aspect morphology (17).

- 16) a) *Dylai Gwyn yr ddisgrifio ‘r llun (Welsh PVN)
ought Gwen the describe the picture
“Gwyn ought to the describe the picture”
- b) *Dylai Rhiannon y canu (o)’r anthem (Welsh PVN)
Ought Rhiannon the sing-vn (of) the anthem
“Rhiannon ought the singing (of) the anthem
“I want to kiss her”
- 17) a) Tá Seán ina shuí (Irish PVNs)
Is Sean stative-3s sitting
“Sean is sitting”
- b) Tá Seán ag dúl abhaile
Is Sean prog go-vn home
“Sean is going home”
- c) Tá Seán le dúl abhaile
Is Sean prosp go-vn home
“Sean is about to go home”
- d) Bhí Seán tar-eis dúl abhaile
Was Sean rec.perf go-vn home
“Sean has just gone home”
- e) Bhà Iain air falbh⁶ (Scots Gaelic PVN)
Was Iain perf leave
“Iain had left”

Readers familiar with the morphology of the Celtic languages might object that this aspect morphology is homographic (and occasionally homophonic) with prepositions in the language (19). Prepositions are presumably nominal rather than verbal functional categories and this would point to an outwardly nominal character for PVNs.

⁶ I’m using Scots Gaelic here because the Irish perfective is created using a passive structure involving a verbal-adjective.

Mixed Categories: A phase bounded approach

18) Irish:

<i>Form</i>	<i>Aspectual usage</i>	<i>Prepositional Meaning</i>
ag	Progressive	at
i(n)	Stative	in
tar-eis or i ndiadh	Recent “after” perfect	after
le	Prospective	with
ar (Scots Gaelic)	Perfective	on

However, there is evidence that this is perhaps a diachronic rather than synchronic parallel. For example, McCloskey (1983) argues that *ag* progressive is not identical to the preposition *ag*. The preposition is always pronounced /əg/ (and can be stressed as /ɛg/). By contrast, the aspect marker is usually pronounced /ə/, except before vowels. Also, the preposition *ag* does not take a special agreeing form when it is attached to a possessive pronoun (19a), but the progressive marker does (19b).

- 19) a) ag a ‘at his...’
 b) á^{L1} ‘prog 3sm-poss’

Agreement also points to verbal functional structure with PVNs. In Irish, PVNs exhibit the same anti-agreement effect as tensed verbs. In Irish overt agreement is only possible with a null subject (McCloskey and Hale 1984) (20a). When a full NP is present, then the verb shows up with the default third person masculine singular inflection (20b).

- 20) a) Táim *pro* go deas b) Tá(*im) mé go deas
 Is.1s adv nice Is.3s(*1s) I adv nice
 “I am nice” “I am nice”

The same kind of pattern emerges with verbal nouns, but with object arguments rather than subjects (for discussion on why this might be the case, see Carnie 1995). In (21a), a full feminine NP shows up with default third person masculine singular agreement, in the form of the possessive pronoun meaning “his”. The overt noun cannot appear with third person feminine singular agreement (21b – the difference between masculine and feminine in these forms is indicated in the consonant mutation on the following word). With a null object, the agreement marker shifts into the feminine form (21c). This is identical to the pattern of anti-agreement found with subjects and tensed verbs.

- 21) a) Ba mhaith liom an bhean a phógadh.
 Cop good with-1s the woman 3sm kiss-vn
 “I want to kiss the woman”

Phasing in Mixed Categories.

- b) *Ba mhaith liom an bhean a pógadh
Cop good with-1s the woman 3sf kiss-vn
“I want to kiss the woman”
- c) Ba mhaith liom *pro* a pógadh
Cop good with-1s 3sf kiss-vn
“I want to kiss her”

In section 1, I argued that adjectival modification in AVNs is due to a Cinquean functional system that is limited to the nominal system. If PVNs lack nominal functional structure, we thus expect adverbial rather than adverbial modification. This prediction is borne out: modifiers of PVNs require adverbial particles.

- 22) Tá sé ag canadh an amhráin *(go) binn (Irish PVN)
Is he prog sing the song adv nice
“He is singing the song nicely.” (B&K; data corrected)

In section 1, I claimed that nominal functional structure, like a determiner was a necessary prerequisite for a nominalization to bear case. Irish PVNs cannot bear genitive case (23), although they show up with the unmarked default common (nominative/accusative) case marking. (Guilfoyle 1997).

- 23) a) Tá mé ag iarraidh seasamh/*seasimh (Irish PVN+PVN)
is I prog try.vn stand.vn.acc/*vn.gen
“I’m trying to stand”
- b) Tá mé ag brath dul/*duil abhaile (Irish PVN+PVN)
Is I prog intend go.vn.acc/*go.vn.gen home
“I am intend to go home” (Data from Christian Bros 1980)

Again, this is strong evidence that PVNs lack a nominalizing functional structure.

Finally, we find that the licensing of arguments also argues against a nominal functional structure. In section 1, we saw that the arguments of nominalizations were optional, and when present were ambiguous. Neither of these properties holds true of PVNs. All arguments are obligatory, and there is no ambiguity what role these arguments bear relative to the PVN.

- 24) a) Tá Seán ag pógadh an Garda (Colloquial⁷ Irish PVN)
Is Sean prog kiss the policeman
“Sean is kissing the policeman”
- cf. Phóg Seán an Garda (Seán kissed the policeman)

⁷ The case marking here is indicative of spoken Irish rather than literary or standard Irish.

Mixed Categories: A phase bounded approach

The evidence accumulated in this section point towards an analysis of PVNs where they crucially lack a nominal functional structure. What are they then? Simply put, these data suggest that PVNs in Irish are little more than untensed verbs, which serve the role of participles in the context of tensed auxiliaries and aspect marking and the role of infinitives in the context of non-finite clauses.

3.0 AVNs & PVNs NOMINAL IN (YES)

In this section, I turn to the puzzling case of inwardly nominal properties of both AVNs and PVNs. These properties don't fall out from either the presence of a nominal functional category or the lack thereof. In section 4, we attempt an explanation of these phenomena in terms of phase theory.

In most circumstances, the objects of PVNs in Irish appear in the accusative case. This occurs when the object has shifted around the verb (Bobaljik and Carnie 1996).

- 25) Ba mhaith liom an bhean a phógadh.
Cop good with-1s the woman 3sm kiss-vn
“I want to kiss the woman”

However, there are a number of situations where the object appears with a genitive case marking. The objects of AVNs always appear in the genitive case:

- 26) tógáil an tí
building the house.gen
“the building of the house”

With PVNs genitive also surfaces in certain situations. In prescriptive written or literary Irish, the objects of progressive are marked with genitive (27). Some speakers also report using this form in their speech.

- 27) Tá mé ag ól an leanna. (Written Irish) PVN
Is I prog drink.vn the beer.gen
“I am drinking the beer.”

In Munster Irish, non-finite embedded clauses with an overt subject obligatorily take a genitive case.

- 28) Ba mhaith liom Seán a thógáil an tí (Munster Irish PVN)
Cop good with.1s Sean 3s build the house.gen
“I want Sean to build the house”

In all dialects of Irish the agreement morpheme that surfaces in lieu of a pronominal object is in the possessive (genitive form).

Phasing in Mixed Categories.

- 29) a) Tá Seán á bhualadh (Irish PVN)
is Sean prog+his hitting.
“Seán is hitting him”
- b) Ba mhaith liom Seán ...
cop. good with.3s John

... mo phógadh/do phógadh/a pógadh/ar bpógadh
my kiss/your kiss/her kiss/our kiss

/bhúr bpógadh/a bpógadh
/your-pl kiss/their kiss
“ I want Sean to kiss me/you/her/our/you-pl/them”

The genitive pronouns also appears in stative and unaccusative constructions where the subject has shifted over the object.

- 30) Tá mé_k i mo shuí _{t_k}
Be I stative my sit-vn
“I am sitting”

This can be seen as part of a larger pattern where possessive pronouns show up in Irish when the possessive position following the N is an empty category.

B&K discuss the case of the genitive case with PVNs in Irish, noting the fact that these cases might appear be counter-examples to their mixed extended category analysis, since a verbal category should not assign a structural genitive case to its complement. In their theory, PVNs do not have N heads, so they couldn't have the properties of N heads such as governing genitive case. To explain this, they claim that these aren't true genitives.

To account for this, they claim that there is no genitive case in Irish. They claim that construct state DPs such as (31) are “passive nominals” similar to *the horse's picture* in English, where the possessive nominal is acting as a subject or specifier rather than a governed complement.

- 31) pictiúr an chapaill
picture the.gen horse.gen
“the picture of the horse”

If construct state nominals are passive nominals, then it is predicted that they cannot occur with both an overt subject and object. B&K observe that the only way to create a complex possessive with both a subject and an object is to use a combination of a construct and a free genitive as in (32), which has a prepositionally marked complement.

Mixed Categories: A phase bounded approach

- 32) pictiúr Chathail den chapall
picture C.gen of.the horse.acc
“Cathal’s picture of the horse”

A construct state with both a subject and an object is predicted to be unacceptable, as in (33).

- 33) *pictiúr Chathail chapaill
picture C.gen horse.gen

Sentence (33) is ungrammatical, but I believe that B&K are incorrect about the origins of this unacceptability. The ungrammaticality of (33) has nothing to do with the fact that this has both arguments. It’s ungrammatical because both the word order and the case marking are incorrect. To the extent that (35) has any meaning, it would mean “the horse’s picture of Cathal”, not “Cathal’s picture of the horse.” There is, in fact, a grammatical form with both arguments (34). Note the difference in word order to (33).

- 34) Pictiúr Chapall Chathail.
picture horse-com Cathal-gen
“Cathal’s picture of the horse”.

B&K are partly right in that in constructions like (34), the “object” isn’t strictly in the genitive case. This is part of a larger pattern called “Common in form, Genitive in function” (CFGF) which pervades Irish Grammar. In CFGF constructions are characterized by two properties. (a) They appear in contexts where genitive would typically be found, and (b) while the root takes the common (accusative/nominative) case, it gets a different consonant mutation than would normally be found in typical common case contexts (Doyle 2001: 64). In (35), we see the morphological form of the common case for *teach* ‘house’. (36) has the same word in it’s genitive form: *tí*. (37) shows a CFGF sentence. The word for ‘house’ appears in the common case form, but with the lenition mutation more commonly found in genitive constructions (cf. Máire → Mháire): *theach*.

- 35) teach Mháire
house-com Mary-gen
Mary’s house
- 36) doras tí
door house-gen
“A house’s door”
- 37) doras theach Mháire
door house-com Mary
“Mary’s house’s door”

Phasing in Mixed Categories.

It should be noted that quite apart from these CFGF contexts, the traditional genitive morphology on the root is disappearing from the language generally. The two cases are developing syncretism in terms of ending. But a distinction between genitive and common form is still present, shifting from the case endings to the initial consonant mutations. This is true in all contexts in the spoken register, where genitive is coming to be primarily marked in consonant mutations (Doyle 2001):

- 38) teach an ghasúir mhóir (Written Irish)
house the-gen boy-gen big-gen
“The big boy’s house” (Data from Doyle 2001)
- 39) teach an ghasúr mhór (Spoken Irish)
house the-gen boy-acc big-acc
“The big boy’s house” (Data from Doyle 2001).

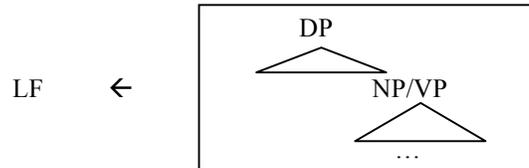
The form in (34), then, does have a genitive object with a genitive subject, it is just a CFGF construction exhibiting non-standard genitive morphology. This in turn means that construct state nominals in Irish cannot be dismissed as “passive” nominals. It is clear that they do allow simultaneous complements and specifiers. Taking this conclusion to the next level, it follows then that genitive case in Irish PVN constructions cannot be dismissed so easily.

Assuming then that the marking on the object of a PVN is real genitive case, we need an account of this seeming parallel to regular NPs. Genitive case in PVNs cannot follow from little *n*. PVNs don’t have the properties of little *n* -- since they have many externally little *v*-like properties such as aspect. Nor can it follow from the presence of a determiner since determiners are not allowed with PVNs. Here the paper turns a bit more speculative. I suggest instead that these case properties of PVNs are not really nominal features at all. Instead I claim that they are due to the fact that the verbal head remains within its phase rather than raising/AGREEing with a head in the TP/CP phase. This proposal builds on a modified version of Chomsky’s (2001) phase theory. Chomsky distinguishes between two kinds phases: those headed by defective heads which trigger the movement of some internal constituent into the phase edge and non-defective ones which don’t. The view proposed here generalizes this view so that defective phases don’t just have edge effects, but include any kind of cross-phasal dependency. Let us distinguish between an Internally Complete Phases (ICP), which are truly semantically interpretable structures and Externally Dependent Phases (EDP) which have some kind of dependence between the phase head and a head in a

Mixed Categories: A phase bounded approach

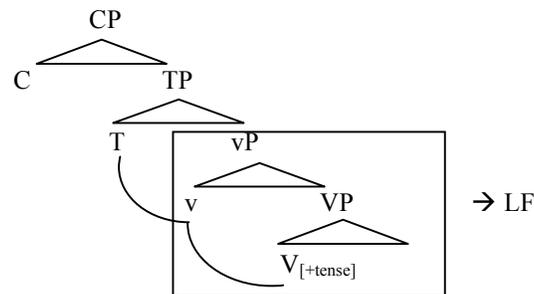
higher phase. These notions are distinct from Chomsky's defective and non-defective phases, but are in the same spirit. Consider first the case of DPs; DPs are ICPs as the N never raises out of phase:

40)



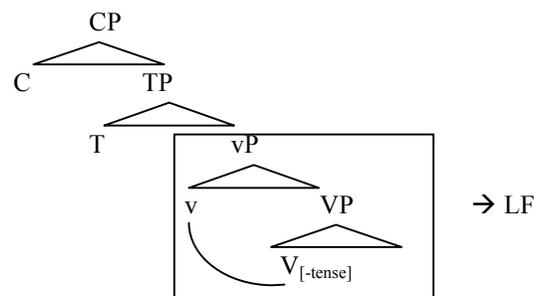
Contrast this with a vP/VP in a clause with a tensed verb. The vP in these sentences is defective in a crucial way. When the verb is tensed it must enter some kind of checking relation (either via Move or Agree) with the T head in the CP phase that dominates it. As such this phase (if it is a phase at all) is externally dependent.

41)



When, for some reason such as lacking tense, the head does not raise out of its phase it will have “nominal” properties that parallel the DP phases' properties. i.e. it will be an ICP.

42)



Here then is a potential source of the parallel in case marking between real DPs (including AVNs) and PVNs. They both are ICPs.

Normal tensed verbs in Irish always raise out of their vP into T (McCloskey 1983). The vPs in such constructions are EDPs. Normal tensed verbs in Irish never allow genitive case on their object.

Phasing in Mixed Categories.

Holmberg (1988) (however, cf. Holmberg 1999) links object shift, including object shift for accusative case checking to overt movement. Determining why this dependence holds lies far beyond the scope of this paper. Fortunately, all that is important here is that this dependence is *not* available in all AVN and many⁸ PVN structures.

In those circumstances where the verb does not raise out of the phase then the object can't raise to get accusative case either. DPs (including AVNs) are always ICPs, so the object can never get accusative case. In PVNs, the verb isn't dependent, and accusative case is unavailable, so genitive case is then used as a repair strategy that comes in to license ICP internal arguments.

It goes without saying that this analysis raises more questions than it has answered. I have not given adequate account of how accusative case is actually assigned either in normal clauses or in those cases in Irish where accusative case is available to the object of a verbal noun, nor do I have any explanation of why, even among the class of verb-raising languages, there is variation in whether genitive is available (Irish) or not (Romance). These are important questions that deserve answers, and perhaps further probing using the tools of phase theory will lead us to adequate answers.

5. CONCLUSIONS

This short paper has investigated the behavior of mixed categories from the perspective of Irish verbal noun constructions. Absolute definitions of part speech like those of Baker (2001) fall apart in light of the mixed behavior of verbal noun categories. Part of the account comes from B&K's insight that outwardly nominal and inwardly verbal behaviors of VNs fall out from the presence of nominal functional categories. The nominal behavior of argument verbal nouns (AVNs) follows nicely from this. However, PVNs don't work the same way. Indeed their behavior is exactly what we would expect if they do not have nominal

⁸ As previously mentioned, in many situations accusative case is available or required in PVNs:

- a) Tá Seán tar éis *an teach* a thógáil
Be John after the house-acc 3s build-VN
"John has just built the house"

- b) Ba mhaith liom [*an teach* a thógáil]
Cop good with.1s the house.acc 3s build-VN
"I want to build the house"

In these cases Bobaljik and Carnie (1996) argued that the verb has shifted, thus allowing accusative case.

Mixed Categories: A phase bounded approach

functional categories. An alternative explanation for the genitive case found with VN categories is required.

I suggest that it follows from the phasal independence of PVN and AVN constructions. Since the verb does not express a dependence on T, accusative case is not available, and genitive comes in as a repair strategy.

REFERENCES

- Abney, S. (1987), *The English Noun Phrase in its Sentential Aspect*, Ph.D. dissertation, MIT.
- Alexiadou, Artemis (2001). *Functional structure in nominals: nominalization and ergativity*. Amsterdam: John Benjamins
- Alexiadou, Artemis (to appear) On the role of syntactic locality in morphological processes: the case of (Greek) derived nominals. In A. Giannakidou & M. Rathert (eds.) *Quantification, Definiteness and Nominalization*. Oxford University Press.
- Bobaljik, Jonathan and Andrew Carnie (1996) A Minimalist Approach to Some Problems of Word Order in Irish. In Borsley and Roberts (eds). *The Syntax of the Celtic Languages*. Cambridge University Press. 223-240
- Borsley, Robert (1993) "On So-called 'Verb Nouns' in Welsh" *Journal of Celtic Linguistics* 2. 35-64.
- Borsley, Robert D and Kornfilt, Jaklin (2000) "Mixed Extended Projections" in Borsley (ed) *The Nature and Function of Syntactic categories. Syntax and Semantics* 32. Academic Press. pp 101-132.
- Borsley, Robert D. (1997) "On a nominal analysis of Welsh Verb-Nouns" in Anders Ahlqvist and Věra Čapková (eds) *Dán do Oide: Essays in Memory of Conn R. Ó Cléirigh*. Baile Átha Cliath (Dublin): Institiúid Teangeolaíochta Éirinn. pp 39-40.
- Carnie, Andrew (1995) *Head Movement and Non-Verbal Predication*. Ph.D. Dissertation. MIT.
- Chomsky, Noam (2001) Derivation by phase. In *Ken Hale: A life in language*, ed. by Michael Kenstowicz, 1 – 52. Cambridge, Mass.: MIT Press.
- Christian Bros. (1980) *New Irish Grammar*. Baile Átha Cliath: C.S. Ó Fallúin, teo.
- Cinque, Guglielmo (1999) *Adverbs and Functional Heads: A Crosslinguistic Perspective*. Oxford University Press.
- Doyle, Aiden (2001) *Irish*. Lincom Europa.

Phasing in Mixed Categories.

Fu, J. Roeper, T. and Borer H (2001) The VP within process nominals: Evidence from adverbs and the VP anaphor do-so” *Natural Language and Linguistic Theory* 19:549-82.

Guilfoyle, Eithne (1997) “The Verbal Noun in Irish Nonfinite Clauses” in Anders Ahlqvist and Věra Čapková (eds) *Dán do Oide: Essays in Memory of Conn R. Ó Cléirigh*. Baile Átha Cliath (Dublin): Institiúid Teangeolaíochta Éirinn. pp 187-200

Harley, H -- This conference.

Holmberg, Anders (1986) Word Order and Syntactic Features in Scandinavian languages and English. Dissertation. University of Stockholm

Holmberg, Anders (1999) Remarks on Holmberg’s Generalization. *Studia Linguistica* 53: 1-39

McCloskey, James (1983) “A VP in a VSO language”. In Gazdar, G., Pullam G. and Sag, I. (eds.), *Order Concord and Constituency*. Dordrecht: Foris.

McCloskey, James and Ken Hale (1984) On the syntax of Person-Number Inflection in Modern Irish. *Natural Language and Linguistic Theory* 1: 487-533.

Rouveret, Alain (1994) *Syntaxe du gallois: principes généraux et typologie*, Paris: CNRS.

Willis, Penny (1988) “Is the Welsh Verbal noun a verb or a Noun?” *Word* 39.3: 201-224.

Zaring, Laurie and Paul Hirschbuhler (1997), ‘Qu’est-ce que ce que? The diachronic evolution of a French complementizer’, in A. van Kemenade and N. Vincent (eds.), *Parameters of Morphosyntactic Change*, Cambridge University Press, Cambridge, 351-379.

Department of Linguistics
University of Arizona
Tucson AZ 85737

carnie@u.arizona.edu