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When one works in a specialized field such as Celtic language syntax, it is a rare pleasure when a whole book devoted to the grammar of one's language specialty appears in print. Although in recent years numerous papers have addressed issues in the generative syntax of Irish, in the past 20 years only two other books have been devoted solely to the topic: McCloskey (1979) and Stenson (1981). Nigel Duffield's book *Particles and projections in Irish syntax* thus fills a very obvious void, being the first book in almost fifteen years to examine the syntax of Irish from a generative (or more precisely minimalist) perspective.

Duffield's goal is a unified characterization of functional projections, the particles that fill these projections, and word order alternations of both a clausal and NP-internal nature. The first chapter of the book sets out the scene in terms of the assumptions of minimalist syntax and some of the issues and concerns raised by the grammar of Irish. The second and third chapters deal with issues in the particle system of Irish, and in deriving VSO order in tensed clauses. In the fourth chapter, Duffield looks at word order phenomena in non-finite clauses (with a particular emphasis on Ulster Irish). Finally, the last chapter revolves around the parallelisms to clausal syntax found in the nominal system of Irish, comparing it in detail to similar systems found in Semitic languages.

Throughout the book, there is an underlying theme which relates syntactic structures to the well-known Initial Consonant Mutations (ICM) of Irish.

From this perspective this book then is not only of interest to syntacticians, but also to phonologists and morphologists interested in ICM. Duffield departs from standard assumptions about ICMs (the idea that they are only lexical properties of specific words), and claims there are two types of ICM phenomena: Lexical and Functional. Lexical mutations are of the idiosyncratic type associated with specific lexical items. Functional mutation, on the other hand, is a syntactic phenomenon, occurring when certain functional projections are lexicalized (either by particles or by head-moved lexical items). (1) below is Duffield's basic claim:

- (1) (a) Lexicalized T^0/D^0 triggers the Lenition F-mutation.
 (b) Lexicalized C^0 triggers the Eclipsis (nasalization) F-mutation.

On the basis of this characterization, Duffield makes several very controversial claims which we will consider in detail below.

In the second chapter of the book, Duffield develops a remarkably elaborate system for deriving the basic VSO word order of tensed clauses. He claims that subjects in Irish are VP internal in VSO clauses. More controversially, he also claims that the verb in VSO structures is not at the left edge of the inflectional complex, but rather in some relatively low head ($Agr(O)^0$):

- (2) $[_{CP} C^0 \dots [_{TP} T^0 [_{NEGP} Neg^0 [_{AGRP} Agr^0 + V_V [_{VP} Subject \dots t_V]]]]]$

This contrasts heavily with most recent research in Irish syntax (see for example Bobaljik & Carnie 1996, among others), where the verb is taken to lie in the highest inflectional head below C^0 . The evidence that Duffield presents for this approach comes from the particle system. Duffield observes that the three heads not occupied by V at spellout (C^0 , Neg^0 , T^0) form a unitary class, in that they contain the information found in the preverbal particles of the language:

- (3) (a) **Ní** thuigim.
 NEG understand
 'I do not understand.'
 (b) **Ar** thuig tú?
 [+Q]-PAST understand you
 'Do you understand.'
 (c) **Dúirt sí** $[_{CP}$ **nár** thuig tú].
 said she that.NEG.PAST understand you
 'She said that you don't understand'

With respect to ICM, Duffield claims that if the T^0 head is in some way lexicalized (either by negation or by the past tense morphemes *do* and *-r*), then the T^0 head triggers lenition on the first consonant of the following verb.

If on the other hand C^0 is in some way lexicalized, eclipsis/nasalization occurs. Notice that there are two crucial parts to this analysis: first the verb must not have raised through T^0 , since lexicalized T^0 is the trigger for the mutation. This in turn forces the second crucial assumption: if the verb is not in T^0 , then it must be lower (in Agr^0), which means that post-verbal subjects must be VP internal. Let us consider these two claims. First, let us consider VP internal subjects. Bobaljik & Carnie (1996) claim on theoretical grounds that by minimalist assumptions the movement of arguments in finite clauses must be a superset of movement of arguments in non-finite contexts. Non-finite clauses in Irish show a derived SOV word order, where the object can be shown to have shifted around verb and subject to the specifier of some agreement projection. Since the subject precedes the object, it follows that the subject is also VP external. McCloskey (1996) presents evidence from VP-adjoined adverbs like *riamh* ‘always/ever’ that the subject must be external to the VP. These adverbs appear between the surface subject position and the surface object position in finite clauses, thus showing that the subject is VP external. In chapter four, however, Duffield easily overcomes these objections by splitting the verb phrase into two halves, with the upper VP containing the subject, an intervening inflectional head (Asp^0) whose specifier serves as the overt landing site of the object, and a lower VP containing the thematic position of the object:

- (4) abc
 (4) [_{CP} C^0 ... [_{TP} T^0 [_{NEGF} Neg⁰ [_{AGRP} Agr⁰ + V_V [_{VP} Subj t_V [_{ASPP} Obj t_V [_{VP} t_V t_{obj}]]]]]]]]]]

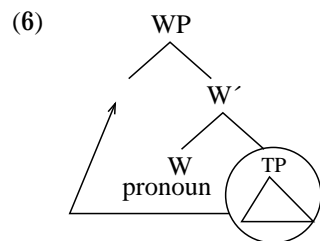
The other claim – that the verb does not move into T^0 – is more controversial and difficult to confirm. As noted by Duffield himself, verbs in Irish show a full range of tense inflectional suffixes. This is problematic for the view that the verb is not in T^0 . Duffield attempts to account for this fact by claiming that these markers do not show tense but rather mood and aspect. To this reviewer this claim seems very strange. These morphemes show a full range of tense forms ranging from past (*-amar*, \emptyset , etc.) to present (*-eann*, etc.) to future (*-faidh*, etc.). The preverbal particles only seem to vary on a past/non-past axis. It seems backwards to claim that the full range of tense inflection is not T^0 , but the more limited set instantiates the node. It should be noted, however, that Duffield’s basic claim can be maintained with only a minor modification. Ó Sé (1990) analyzes the temporal morphology in Irish preverbal particles, and the equivalent particles in copular clauses, as realis/irrealis mood. Duffield’s system translates directly into this characterization. Mood is realized in the preverbal particle system and is lexicalized as a lenition trigger. On a related note, Duffield seems to assume that the only positioning of NegP is one below TP and above AgrP. Laka (1991) argues for an A-bar projection lower than CP (and perhaps MoodP) but higher than the highest A inflectional projection (TP or AgrP): ΣP . This

position is associated with negation in complementizer particles in Basque. The extension to Irish should be obvious: Negation might be this Σ^0 , rather than the Neg^0 (lower than T^0) discussed by Duffield. What is particularly interesting, however, is that the important insights of Duffield's analysis can be maintained independently of what actual functional projections are involved.

In addition to this analysis of particles and VSO structure, the first chapter of Duffield's book contains an analysis of an otherwise puzzling phenomenon in modern Irish: pronoun postposing. While in finite clauses with full NP objects the word order is VSOX, the word order in clauses with weak pronominal objects is VSXO:

- (5) Bhuail mé leis an ord é
 hit I with the hammer it
 'I hit it with the hammer.'

Duffield explains this effect in terms of Wackernagelian second position, where the pronoun occupies the head of WP (an A-bar projection higher than TP but lower than C^0), and the rest of the clause moves to the specifier of WP, as part of a generalized topicalization operation:



This account also attempts to explain the apparent 'reverse' order of clausal adverbials found in Irish. If this account is correct then there should be a direct correlation between reversed order adverbials and postposed pronouns crosslinguistically. Only further comparative work will confirm whether this prediction holds true or not. A more pressing problem has to do with the limitations of the pronoun post-posing phenomenon. The above account predicts that weak pronouns will follow any finite complements embedded under TP (which in turn is in the specifier of WP). This is false (Ó Siadhail 1989: 209):

- (7) *Chuala mé raithe [_{CP}go mbíodh sé ann] é
 heard I said that be.HAB he there it
 'I heard it said that he used to be there.'
 cf. Chuala mé é raithe go mbíodh sé ann.
 Chuala mé raithe é go mbíodh sé ann.

Pronoun-postposing is a strictly clause bound phenomenon.

The strong claim of Duffield's work is that in Irish, complementizers always cause eclipsis/nasalization on the initial consonant of the following word. As he notes, however, there are two glaring exceptions to this claim: the negative complementizer found in non-finite clauses *gan*, which inflicts no mutation, and the so called direct relative ([+wh]) complementizer a^L , which causes lenition. To explain these exceptions, Duffield claims neither of these elements is in reality a complementizer, outward appearances to the contrary. *Gan*, he claims, is a negative element that occupies the specifier of NegP. This analysis seems both sound and plausible. The claim that a^L is not a complementizer is more controversial however, as among other things it calls into question the well motivated analysis of Irish wh-complementizers advanced by McCloskey (1979, 1990). Duffield claims that a^L , unlike the indirect relative marker a^N (which is a complementizer in Duffield's system), is an element base adjoined to T^0 , thus accounting for the fact that it is a leniter rather than an eclipsis/nasalization trigger. In order to account for the fact that this morpheme appears overtly with wh-words and in other wh-contexts such as relatives, Duffield claims that the specifier of TP may function when overtly marked (by a^L in Irish) as a Topic Phrase. As support for this claim he notes that 'when removed from context, many XP- a^L -V-YP strings are ambiguous between a relative-clause interpretation and a topic-structure interpretation' (196). I find this evidence confusing, since there are many cases where XP- a^N -V-VP strings with an unambiguous complementizer a^N also function like topicalization structures. This means that in Duffield's system there are at least three different locales for topicalization. First we have the specifier of CP, headed by a^N . Next there is the specifier of TP, headed by a^L . Finally, there is the specifier of WP, headed by weak pronominals. This seems overly complex for a relatively straightforward phenomenon, and only seems to be motivated² by the need to maintain the mutation hypothesis in (1). Further problems arise with this analysis, however. First, there is the problem of where the a^L morpheme comes from. Duffield does not want it to be generated under T^0 , since it has a morphologically decomposable alternant that shows reflexes of the tense

[1] Orthographically this word is actually <a>, phonologically it is a /ə/. Duffield follows McCloskey in writing this particle as a^L (where ^L is a mnemonic for 'lenition') to distinguish it from the many other particles which are written *a* (such as the indirect relative a^N).

[2] Duffield has other arguments for the idea that a^L is not a complementizer. For example, he presents citations to the claim that a^L is historically derived from the same morpheme that shows up marking the past/non-past distinction in complementizer and negative heads. From the perspective of synchronic grammar this evidence is clearly weak. He also claims that, unlike complementizers, in the class of irregular verbs, the suppletive dependent form is never used with a^L . Since the standard analysis of dependent/independent verb form alternations is one of selection, this argument disappears, as one could simply claim that a^L selects independent forms, whereas other complementizers select dependent forms.

morpheme, $a\text{-}r^L$ ‘ a^L + past’; instead he base generates it as adjoined to T^0 . It remains a mystery as to why or how this should occur. A further problem lies with the fact that the a^L morpheme is well known to mark cyclic *wh*-movement. In McCloskey’s classic (1990) analysis of *wh*-movement, whenever a *wh*-word has moved through the specifier of a CP, the morpheme a^L appears as the head of that CP. Under Duffield’s analysis, this cyclic behavior of a^L is mysterious: by stipulation each clause embedded under a *wh*-word must base generate a topic-identifying a^L morpheme adjoined to its T^0 head. The link to cyclic *wh*-movement seems to have been abandoned.

Chapter 4 represents one of the most polished and complete sections of this book. It presents an analysis of SOV word order in Ulster infinitivals in terms of object raising to a functional projection. Duffield argues that object movement in Modern Irish is to some position internal to the VP; namely to the specifier of AspectP, which is headed by another particle a^L (not to be confused with the one found in direct relatives) (8):

$$(8) \dots [_{VP} \text{Subj } v [_{ASPP} \text{Obj } [_{ASP^0} a^L] [_{VP} V t_{obj}]]]$$

This derivation is highly convincing since, as noted above, it explains the problematic adverbial placement facts, as well as some theoretical concerns.³ Duffield links this word order positioning to another phenomenon in the language, the $ag \Rightarrow a^L$ rule. In matrix clauses, when an object is extracted from a clause bearing perfective aspect marking (*ag*), then the perfective marker shifts form to a^L , homophonous with the morpheme in (8):

- (9) [An t-airgead]_i a bhí an bhean **a^L** thabhairt t_i don fhear
the money WH was the woman PROG give to.the man
‘the money that the woman was giving to the man’
cf. Bhí an bhean **ag** tabhairt an airgid don fhear
‘The woman was giving the money to the man’.

On the basis of this fact, Duffield associates the a^L morpheme in (8) to the Aspectual head (rather than, for example, AgrO^0). While Duffield’s arguments about object movement to a position that is VP internal are entirely convincing, the identification of the head a^L as Asp^0 seems highly suspect. First, there is the fact that this particle, like any other agreement morpheme in Irish, shows a complete range of person forms when the subject is null:

- (10) Ba mhaith leis [pro mo^L/do^L/a^L/a/ár^N/bhúr^N/a^N (m)b(h)ualadh
would-like with.3S 1S/2S/3MS/3FS/1PL/2PL/3PL hit
‘He would like to hit me/you/he/she/us/you(pl)/them.’

[3] In particular, Duffield solves the main problem with Bobaljik & Carnie’s (1996) analysis, where the movement of a subject around the surface position of the object creates a violation of the minimality based economy condition of shortest move.

Second, there is a strong inconsistency in Duffield's argumentation about this particle. He observes '...the fact that a^L directly substitutes for ag – as opposed to being projected in addition to the progressive morpheme – suggests that "Object Agreement" and "Aspect Phrase" are one and the same VP-internal functional projection' (246). Notice, however, that in chapter 2, Duffield argued for three distinct functional heads above AgrP: C^0 , T^0 , and Neg^0 , despite the fact that all the information contained in these nodes is invariably contained in a single particle. Finally, Duffield seems to have missed the fact that overt Aspect heads, such as the recent perfective morpheme *tar eis*, can in fact appear overtly in conjunction with the a^L morpheme. Worse yet, these aspect morphemes are separated from a^L by an object:

- (11) Tá Seán **tar eis** an teach **a^L** thógáil
 be John PERF. the house a^L build
 'John has just built the house.'

The fact that these aspectual elements are heads can be seen by the fact that they block head movement of the verb to initial position and force auxiliary insertion. These arguments all point to an analysis where the a^L morpheme in non-finite clauses and in sentences like (11) is identified with $AgrO^0$.

In the last chapter, Duffield presents very convincing arguments from adjective placement that the genitive constructions in Irish involve raising both the head noun through two functional projections (Num^0 , Agr^0) to D^0 in a manner familiar from standard analyses of semitic Construct State Nominals. The argumentation in this section is very thorough and complete, so I will not discuss it further. However, I would like to take up the claim made by Duffield that D^0 s, when lexicalized, are lenition triggers. As noted above, Duffield makes a critical distinction between F(unctional)-mutation and L(exical)-mutation. In particular, he claims that only functional mutation spreads through syntactic categories, whereas lexical mutation does not. Empirically this claim is simply false. Lexical mutation (such as that triggered by plural masculine nouns) can spread to two conjoined adjectives:⁴

- (12) na diail^L **bheaga** agus **mhóra**
 the devils little and big
 'the big and small devils'

The empirical coverage of Duffield's work is impressive. Based on a relatively simple assumption, he manages to develop a comprehensive (albeit complex) system accounting for a wide variety of phenomena.

[4] A more accurate description of the data seems to be that lenition may spread, but eclipsis is strictly local.

This book is an outgrowth of Duffield's (1991) dissertation, based in part upon that work, in part on new research and new assumptions meeting more current minimalist assumptions. The fact that this book is a revised version of an older thesis, however, causes it to be a less useful tool than should be merited by the analysis it contains. The book, in particular the second chapter, moves back and forth from minimalist to preminimalist GB assumptions with almost dizzying frequency, obscuring an otherwise innovative and interesting analysis. The book is also painfully badly edited, with many errors in the data, some of which are crucial⁵ to the analysis. For example, in chapter 5, example (16c) (279) shows that lexical eclipsis cannot spread across a syntactic domain. The sentence is marked as grammatical, but is crucially UNGRAMMATICAL. A similar problem is seen in chapter 5, example (14a) (277) (the asterisks here are mine, not Duffield's):

- (13) (a) *a aon **theach** (b) *a h-aon **theach** (c) *a n-aon **theach**
 his one house her one house their one house

These examples were meant to show that in most cases, lenition is a local phenomenon, where the lenition trigger (*aon*) is string adjacent to the target word (*teach*), crucially blocking other mutations (such as anti-lenition (13b) and eclipsis (13c)) triggered by less adjacent particles. Although examples exist which show this very phenomenon, the examples given above in (13) do not as they are all ungrammatical – simply because /t/ never lenites after a homorganic nasal like the /n/ at the end of *aon*. Duffield marks these incorrectly as grammatical.

There are also surprising gaps and misattributions in the references of this work. For example, there is no reference to Fassi Fehri's (1993) work on construct state nominals, which proposes a nearly identical DP internal structure and movements to the one proposed here. The idea that Irish object shift involves movement to the specifier of AspP is misattributed to Noonan (1994), where in actuality Guilfoyle (1993) was the first to apply the analysis to Irish. On page 259, the claim that the *ag* ⇒ *a^l* rule applies only in northern dialects of Irish is attributed to McCloskey (1983). This is incorrect, McCloskey never makes this claim, nor for that matter is the claim correct.

[5] There are some other less crucial but nonetheless unfortunate errors in the data as well: (i) p. 19, example 20a the word by word gloss should read 'the priest parish'; (ii) p. 148, example 14a should read '...an t-amhrán a rá arís'; (iii) p. 182, example 83b and 84b should be 'Na rudai' not 'An rudai'; (iv) p. 182, example 84b 'Na rudai' is misglossed as 'what', but should be 'the things'; (v) p. 191, example 101b 'a dheir' should be 'a deir'; (vi) p. 241, example 63f 'cá hair' should be 'cá air'; (vii) p. 241, example 63f is incorrectly translated. It actually means 'We didn't know what he was looking at'; (viii) p. 244, example 67b 'Na cheisteanna' should be 'Na ceisteanna'; (ix) p. 277, example 13b 'ar hocht gcapall' should be 'ar ocht gcapall'; (x) p. 320, example 80b 'dheathár' should be 'deathár' (see discussion above in the main text about lenition of dentals). Many of these errors involve mistakes in the initial consonant mutations, which is particularly unfortunate in a work with a special focus on initial consonant mutations.

This statement is important to Duffield's analysis since it is meant to serve as evidence for the functional identity of the *a^L* and *ag* particles. What makes the statement so particularly strange, is that in footnote 21, Duffield refers to the application of this process in the southern dialect spoken in Dún Chaoin, in West Kerry – thus providing a clear counterexample to his own prediction. One factor likely to frustrate the non-Celticist is in the inconsistency in marking the ICMs: sometimes they are marked with underlining, other times they are ignored.

It is thus a truly unfortunate fact that the poor editing and exposition in this work obscures an otherwise well worked out and articulated theory, and thus limits the usefulness of the book to people who are not experts in Celtic syntax. If the reader can put these minutiae aside, however, they will undoubtedly find insights in this work that will challenge their views on both the syntax of Irish and, more generally, the minimalist approach to grammar.

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