

Object positions (in Irish)

Jim McCloskey
University of California, Santa Cruz

1 Grammatical relations

When talking about syntax¹ it is hard to avoid loose talk of ‘subjects’ and ‘direct objects’. Such terms sometimes seem convenient, but they are also mysterious and it is one of the signal achievements of syntactic theory since the 1980’s to have eliminated the need to make use of them. Their elimination has been achieved in the way that one would like—by way of reduction to more fundamental and independently necessary concepts such as the combinatorics of structure building (which yield command as a measure of prominence), and the interactions we call case and agreement.

For example, the network of interactions which jointly define ‘subjecthood,’ we now understand as a set of interactions entered into by closed class lexical items which appear relatively high in the clause. In earlier conceptions, one particular head (INFL, later TENSE) played a distinguished role in that set of interactions. More recent work, however, makes it clear that no one head has such a privileged (and therefore mysterious) role. Rather, any head which is sufficiently high in the extended projection to command external arguments may, in principle, have the relevant properties and thereby enter into the relevant interactions (see, for instance, [Cable 2012](#) on Dholuo and [Zyman 2017](#) on P’urhepecha).

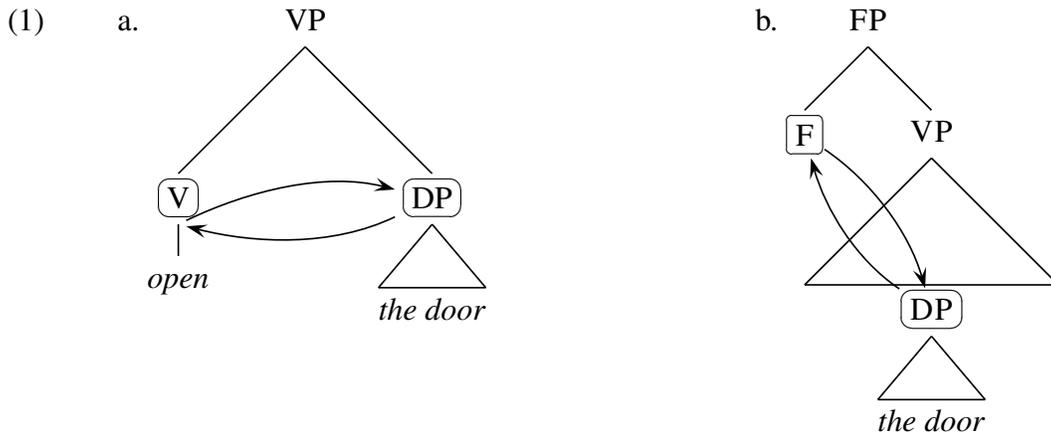
2 Objecthood

If we take the numerology of Relational Grammar seriously, then the ‘direct object’ relation is ranked second in the overall hierarchy of grammatical relations. If that is so, it is a very important task for syntactic theory to construct an understanding of that relation and the interactions through which it manifests itself (case, agreement, ordering, characteristic semantics, behavior under extraction and so on). In work of the 1980’s, however, there remained a disturbing asymmetry between the emerging understanding of subjecthood and the kinds of understanding of objecthood that were available. Subjects were defined by their morphosyntactic connections with

¹ I draw here on much earlier work on Irish syntax. See especially [Guilfoyle 1990, 1994](#), [Noonan 1992, 1994](#), [Duffield 1995](#), and [Ó Donnchadha 2010](#).

a closed class head (INFL or TENSE or AgrS), while objects were defined by their connections and interactions with an open class item — the verb.

One of the most important early attempts to resolve this theoretical anomaly in an empirically rich and convincing way is Kyle Johnson’s (1991) paper ‘Object Positions’, which proposed a shift from the characterization in (1a) to that in (1b), in which the direct object relation, like the subject relation, is conceived as a set of relations between a closed-class (functional) item and a nominal in its local command domain (the ‘direct object’).

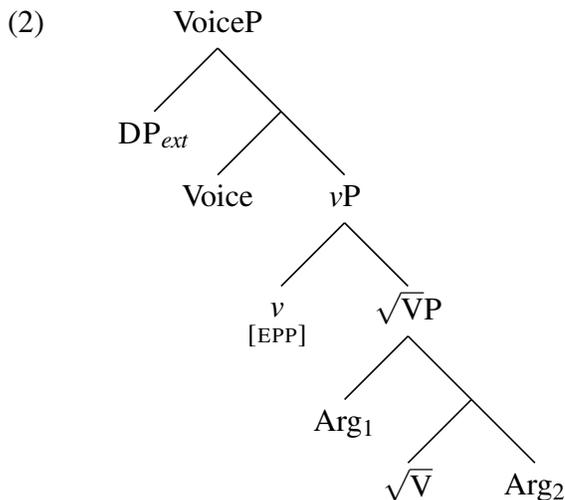


Johnson 1991 gives F of (1b) the nonce name μ ; it is proposed that in English objects raise to the specifier of its complement (VP) and that verbs raise to μ . This pair of proposals yields an understanding of the relative prominence of objects with respect to other material in the verbal domain and of the fact that direct objects in general immediately follow the verb. The analysis of (1b), in its various variants, now represents the conventional wisdom within the framework of the Minimalist Program. But outside that circle, the analysis is widely criticized. For Culicover & Jackendoff (2005: 50–56), for example, the kind of analysis illustrated in (1b) is a symbol of all that is wrong with what they call MGG (‘Mainstream Generative Grammar’).

In this paper I would like to engage some of the issues that arise in the rethinking represented by (1b). I do that by way of a detailed examination of objecthood in Irish. My conclusion will be that, despite the misgivings of Culicover and Jackendoff, that examination yields support of an interesting and rather specific kind for the understanding represented by (1b).

First, though, we should take a step towards specificity of commitment by adjusting the proposals in Johnson 1991 in the light of more recent theoretical developments.

The discussion of the direct object relation in Chomsky 2008 can be read as just such an update — in a much-changed theoretical context. Chomsky there identifies Johnson’s μ with the light verb v and assumes that English objects appear in the specifier of its VP-complement. That leaves us with the potential anomaly of postulating a movement-driving feature (an EPP-feature) on an open class element, the lexical verb. If we were to assume, with Harley (2013), Merchant (2013), Legate (2014) and others, that we should distinguish a Voice head from a verbalizing head v , the first selecting the second, we will have the structure in (2), and the potential anomaly is eliminated:



Given (2), agentive arguments are arguments of Voice and originate in its specifier; the most prominent nominal argument in VP (if there is one) raises to the specifier of v (and is the ‘direct object’), and the verbal root raises through v to Voice yielding verb-object order, as before. English verbs thus lexicalize an array (a ‘span’) of three distinct atoms of the syntactic system.

Furthermore, an expected possibility is now that the Voice head may itself have the EPP-property, triggering raising into its own specifier position. If that interaction is restricted to nominal phrases, we will have a more prominent object position still. And the typological landscape we now expect to encounter is one in which, across languages, we should find evidence for at least three ‘object positions’ — the thematic position (which can be anywhere at all within the accessible command domain of Voice), the specifier of v , and the specifier of Voice. We in addition expect that, in contexts where we can clear away the confounding effects of head movement, we will find evidence for syntactically autonomous closed class items corresponding to Voice and v .

3 Objecthood in Irish

Irish is famously a VSO language, as seen in (3b). A less well known observation, however, is that the VSO pattern holds only for its finite clauses. In nonfinite clauses, as illustrated in (3a), the subject is initial, and the verb is medial. The verb in turn follows the direct object but precedes all other complement-types.

- (3) a. Níor mhaith liom iad bréag mar sin a insint domh.
 I-wouldn't like them lie like DEMON tell.NON-FIN to-me
 'I wouldn't like them to tell me a lie like that.'
- b. Níor mhaith liom go n-inseodh siad bréag mar sin domh.
 I-wouldn't like C tell.COND they lie like DEMON to-me
 'I wouldn't like them to tell me a lie like that.'

And a crude (but basically correct, I think) analysis of the relation between (3a) and (3b) suggests itself:²

- (4) VERB < SUBJECT < OBJECT – OBLIQUE ARGS < ADVERBIALS
-

In (4) head movement of the verb to initial position is linked with its relative morphological complexity. Nonfinite verbs are much simpler in morphological terms (much more on this below) and appear close to the arguments that they select. Nonfinite clauses, then, may reveal more clearly than their finite cousins do what the building blocks of the clause are and how those building blocks combine—in a way that is less obscured by head-movement than is the case for finite verb-initial clauses. The form of nonfinite clauses can in turn be described by way of the informal schema in (5), in which square brackets indicate optionality:

- (5) *Constituent order in nonfinite clauses*
 [NEG] [Subject] [Direct Object] V [PP-complement] [CP-complement]

The VSO pattern of finite clauses is constant across the dialects and has been established since the earliest period for which we have records (late in the sixth century). The SOVX pattern of nonfinite clauses, on the other hand, is a relatively recent innovation which emerges into view in the manuscript tradition only in the late sixteenth and early seventeenth centuries and it shows a great deal of variation across the Gaelic dialect-continuum. I will not engage that variation here, but focus exclusively on Northern dialects, where the descriptive and expositional challenges are somewhat less daunting than for others. The crucial question is now, of course: What is the syntax that yields the informal description in (5)?

² See McCloskey 2017 for a recent working out of this line of analysis.

The focus of this paper is objecthood and so I will set aside questions having to do with subjects. Because finite clauses are in addition fairly unrevealing about the syntax of objects (though see [Bobaljik & Carnie 1996](#) for an important discussion), I will narrow the gaze still further and focus on the syntax of direct objects in nonfinite clauses and on what it can teach us about objecthood in general.

4 The transitivity particle

In (3a) and in (5), the sequence *a insint* is glossed simply as a ‘nonfinite verb’. That is not inaccurate, but to understand the syntax which produces (5), we must probe its internal composition. It consists, in fact, of three elements:

$$(6) \quad \{ \text{PREV} \{ \sqrt{V} + \text{SUFFIX} \} \}$$

The verbal root *inis* is suffixed with a morpheme *-int*, the fusion so produced known in the Irish grammatical tradition as a ‘verbal noun’. That complex word is in turn preceded by a pre-verbal particle *a* — written separately, but accent-less and at least phonologically dependent on the following ‘verbal noun’. The ‘verbal noun’ is a form which was formerly nominal in its syntax but which in the contemporary language is entirely verbal ([Gagnepain 1963](#), [McCloskey 1980](#), [McCloskey & Sells 1988](#), [Stuber 2012](#)). The particle which precedes the ‘verbal noun’ in (6) is one of a class of such preverbs, whose members appear always and only in nonfinite contexts of various kinds. This particular preverb exhibits an interesting distributional pattern.³

ONE: It is obligatorily present with objects (preverbal nominal arguments):

- (7) a. Ba mhaith liom an teach seo [a] dhíol le duine
 I-would-like the house DEMON PREV sell.VN with person
 inteacht.
 some
 ‘I would like to sell this house to someone.’
- b. cha dtig liom an fear choíche [a] phósadh
 NEG-FIN come with-me the man ever PREV marry.VN
 ‘I can’t ever marry the man.’

SRNF 11

³ Examples with tags like ‘BSM 48’ are naturally occurring. I will be glad to provide the source information on request.

TWO: It is obligatorily absent, or silent, with intransitive verbs of all types:

- (8) a. bhí an chúis ró-mhór le Sasain géilleadh go síothchánta
 was the matter too-grave with England yield.VN peacefully
 ‘The matter was too grave for England to yield peacefully.’ BSM 48
- b. Is cuimhin liomsa muid cruinniú i New York
 COP-PRES memorable to-me us gather.VN in
 ‘I remember us gathering in New York.’ DM 106
- c. cionnus an bósun tuitim thar an taoibh
 because the bosun fall.VN over the side
 ‘because the bosun fell overboard’ BG 239
- d. Seo an darna huair a leithéid tarlú.
 this the second time its like happen.VN
 ‘This is the second time such a thing has happened.’ RNG 29-09-2008
- e. Ba mhian leat gan mé creidbheáil ins an rud
 COP-PAST desire with-you NEG-FIN me believe.VN in the thing
 ‘You wanted me not to believe in the thing.’ UMI 167

THREE: It is optionally present with verbs which take CP-complements of various types:

- (9) a. go dtáinig leis a’ tseandúine [a] chreidbheáil gur i
 C came with the old-person PREV believe.VN C in
 Rinn na bhFaoileann a bhí sé
 C was he
 ‘that the old man came to believe that it was in Rinn a bhFaoileann he
 was’ D 277
- b. dhiúltaigh siad creidbheáil go bhfuil an domhan cruinn
 refused they believe.VN C is the world round
 ‘they refused to believe that the world is round’ AM 46
- (10) a. níorbh fhurast [a] thabhairt ar m’ athair an lán mara a
 was-not easy PREV give.VN on my father the tide PREV
 ligean ar shiúl air
 let.VN away on-him
 ‘it wasn’t easy to make my father miss the tide’ NBM 65
- b. ní thiocfadh liom tabhairt air níos mó a
 NEG-FIN come.COND with-me bring.VN on-him more PTC
 innse
 tell.VN
 ‘I couldn’t make him tell any more’ FFF 69

Object positions (in Irish)

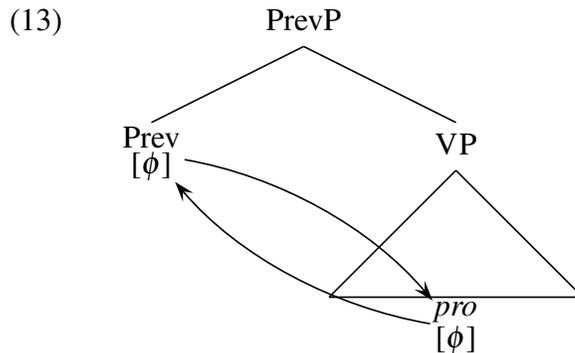
- (11) a. an bhfuil dochar [a] fhiafruighe díot caidé'n scéal éagsamhail
Q is harm PREV ask.VN of-you what story strange
a tá in do chionn
C is in your head
'Is there any harm in asking you what strange story you have in your
head' CP 135
- b. Ar mhiste domh fiafraí duit cé an áit a bhfuil an
INTERR harm to-me ask.VN of-you what the place C is the
baile agat?
home at-you
'Would it be OK if I asked you where your home is?' SSOTC 266

The preverb is also implicated in Object Agreement in nonfinite clauses. Objects agree with the preverb under the usual idiosyncratic Irish conditions (McCloskey & Hale 1984, Andrews 1990, McCloskey 1986, 2011, Legate 1999, Doyle 2002, Ackema & Neeleman 2003, among many others), and the preverb is, as expected in this heavily head-marking language, the bearer of object agreement morphology. We see this in the example of (12):

- (12) a. I ndiaidh iad mo cháineadh.
after them S1 criticize.VN
'after they criticized me'
- b. is fearr domh do leanstan agus féacháil le do philleadh
COP-PRES better to-me S2 follow.VN and try.VN with S2 turn.VN
'It would be better for me to follow you and attempt to turn you back'
COC 157

The structure must be as in the schematic (13), then, where *pro* indicates the position of the silent pronominal argument (in this case the direct object) whose presence is always implied by agreement morphology on a functional head in Irish.⁴

⁴ The nominal origins of the verbal noun system are reflected in the fact that the Object Agreement markers are syncretic with the Possessor Agreement markers.



Summing up these observations, the preverbal particle *a* in Irish nonfinite clauses seems to be the crucial ingredient in the expression of transitivity. In fact the preverb can be taken to be the fundamental particle mediating the interactions which constitute objecthood in this environment. It attracts the highest nominal argument into its second specifier position (the first being occupied by the external argument), a movement which yields the obligatory Object Shift characteristic of nonfinite clauses.⁵ It licenses (by Case-marking on classical interpretations) the object and therefore must be present if an object is to appear within the verbal domain. And finally it hosts the ϕ -probe in the Object Agreement interaction. These properties are definitional of the category Voice (in its transitive guise) and it surely makes sense to identify the transitivity preverb as F of (1b) and therefore to identify it with the Voice head of (2). It is the element whose existence is predicted by the theory of direct objects that we are scrutinizing.

It will not be possible here to consider the interesting case of clausal complements and their interaction with the transitivity preverb (the observations of (9)–(11)). But a case can be made that when the preverb appears (in the a-examples of (9)–(11)) there is a null pronominal in object position, one which is linked with an extraposed clause, and that in the cases without the preverb (the b-examples of (9)–(11)) the CP occupies its position of origin.

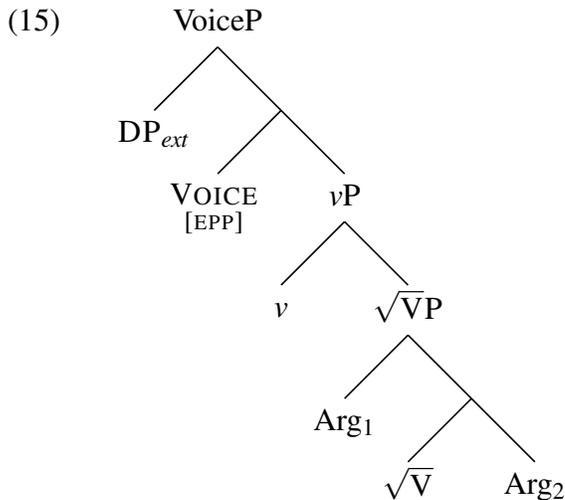
⁵ I use the term ‘Object Shift’ here because it seems appropriate. It is important to note however that the Irish phenomenon is very different from the Scandinavian phenomenon for which the term has also been used. Object Shift of the Irish type is obligatory, not optional. It has no semantic or pragmatic consequences or side-effects. There are no phonological or morphological restrictions on its application. The verb in Irish remains low and to the right of the raised object. And *v*P-adjoined adverbs may intervene between the raised object and the nonfinite verbal complex (see example (7b) above). Clearly the analyses of the two phenomena must be very different.

5 The lower verbal domain

We have arguably made some progress at this point in better understanding the syntax of the nonfinite verbal complex, whose internal structure is illustrated again in (14):

$$(14) \quad \{ \text{PREV} \{ \sqrt{V} + \text{SUFFIX} \} \}$$

We have identified the preverb of (14) with the Voice head postulated in (2). But what of the second piece of (14)—the ‘verbal noun’ formed by combining a root with a ‘verbal noun’ suffix? The structure considered earlier in (2) for English will take the form (15) in Irish, with the Voice head bearing EPP and driving Object Shift to its second specifier:



If (15) captures something real about the syntax of the verbal domain in Irish, we will have two expectations. The first is that all internal arguments, including direct objects, will have their point of origin as specifiers of or as a complement of the root. The second is that we will find evidence for the presence of a ‘verbalizing’ element within the verbal domain in non-finite clauses.

For the first expectation we already have the observation encapsulated in (5) that all non-DP complements follow the ‘verbal noun’. In (16a) we have two PP arguments, in (16b) a PP and a nonfinite CP complement.

- (16) a. Ba chóir duit labhairt leis faoi seo.
 COP-COND proper to-you speak.VN with-him about DEMON
 ‘You should speak to him about this.’

- b. ní thiocfadh liom tabhairt air níos mó a
 NEG-FIN come.COND with-me bring.VN on-him more PREV
 innse
 tell.VN
 ‘I couldn’t make him tell any more’ FFF 69

The order of elements in (16) implies of course that the root must raise in (15) and left-adjoin to *v* to form the ‘verbal noun’. We thus identify the verbal noun suffix with *v*, construed as a ‘verbalizer’. The raising appealed to here, with its resultant mirror-image order of morphemes, represents the extent of head movement in the nonfinite domain.

That even direct objects originate as low as all other complements (that is, as complement or specifier of the root) is suggested by the examples in (17).

- (17) a. ní hionann sin agus an tAifreann a léamh uilig
 NEG-FIN same that and the Mass PREV read.VN all
 ‘That’s not the same as reading the entire Mass.’ IDCS 73
- b. agus an scéal a inseacht uilig dhó
 and the story PREV tell.VN all to-him
 ‘and to tell him the whole story’ DGD 200
- c. Iad a rá uilig, an ea?
 them PREV say.VN all is-it
 ‘(You want me to) sing them all, is it?’ RNG 8-7-95

All of the examples of (17) involve Quantifier Float (see Ó Baoill & Maki 2008 for extensive discussion). If the isolated universal quantifier *uilig* in the examples of (17) marks the point of origin for the raised objects (as seems likely) we have evidence that they have a pre-Object Shift position within the complement of *v* and therefore to the right of the ‘verbal noun’. Raising of the entire DP headed by the quantifier is, as expected, also possible:

- (18) a. ní hionann sin agus an tAifreann uilig a léamh
 NEG-FIN same that and the Mass all PREV read.VN
 ‘That’s not the same as reading the entire Mass.’
- b. agus an scéal uilig a inseacht dhó
 and the story all PREV tell.VN to-him
 ‘and to tell him the whole story’
- c. Iad uilig a rá, an ea?
 them all PREV say.VN is-it
 ‘(You want me to) sing them all, is it?’

Object positions (in Irish)

A final observation is in order. There are many distinct verbal noun-forming suffixes (see Bloch-Trojnar 2006 for general discussion), but one of the more productive among them is the suffix whose orthographic form is *-(e)áil*, illustrated in (19):

- (19) Rinne sé teach a thóg-áil.
do.PAST he house PREV raise.VN
'He built a house.'

This suffix has other uses. Among them is to facilitate the borrowing of English verbs into Irish—both nonce borrowings and long-term borrowings. To be used as verbs in an Irish context, such borrowed items must be augmented with the *-áil* suffix, as seen in (20):

- (20) a. *Nonce borrowings:*
miss-áil, enjoy-áil, bother-áil
b. *Permanent borrowings:*
vót-áil (vote), péint-eáil (paint), smugl-áil (smuggle), bóist-eáil
(boast), póits-eáil (poach), cic-eáil (kick), fón-áil (phone)

Such uses provide perhaps some support for the idea that among the functions of the morphemes used to form verbal nouns in Irish is that of making appropriate verbs—that is to act as a 'verbalizer'. If this is so, then the identification of these suffixes with the verbalizer *v* receives some interesting support.

6 Autonomy of the transitivity particle

But what, finally, of the most contentious part of this framework of assumptions—the idea that the preverb (now identified as a Voice head) is a syntactically independent entity, a closed class item similar in fundamental respects to a member of the class C, or a member of the class D. Are there reasons which go beyond theoretical consistency which would suggest this interpretation?

An initial observation is that if there were a second head movement step which incorporated the verbal stem into Voice, that movement (unlike the one we have postulated for the creation of the verbal noun) would not respect Mark Baker's (1988) Mirror Principle. If it did, the preverb would in fact be the final element of the infinitival verbal complex. The preverb in fact appears in exactly the position we would expect a Voice head which was syntactically independent to occupy—the position from which it selects *vP*.

But I would also like to develop a less theory-bound (if slightly salacious) argument in favor of the idea that the preverb is a syntactic head like any other. The core of our proposal is that the transitivity preverb in a nonfinite clause acts like

any other functional head—it selects and therefore precedes its phrasal complement (vP in this case). In terms of the morphosyntax nothing more need be said. However, like many other functional heads (in Irish in particular) the Voice head is phonologically deficient and as a consequence is a phonological dependent of the material that follows. The strict adjacency implied by this phonological dependency makes it difficult to construct the obvious kinds of argument for the autonomy of the preverb since nothing can intervene between it and following material.

Or almost nothing. As it happens, though, certain swear-words borrowed from English may so intervene, as we see in (21):

- (21) tá sé ceaptha thú a *feckin* ghortú
 is it intended you PREV hurt.VN
 ‘It’s intended to feckin’ hurt you.’ GDDR 271

Crucially, this is not an instance of expletive infixation of the well studied English type. It is absolutely impossible to insert a borrowed swear-word within a morphologically complex word, as shown, for example, in (22):

- (22) a. chaithfidís
 must.COND.P3
 ‘they have to’
 b. *chaithfi-feckin-dís
 c. *ambasa-feckin-dóir

Speakers are very clear about this and no attested examples of the type in (22) have so far been observed. In sharp contrast, examples like (21) can be found very easily and speakers judge them as natural without hesitation.

Similar effects turn up in a number of other contexts. The same set of borrowed swear-words, for example, can appear between a preposition and its complement DP, as seen in (23):

- (23) Feicfidh mé arú amáireach thú le dhul ar *feckin*’ siúlóid
 see.FUT I day-after-tomorrow you with go.NON-FIN on walk
 mar sin.
 as that
 ‘I’ll see you the day after tomorrow to go on a feckin’ walk then.’ GDDR 305

They also occur between many kinds of determiners and their phrasal complements. This is shown for possessive determiners in (24), and for the definite determiner in (25).

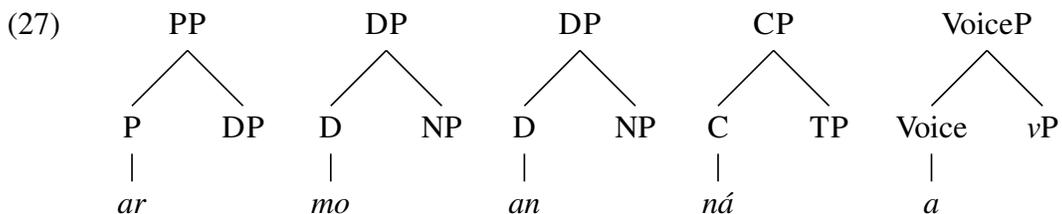
Object positions (in Irish)

- (24) a. níl mé ag iarraidh ortsa mo feckin cháil
 NEG-FIN-be.PRES I PROG ask.VN on-you my reputation
 a scriosadh
 PREV destroy.VN
 ‘I’m not asking you to destroy my feckin’ reputation.’ GDDR 304
- b. Dún do friggin chlab, a Mhamaí.
 close your gob VOC-Mammy
 ‘Shut your friggin mouth, Mammy’ RNG 13-06-2012
- (25) a. an focain deartháir úd.
 the brother DEMON
 ‘that fuckin’ brother’ J 95
- b. thar thairseach an focain tí seo.
 over threshold the house.GEN DEMON
 ‘through the door of this fuckin’ house’ J 95

Finally they may intervene between a negative complementizer and its TP-complement, as seen in (26).

- (26) Ná focain fliuch an bosca!
 NEG-IMP wet the box
 ‘Don’t fucking wet the box.’ J 117

The evidence is fairly clear, then, and can be visualized by way of the sequence of trees in (27), which lays out the array of well-formed patterns so far identified.



The generalization suggested by (27) seems very clear: Swear words borrowed from English never appear within a morphological word. However, they may appear between a prosodically dependent functional head and the complement of that head.⁶ All of the well-formed examples in (21)–(26) meet this condition. If this interpretation is accurate, we have evidence that the relation between the transitivity particle and the projection of the verbal stem is indistinguishable from the relation between P and DP, between D and NP, or between C and TP. If the transitivity preverb is a

⁶ Baronian & Tremblay (2017) describe what looks like a very similar distributional pattern for the same borrowings in Montréal French.

closed-class lexical item which selects a phrasal complement (the projection of v), the well-formedness of (21) is expected as part of a larger pattern. But this is the core of the proposal in (15) and is precisely the hypothesis that we wanted to put to the test.

7 Conclusion

We are thus brought by this language-internal deductive path to the theory of objecthood which Chomsky (1995, 2000, 2001) arrives at by way of general theoretical deduction, which Kratzer (1996) arrives at by deduction from semantic considerations and which Johnson (1991) arrives at by way of close examination of English. The properties crucial for objecthood inhere not in verbs but in syntactically independent functional heads which select phrases headed by verbal stems. Verbal phrases are therefore multi-layered and there are at least three ‘object positions’.

References

- Ackema, Peter & Ad Neeleman. 2003. Context-sensitive spell-out. *Natural Language and Linguistic Theory* 21. 681–735.
- Andrews, Avery. 1990. Unification and morphological blocking. *Natural Language and Linguistic Theory* 8. 507–557.
- Baker, Mark. 1988. *Incorporation: a theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baronian, Luc & Alice Tremblay. 2017. The morphological rise of *fuckin*-insertion in Montréal French. Manuscript, Université du Québec à Chicoutimi and Stanford University.
- Bloch-Trojnar, Maria. 2006. *Polyfunctionality in morphology: A study of verbal nouns in Modern Irish*, vol. 3 Lublin Studies in Celtic Languages. Lublin, Poland: Wydawnictwo KUL.
- Bobaljik, Jonathan & Andrew Carnie. 1996. A Minimalist approach to some problems of Irish word order. In Robert Borsley & Ian Roberts (eds.), *The syntax of the Celtic languages: A comparative perspective*, 223–240. Cambridge, England: Cambridge University Press.
- Cable, Seth. 2012. The optionality of movement and EPP in Dholuo. *Natural Language and Linguistic Theory* 30. 651–697.
- Chomsky, Noam. 1995. *The minimalist program*. Cambridge, Massachusetts: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries, the framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist*

Object positions (in Irish)

- syntax in honor of Howard Lasnik*, 89–156. Cambridge, Massachusetts: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, Massachusetts: MIT Press.
- Chomsky, Noam. 2008. On phases. In Robert Freidin, Carlos P. Otero & Maria Luisa Zubizarreta (eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*. Current Studies in Linguistics, 133–166. Cambridge, Massachusetts: MIT Press.
- Culicover, Peter W. & Ray Jackendoff. 2005. *Simpler syntax*. Oxford: Oxford University Press.
- Doyle, Aidan. 2002. *Covert and overt pronominals in Irish*. Lublin, Poland: Wydawnictwo Folium.
- Duffield, Nigel. 1995. *Particles and projections in Irish syntax*. Boston, MA: Kluwer.
- Gagnepain, Jean. 1963. *La syntaxe du nom verbal dans les langues celtiques: 1. Irlandais*. Paris: C. Klincksiek.
- Guilfoyle, Eithne. 1990. *Functional categories and phrase structure parameters*. Montreal, Canada: McGill University dissertation.
- Guilfoyle, Eithne. 1994. VNP's, finiteness and external arguments. In M. Gonzalez (ed.), *NELS 24, papers from the Twenty-fourth Annual Meeting of the North Eastern Linguistics Society*, 141–155. Amherst, MA: GLSA.
- Harley, Heidi. 2013. External arguments and the Mirror Principle: On the distinctness of Voice and *v*. *Lingua* 125. 34–57.
- Johnson, Kyle. 1991. Object positions. *Natural Language and Linguistic Theory* 9. 577–636.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In Johan Rooryck & Laurie Zaring (eds.), *Phrase structure and the lexicon*, 109–137. Dordrecht: Kluwer.
- Legate, Julie. 1999. The morphosyntax of Irish agreement. In Karlos Arregi, Benjamin Bruening, Cornelia Krause & Vivian Lin (eds.), *MITWPL 33: Papers on morphology and syntax, cycle one*, 219–240. Cambridge, MA: Department of Linguistics, MIT.
- Legate, Julie Anne. 2014. *Voice and v*. Cambridge Massachusetts: MIT Press.
- McCloskey, James. 1980. Is there raising in Modern Irish? *Ériu* 31. 59–99.
- McCloskey, James. 1986. Inflection and conjunction in Modern Irish. *Natural Language and Linguistic Theory* 4. 245–281.
- McCloskey, James. 2011. Inflection and silent arguments in Irish. Handout for a talk at CASTL, University of Tromsø, September 2011. Available at: <http://ohlone.ucsc.edu/~jim/papers.html>.

- McCloskey, James. 2017. Prosody, ellipsis, and the cartography of verb-initial orders in Irish. Available at <http://ohlone.ucsc.edu/~jim/papers.html>.
- McCloskey, James & Kenneth Hale. 1984. On the syntax of person number marking in Modern Irish. *Natural Language and Linguistic Theory* 1. 487–533.
- McCloskey, James & Peter Sells. 1988. Control and A-chains in Modern Irish. *Natural Language and Linguistic Theory* 6. 143–189.
- Merchant, Jason. 2013. Voice and ellipsis. *Linguistic Inquiry* 44. 77–108.
- Noonan, Máire. 1992. *Case and syntactic geometry*. Montreal, Canada: McGill University dissertation.
- Noonan, Máire. 1994. VP internal and VP external AgrOP: evidence from Irish. In *WCCFL 13, Proceedings of the Thirteenth Annual Meeting of the West Coast Conference on Formal Linguistics*, Stanford, California: Stanford Linguistics Association.
- Ó Baoill, Dónall & Hideki Maki. 2008. The theme goal construction in Modern Irish. *English Linguistics* 25. 439–451. Also in Maki and Ó Baoill (2011).
- Ó Donnchadha, Gearóid. 2010. Syntactic structure building and the verbal noun in Modern Irish: A minimalist approach. Doctoral dissertation, University College Dublin.
- Stuber, Karin. 2012. Periphrastic constructions in Old and Middle Irish. Presented to the Workshop on New Perspectives in Celtic Syntax, UC Berkeley.
- Zyman, Erik. 2017. Quantifier float as stranding: Evidence from Janitzio P'urhepecha. Under review. Available at <https://people.ucsc.edu/~ezyman/publications.html>.