1. Introduction

This paper aims to investigate several features of Modern Irish within the framework of Role and Reference Grammar (RRG), and in particular to show how certain grammatical constructions provide support for the architecture proposed by RRG. RRG makes certain assumptions about the universals of human language (Van Valin and LaPolla 1997), and in the spirit of the theory we expect Irish to be no different. This paper will start with the very basics of said theory, and attempt to relate them to Irish from the very bottom up, and will show how the predications made by RRG explain the Irish data nicely, particularly with respect to the behavior of the Privileged Syntactic Argument (PSA).

Irish is a member of the Celtic branch of the Indo-European language family, and is spoken by approximately (optimistically) 30,000 people natively in contemporary Ireland. It has enjoyed a certain amount of infamy in linguistic circles for its many grammatical ‘quirks’, many of which have been so deemed so inconsistent with the traditional IE model that it has even been proposed that Irish actually has roots in the Semitic languages (Venneman 2002).

Several key points must be made about the state of Modern Irish before beginning. Modern Irish is broken up into three main dialects: Munster (Southern), Connacht (Western) and Ulster (Northern). It seems as though there are as many differences between the dialects as there are similarities. However, Connacht and Munster share a great deal more in common with each other than either do with Ulster Irish, and this is important here. The bulk of the data here is from these two dialects: Connacht Irish is that with which I am familiar, and the consults for this work were either from West Kerry (Munster), or from Áras Mháirtín Uí Chadhain (an Irish-promoting organization An Cheathrú Rua, Galway), all of whom I am extremely indebted to.

Secondly, this is largely a synchronic work. Regardless of how recent a linguistic innovation is, the Irish language is taken as-is as it was given to me by my consultants. There are several aspects of the discussion which warrant this admonition- most notably the discussion of the impersonal and passive constructions, which have recently seen some changes.
2. Syntax

2.0 The Layered Structure of the Clause

Syntax in RRG is monostratal in nature. There is only one layer of syntactic representation posited: that with which one is presented in a given utterance. The structure of any given sentence is built around the Layered Structure of the Clause (LSC), which is comprised of several levels: there is the predicating nucleus, which together with its arguments forms the core. Material beyond the core and its constituents that form a clause (e.g. temporal adverbials) is then joined underneath the clause level. Clauses can be joined together to form a larger sentence. This basic blueprint of an utterance is at the core of the syntactic representations of RRG.

We are assuming the universal aspects of the Layered Structure of the Clause (LSC) to be present in Irish. That is, there is a predicating Nucleus, a Core containing the arguments of the clause, and a Periphery containing adjuncts, all forming a sentence. It is also assumed that the operators function at these same levels. Operators in RRG consist of a host of familiar meanings often conveyed by closed-class linguistic items, such as negation, definiteness, and so on. One important observation captured in RRG is the seemingly universal ordering of the operators, and the scope of their interpretation. As one works outwards from the nucleus, one expects the operators to be linearized in a fashion that is consistent with their ordering in the LSC: in (1) below, one predicts that aspect would be closer to the main predicating element, be it to the left or to the right. Another important motivation for the LSC is the scope of these operators. Again, in (1), the operators crucially scope over the layer with which they are associated, which becomes evident in a number of constructions, for example coordination, in which the interpretation of an operator relies on the level to which it is attached.
In the clause above, the preverbal *port manteau* particle *Nach* codes a Realis/Irrealis distinction, negation, and illocutionary force- ASP, NEG and IF operators, respectively. The verb is also inflected for present tense, giving a TNS operator. Pronominal and NP arguments fit neatly under the core, and the nucleus contains the predicing verb.

There are non-universals in clause structure, however, and these are the Pre- and Post-core slots, and the Left and Right detached positions. The easiest to demonstrate are the left and right detached positions (LDP and RDP). These are positions underneath the SENTENCE node, set off from the rest of the clause by an intonation break. Here, Irish is like English in that both are happily used in discourse, and are orthographically represented with a comma. Take (2) and (3) below, demonstrating the LDP and RDP, respectively (LSC omitted to conserve space).

(2) *An fear a bhris an fhunneog, chonaic mé ar maidin é* (O’Siadhail 213)
“The man who broke the window, I saw him, this morning.”
Chonaic mé ar maidin é, an fear a bhris an fhunneoig. (O’Siadhail 213)
“I saw him, this morning, the man who broke the window.”

Here the complex NP in the RDP serves to provide an antecedent for the following pronoun, é. The LDP serves broadly the same function, except on the left edge.

Perhaps more intriguing is looking for motivation for a Pre-Core slot or a Post-core slot in Irish. Irish is a right-branching, VO language, and as such Pre-Core would be the less marked of the two should either be motivated in the language. As it turns out, this is the case: there is a clear PrCS. Irish is like several other IE languages in requiring WH-words to be fronted. Since there is no intonation break, but a clear clause initial ‘slot’ is observed, we say this is the pre-core slot. Several sources (see McClosky 1979) cite Irish as having obligatory multiple WH-fronting, which is somewhat typologically unusual. Typically, other languages which allow multiple wh-fronting also have scrambling, such as Bulgarian (Boskovic 2002), but Irish has relatively rigid word order within the clause. The phenomenon does merit attention here, despite the fact that it seems to be a point of contention amongst informants, with a number preferring a single, obligatorily fronted wh-word as in (5) over multiple wh-fronting, seen in (4):

(4) Cé cad a thug dó? (McCloskey 1979)
who what PRT gave to.3SG.MASC
“Who gave what to him?”

(5) Cé a thug cad du/it/dó?
who PRT gave what to you/him (Donnla Nic-Gearailt, p.c.)
“Who gave what to you/him?”

In the case where there are multiple wh-frontings, we would like to say that they are fronted to the PrCS, as they are pronounced without an intonation break (which would suggest a left-detached phrase). The PrCS also happily hosts fronted NPs or PPs, sans intonation break:

(6) Súil ní rabhadar ag tóigeáil de.
eye NEG were.they at take.VN of.3SG
“An eye they weren’t taking off him.”
So while Irish clearly makes room for a PrCS in its grammar, its behavior is somewhat aberrant in terms of the size of the constituents which it permits. The Irish PrCS either allows complex items to be inserted into it, or is it possible to construct a sort of conjoined PrCS of the same sort of juncture exhibited in other levels of the LSC, such as nuclear juncture in the case of complex causatives in Mandarin and French (VVLP 1997).

The second of the two non-universal LSC positions is the post-core slot (PoCS), and there is no strong phenomenon in Irish which would motivate a post-core slot. There is a phenomenon by which pronouns and prepositional pronouns (inflected prepositions) are moved to the end of the sentence, as below (from O’Siadhail 1989):

(7)  a.  Bhrís sé an chathaoir leis an ord aréir  
     broke he the chair with.3SG the hammer last.night  
     “He broke the chair with a hammer last night”
     a’. Bhrís sé leis an ord aréir í  
     “He broke it with a hammer last night”

But this phenomenon doesn’t by itself necessitate a PoCS- it could just as well be a case of slight scrambling. Sentences like the following make that a likely possibility (O’Siadhail 210):

(8)  Chuala mé raite é go mbíodh sé ann  
     heard me spoken it CLM be.PAST.HAB he there  
     Chuala mé é raite go mbíodh sé ann  
     “I heard it said that he used to be there.”  

The PrCS and the PoCS come from the top-most CLAUSE node. The structures above are clausal subordination- a CLAUSE asymmetrically linked under the highest CLAUSE node. Looking at the behavior of documented PrCS movement, the reason for this importance is clear. First regard these examples:

(9)  a.  He is sure that Máire will come tomorrow  
     b. Who is he sure ___ will come tomorrow?  
     c. #He is sure that who will come tomorrow?
In a roughly similar clausal subordination structure in English, the movement to PrCS from the embedded clause goes to the PrCS linked under the highest CLAUSE node—not to any PrCS licensed by a lower CLAUSE node. In (9.c), certain contextual circumstances are required for this sentence to be felicitous, but these same conditions would license WH in situ, such as He is sure that Máire will come when? Turning our attention back to the Irish example above, we would expect a true PoCS movement to go to the PoCS following the highest CLAUSE node, at the very end of the utterance in question. But that is shown to be ungrammatical here, but rather the scrambling seems to be allowed core internally. Since the PoCS, like the PoCS, is a privileged structural position that is invariant with respect to the content of the core to which it adjoins, the PoCS is not convincingly motivated in Irish.

2.1 Irish Syntax

Irish is typologically classified as a VSO language, and this is the canonical order of elements shown. A comprehensive synopsis of Irish grammar won’t be found here, but rather a quick overview of some salient points will be pointed out here, to facilitate later discussions of more difficult phenomena (all examples from Domhnalláin):

(10) Is dócha go bhfuil an obair go léir déanta agat?
    COP likely CLM is.DEP the work.VN to all done.VA at.2SG
    “I suppose you have all the work done?”

(11) Rith an madra salach isteach sa teach
    run.PAST the dog dirty inside the house
    “The dirty dog ran inside the house”

(12) Chonaic mé an bhanaltra-sa ag imeacht léi
    see.PAST I the nurse.EMP at leave.VN with.3SG.FEM
    “I saw the nurse (not the doctor) leaving”

In (11) the basic VSO order is seen. Shown in both (10) and (12) are the ‘verbal noun’ forms of the verb, whose behavior will be looked at in depth later on. In the two aforementioned sentences are examples of ‘inflected prepositions’ as well, which consist of a prepositional element and a pronominal marking. This isn’t a case of head-marking, but in at least some cases
it appears to be at least partially head-marking in nature: the string “le an madra (with the dog) is ungrammatical, and instead the form leis an madra (with 3SG.MASC the dog) must be used. The bearing this has on our analysis will be taken up in the discussion of adpositional phrases. (11) serves to characterize Irish in terms of Talmy’s (1985) satellite-framed/verb framed language typology: here it is, like English, a satellite-framed language. This will have consequences in our discussion of Irish logical structure and semantics. Also seen in (11) is the preposition marking the verbal noun for aspect (here, ag marks progressive), a phenomenon pertinent to our discussion of the verbal noun. Lastly, in (11) there is a clitic –sa which attracts focus to its host banaltra, one of several ‘grades’ of Irish focus structure that will be touched upon later. Irish, as seen above, is a largely predicate initial language (though some important deviations will be discussed later), so we can state a very general Irish specific linear precedence rule:

\[
\text{NUC} > \text{XP}^* 
\]

Our discussion is now going to focus on how certain, more interesting features of Irish syntax operate within RRG.

### 2.2 Layered Structures Below the Clause level:

RRG posits LS’s not only for the sentence level, but for subclausal constituents such as adpositional phrases and noun phrases. Adpositional phrases in Irish have some interesting departures from the IE model. First off, they can be inflected for person and number, as in the following paradigm:

(13) \begin{align*}
\text{agam} & \quad \text{‘at me’} \\
\text{agat} & \quad \text{‘at you’} \\
\text{ag} & \quad \text{‘at’}
\end{align*}

These are not analyzed as head-marking style prepositions. The “le an madra / leis an madra issue mentioned above is far too isolated to warrant such a classification (it only happens
with definite NPs and agrees only in person, and only with said preposition). Most prepositions show no such behavior, and *ag* is one such preposition: "*aige an madra / ag an madra*. There is one instance in which is does, the set (and assumed to be moribund) phrase *cé acu* ‘which of..’ exhibits the same behavior as *leis: cé acu na daltaí* ‘which of the students.’ Therefore the LS of these adpositional phrases posits the pronominal conflations here to be Core-level arguments within the AdP, and they are merely realized phonologically as the above forms. In fact, Acquaviva (2000) fields an attempt at breaking each prepositional paradigm down into a prepositional core and a uniform set of endings with some degree of success. These facts lead us to posit the pronominal components as NP nodes rather than head marking PRO nodes, showing variation from more common types of prepositional phrases mostly in their phonetic realizations.

One final interesting aside about the notion of the PP in Irish is to be made. In RRG there is a clear difference between those prepositions that predicate, adding semantic content to the clause, and those which aren’t, which are little more than case markers. It was said above that there is a process in Irish which moves a pronoun (or prepositional pronoun) to the end of the sentence, giving sentences like:

(14)   a. *Bhí an leabhar ag m’athair ar an mbóthar inné*
       was the book at my.dad on the road yesterday
       “My dad had the book on the road yesterday.”
       b. *Bhí an leabhar ar an mbóthar inné aige*
       “He had the book on the road yesterday.”

In the sentences above, the preposition *ag* is clearly predicative. This pronoun shifting of prepositions does not occur, however, in those sentences where O’Siadhail describes the verb is “so closely connected with the following preposition that the whole must be considered as a complex,” (O’Siadhail 208). Seen below:

(15)   a. *Thug mé leabhair dhuit ar an mbóthar inné*
       gave me book to.2SG on the road yesterday
       “I gave the book to you on the road yesterday.”

In sentences such as above, the pronoun *dhuit* is not moved as *aige* was in (14) above. In RRG these would be non-predicating prepositions, a result of the linking algorithm. So
discussing these two very different types of prepositions has a certain convenience in the discussion of Irish here: the predicative prepositions are subject to a different distribution than their ‘case-marking’ compatriots.

Noun Phrases are where we start to take an interesting turn in Irish syntax. This is notably in the form of verbal nouns, which will be discussed in depth after Irish semantics have been introduced, so as to facilitate a more complete picture of the phenomenon at hand.

2.3 Grammatical Relations in Irish

When attempting to determine the grammatical relations of a language (if any), one can look at coding properties or behavioral properties of the language to ascertain the relations (VVLP 250). The canonical coding property is verb agreement, but this diagnostic won’t apply to Irish effectively. Irish ‘verb agreement’ is little more than pronominal suffixes on the verb stem- in other words, verb agreement and independent pronouns are mutually exclusive. So in our investigation here, we will look at the behavioral properties of the Irish clause: we will be looking for restricted neutralizations (After VVLP), and the distributions thereof to ascertain what kind of system Irish uses. Using a standard diagnostic adapted from VVLP (252), we are going to look at the interplay of syntax and semantics in the matrix coding of arguments of dependant cores:

(16)  a. *Ba mhaith le Pádraig ___ a rith sa ngáirdín*
     “Pat would like to run in the garden”

b. *Ba mhaith le Pádraig, _____, prátai a ithe*
   “Pat would like to eat potatoes”

c. *Ba mhaith le Pádraig, _____, a bheith níos airde*
   “Pat would like to be taller”

d. *Níor mhaith le Pádraig, na gardaí __, a marú*
   “Pat wouldn’t like to kill the garda.”
   “Pat wouldn’t like the garda to kill ___”

e. *Níor mhaith le Pádraig, _____, a bheith marú ag na gardaí*
   “Pat wouldn’t like to be killed by the garda”

f. *Ba mhaith le Pádraig Aoife na prátaí a ithe*
   “Pat would like Aoife to eat the potatoes”
As seen in (16.f), a fully specified complement clause in Irish exhibits SOV word order (though not all complement clauses do, as we will see), with the two arguments preceding a particle *a* and the “verbal noun” form. Like in VVLP, (16 a, b) have actor controllers, (16 c, d) have undergoer controllers. But (16.d) is ungrammatical with the intended reading “*Pat wouldn’t like the garda to kill (him)*”, instead it must have the reading “*Pat wouldn’t like to kill the garda.*” But as seen in the original test, the only different between (16 d) and (16 e) is a syntactic one: the semantic roles are the same. There is a neutralization between actor and undergoer, thus, and it is restricted, because only syntactic subjects exhibit this behavior—objects do not participate in this. This is a brief analogue of the canonical tests given in VVLP, and they serve our purpose in so far as to show that Irish is like the IE model in having restricted neutralizations. The notion of a PSA is thus warranted. The Privileged Syntactic Argument (cf. Van Valin, forthcoming) of the clause can be [S], as in (16.a, c), it can be [A], as in (16 b), and it can be [d-S], as in (16 e). It is restricted in that only the “S” of the SOV complement clause can act as a pivot, and it is a neutralization in that it ignores semantic roles— in a classically accusative pattern, the pivot in an Irish complement clause is the PSA only, and is either [S], [A], or [d-S].

Irish departs from this standard IE models in several interesting ways. First we will look at the notion of ergativity in Irish, which is seen in one common construction—what Noonan (1990) calls the “participial clauses” and Nolan (2001) calls “perfective passive.” Here the PSA may only be realized as the [S] or [U]. Take for example:

(17)  
   a. *Tá an fhuinneog* [S] _briste._  
       is the window    broken  
       “The window is broken.”  
   b. *Tá an fhuinneog* [U] _briste agam_ [A]  
       at.1SG  
       “[A] have broken the window”

Noonan analyzes these as evidence of at least some limited ergativity in Irish. This requires some qualification. Comrie (1978) examines at length the manifestations of ergativity through a reasonably wide typological lens. This would be, according to his classification of
ergative systems, “lexical” ergativity, different from syntactic or morphological ergative systems. He remarks that it is likely the case that all languages experience a small amount of ergativity, at least in this lexical sense, and that furthermore in the typical IE model ergativity is limited to these constructions. Also, it is worth mentioning that this construction is only in Irish syntax in showing this distribution. Perhaps, then, Nolan’s characterization of this is more accurate- it is more likely a passive voice-modulation construction than a non-modulated construction preferring an ergative system. Indeed, there have been many theoretical approaches to ergativity that liken it to normalized passive constructions (Matthew Dryer, p.c.). Furthermore, there is a conspicuous lack of an antipassive here, whereby the [A] may be derived as the PSA. Instead, to render such a distribution of semantic roles and PSA-ood, the normal active voice would be used: Bhris mé an fhuiinneog, quite literally “I broke the window.” (17.a) above also has a perfective reading “The window has been broken.” These facts suggest that it could in all likelihood be a derived subject with the oblique actor argument suppressed.

In another, more interesting departure from our canonical IE clause, Irish has a number of verbs and constructions which can be quite tricky for this theory of grammatical relations. These are what Noonan (1990) calls “subject-less” clauses. Take for example:

(18) a. Tá orm mo bhia a íthe
    is on.1SG my food  PRT eat.VN
    “I have to eat my food.”
b. Mhédaigh (i gconaí) ar mo shaibreas tréis mo ghuí-se
    increase.PAST always on  my  wealth    after my prayer
    “My wealth (always) increased after my prayer.”
c. Chuaigh air aici
    go.PAST on.3SG.MASC at.3SG.FEM
    “She defeated him.”

These examples all are alike in one key aspect: they all lack a PSA. The arguments in these clauses are all rendered as oblique core arguments, and they are not optional- removing one does change the meaning, as opposed to the oblique actor expressions seen in the perfective passive above. More importantly, however, these arguments seem to be exempt from
the perks of PSA-hood, at least in several key ways. We just saw the restricted neutralization in the pivot of a complement clause, and were able to ascertain that was the PSA. None of the arguments in the clauses above may act as a pivot in order to have co-reference with an argument in the matrix clause, the argument must be repeated:

(19)  
   a. Chuaigh air aici.  
       “She defeated him.”
   b. Fuair sí an ceann is fearr air  
       found she the head COP best on.3SG.MASC  
       “She defeated him.”
   c. Ba mhaith léi, dul aici air  
       “She would like (her) to defeat him.”
   d. Ba mhaith léi __ an ceann is fearr a fáil air  
       “She would like to defeat him”
   e. Bhuail Martina Brian agus chuaigh aici air  
       hit and
       “Martina hit Brian and (she) defeated him.”
   f. Bhuail Martina, Brian agus fuair __, an ceann is fearr air.  
       “Martina hit Brian and defeated him.”

This makes an apt demonstration of the necessity for having a syntactically determined PSA: the unavailability of gapping in the complement clauses in the examples given above is not a function of any semantics. Indeed, structures with similar meaning but different argument structure readily permit them. The role of the PSA is thus not reducible to its role in the semantics, and

In (19 a,b) we can see two ways of rendering roughly the same content: a predicate something like \texttt{defeat}'(x,y). The first of the two is the PSA-less rendering, with two oblique core arguments (and curiously enough, a VOS, or more accurately VUA, word order), and the second is an idiomatic rendering where the actor argument in the LS is realized as the PSA (which is realized as the subjective pronoun \texttt{sí}). While we don’t want to say that (19.a) and (19.b) mean the same thing, is it reasonable to assume that they have a similar LS in the sense that they suggest an event with the same relation of an actor to an undergoer, and the same event easily could be described by one or the other. Whether or not these are the actor and undergoer macroroles in the sense of RRG in the case of (19.a) will be taken up later on. What these examples show is
that the PSA in (19.b) can act as the pivot in the complement clause and the coordinated clause, whereas its analogue in the PSA-less clause (19.a) has no such properties. These are the properties which Noonan (1990) associates with what he calls the “subject,” referring to the notion of traditional subject as it applies to Irish. These same properties are those which make the actor of (19.a) a PSA, while the actor of (19.b) cannot be called as such.

So far we want to say that we have observed a restricted neutralization in Irish. We have seen [A], [S], and [d-S] alternately fill this restricted and neutralized position, which means that Irish has variable syntactic pivots (VVLP 281), like English and the vast majority of its IE brethren. However, we also have seen a pattern which stands in stark contrast to this, that of the so-called subject-less clauses. This pattern is also different from that which VVLP (259) shows us, the semantic pivot and controller system of Acehnese, free of grammatical relations. Unlike Acehnese and other PSA governed constructions, there is simply no pivot allowed here- semantic or otherwise. An attractive conclusion to be reached from these is that these clauses simply lack a PSA altogether. VVLP defines the Privileged Syntactic Argument as a cover term for syntactic controllers and pivots in a given construction- these subject-less clauses lack this. Acehnese too lacks the standard sort of PSA, so lacking a PSA is not unheard of. Sounds simple enough, but what sort of implications does it have for RRG? The notions of undergoer and actor, as well as the selection of PSA, must come under close scrutiny here. The table below delineates the four logical possibilities for the interplay of macroroles and PSA:

| [-] MR [-] PSA: Chuaigh air aici | [+] MR [-] PSA: Gopnyan geu-tém jak | [+] MR [+]: Peim hefur alltaf pótt... | [+] MR [+]: Bhual Martina Brian |

Table 1: Macrorole vs. PSA distribution

While the large bulk of sentences in the world’s languages will ostensibly include both Macro-roles and PSA-hood, VVLP shows the independence of the two notions. The Acehnese examples have macroroles, these are the semantic requirements for controller- and pivot-hood,
and as such they lack the syntactically motivated notion of a PSA. The non-macrorole PSA too is taken from VVLP (357), as an example of Icelandic “quirky case.” In the example above, Peim *hefur alltaf pótt* (they.DAT have.3SG always thought) the verb *pótt* is said to be M-Atransitive, not having any macroroles to assign, which explains the distribution of the dative case. However, *Peim* is still a PSA despite its lack of a macrorole (VVLP later shows how it can act as a pivot, etc.) The co-existence of a macrole and a PSA is the canonical and most common pattern we see, and most clauses will follow this pattern in Irish (as well as English, French, Dyirbal, etc.) What is new is the seeming existence of a non-PSA, non-macrorole construction. Given the typology of the interaction of these two notions given above, this fourth possibility is not completely unreasonable. Let us motivate this classification of said clauses in the table above. A construction like *Chuaigh air aici* can be said to lack macroroles because of the distribution of pronouns. Irish, like many IE languages, maintains a distinction between subjective and objective pronouns. From an RRG point of view, this distribution is accounted for by the use of macroroles. Generally speaking, in an M-transitive clause, the actor will take the nominative case, and the undergoer, the accusative, such as the Irish *Bhuail sí*<sub>NOM</sub> é<sub>ACC</sub> ‘She hit him’ (cf. *Bhuail Martina Brian*). In general, the RRG account for oblique core arguments such as *aici* or *Peim* in the examples above is explained by their lack of a macrorole, and rules for case (or preposition, as per the language specific rules) assignment make reference directly to their position in the LS, with no macrorole intermediary. So these do not behave like they have macroroles, and we want to say that the selection of the argument marking simply makes reference to naked LS. For instance, the sentence *Chuaigh air aici* would have a representation like *do*’(3sg.FEM, [defeat’(3sg.FEM, 3sg.MASC)]) & BECOME *defeated*’(3sg.MASC), and the selection principle for the preposition *ag* (*aici*) would make reference to its object being the first argument of a *do*’(x,y) predicate (canonically the actor place, if there were macroroles in this particular representation.) Indeed, we find that the preposition *ag* usually marks the actor macrorole in obliques (i.e. passive constructions) and thus a rule that made reference to the first argument in an activity predicate would not be far-fetched at all. Lastly, the required ordering of arguments in
the clauses in question often departs from the normal. *Chuaigh air aici* would be very broadly classified a VOS clause, as opposed to the standard Irish VSO, or SOV for complement clauses. So there is reasonable language-internal evidence for saying that these constructions behave as if they did not have macroroles.

The lack of a macrorole does not beget the inability to act as the PSA. VVLP shows us this in the Icelandic example given below:

(20)  
a. peír, sjá stúlkuna og pró, finnst hún álitleg
they see girl-the and find her attractive
“They see the girl and ____ find her attractive.”

The gapped pronoun in (20) above would be in the dative case. The RRG account for this is its verb’s M-intransitivity- *finnst* has but one macrorole to give, and as such, gives it to the undergoer (as it has, assumedly, no activity predicate). This is, however, independent of PSA selection, and PSA selection is business as usual. It just so happens that the dative non-macrorole argument gets the privilege. It still functions as the syntactic pivot. We have seen Irish to have grammatical relations, but we consistently see these “prepositional” verbs failing to take PSA-hood in every instance where they would be expected to be the pivot. However, before conclusions are too hastily drawn, there is also another behavior of theirs which complicates our tentative classification of them as PSA-less clauses: they can indeed act as controllers, as seen in:

(21)  
a. *Chuaigh air aici, agus chuaigh ___*, abhaile.
and went homewards
“She defeated him and ____ went home.”

While reported as being one of the least elegant ways possible of rendering this concept, the sentence above is nevertheless a grammatical utterance in Irish. The gapped pronoun (which would be *sI*) is controlled by the oblique core argument pronoun *aici* (at-her), and no other reading is allowed. This is a curious twist. We have already classified them, convincingly so, as being M-atransitive and lacking macroroles. This logically precludes the possibility of the
Acehnese-style semantic pivot and controller system, for this system makes reference to the macroroles. It is the macroroles to which the semantic pivots and controllers make reference, not to the LS of a given verb, and as such, they are a requirement for a semantic pivot and controller system ala Acehnese. We have macrorole-less constructions with controllers but which cannot act as pivots, whereas in the attested examples of macrorole-less PSA-hood in VVLP (Icelandic “quirky case”) they can act as both controllers and pivots, as if they were any other PSA in the grammar of Icelandic.

At this juncture it is extremely useful to bring into play notions put forward by Bickel (2003), where he contrasts controller properties of Nepali and Belhare, and from this introduces the notions of case-sensitivity and case-insensitivity. The meanings of these notions is fairly transparent- the one crucially makes reference to the syntactic “valence frame,” whereas the other refers strictly “to the semantic argument structure and to prominence hierarchies defined there.” These notions are immediately useful in classifying the behavior of these controllers and pivots. The Icelandic example given in (20) above could be said to have a case-insensitive pivot (and if finnst formed the matrix clause, we would have a case-insensitive controller). This is because its syntactic status is not the canonical nominative case, but rather the “quirky” dative case. The lack of macroroles defined for the lexical verb to which it belongs is responsible for its syntactic queerness, but as stated above the macrorole process and the PSA selection process can be quite independent of each other, and so by referencing the semantic LS of the verb the PSA can be determined. It is said to be case insensitive because despite its syntactic handicap, it is not at all hindered in fulfilling its duties as PSA. Bearing this in mind, the solution to the Irish data at hand becomes clear. The PSA of a given macrorole-less (and thusly syntactically handicapped) clause is case insensitive in the controller function, but clearly case sensitive in a pivot position. Since RRG is a theory that is very considerate of the status of a construction within a given language, specifying this is rather easy:
<table>
<thead>
<tr>
<th>Icelandic</th>
<th>Irish</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controller</strong></td>
<td>Case-insensitive</td>
</tr>
<tr>
<td><strong>Pivot</strong></td>
<td>Case-insensitive</td>
</tr>
</tbody>
</table>

Table 2: Case-sensitivity in M-atransitive constructions.

One last loose end remains to be tied in this short discussion. Calling the controllers in the prepositional sentences like the ones given in (19) above privileged syntactic arguments is tricky business, especially since as was mentioned above they do not look like normal clauses in their ordering of constituents (and Irish is normally position sensitive in regards to the syntax of a transitive clause). Why not just label them semantic controllers? Functionally, the distinction matters little. A case-insensitive PSA, selected by direct reference to the LS and following a different syntactic framing scheme would in essence be a semantic controller- its PSA-hood is based solely on its position in the logical structure, and not on any other more visible features of PSA-hood. However the notions of semantic controllers and pivots would, in the RRG framework, crucially make reference to the semantic macroroles which we are here claiming to be absent, in order to explain the distribution of pronouns and other matters delineated above. These notions of actor and undergoer are highly useful in explaining ungrammaticality in sentences like the Acehnese sentence below, a language which as was stated relies only on semantic macroroles without grammatical relations:

(22) a. *Gopnyan geu-tém [rhêt]
    3SG          3-want fall
    “(S)he wants ___ to fall”

Where VVLP explains the ungrammaticality of said sentence as a mismatch between the actor macrorole of the controller and the undergoer macrorole of the pivot- the actor controller cannot control an undergoer pivot. Here, without making reference to macroroles, this analysis would not be possible. So there is adequate evidence from overt syntactic phenoma to support the positing of macroroles, as well as the PSA, but these constructions here no not readily fall into a
description from either end. The notions of case-sensitivity and case-insensitivity are extremely important in being able to capture their behavior within the RRG system.

2.4 The Verbal Noun- Nominalized Predicates:

RRG uses uniform logical structures to capture the semantic meaning of a given utterance, and it is from these that the syntax is drawn. This is an attractive prospect from any side- it stands to reason that a given meaning, irrespective of the language encoding it, should in all likelihood have the same sort of representation in a purely semantic sense. The utility of the RRG LS in the Irish discussion, however, helps to account for one of the most salient features of Irish syntax: the verbal noun.

The basic VN construction can be seen below:

(23) Tá Séamus ag léamh leabhair (*leabhar)
be at read.VN book.GEN book.ACC
“James is reading a book.”

Here, the VN is syntactically a nominal: it licenses genitive case for its object argument, and aspect is marked by the preposition ag (and all of these pre-verbal noun markers are prepositions, each marking different aspects). There are even several verbal nouns that can be used in the construction above, but cannot act as verbs otherwise:

(24) a. Táim ag feadaí
is.1SG at whistling
“I'm whistling.”

b. *D’headaí mé
whistle.PAST 1SG
“I whistled.”

Above, the plain nominal can act as the predicating verbal noun, but cannot act like other verbs and take verbal inflection and position (here an initial mutation which indicates past tense.) But semantically speaking, it is the VN that determines that syntactic valency for the clause, and provides the major predicating force (Tá would head an AUX node, a required part of the
construction) as well as (assumedly) the macrorole and PSA distribution for the clause. One last note of the distribution of the verbal noun is that, from a skeptically descriptive viewpoint, we want to say that they occur exclusively in these aspect constructions. There are many uses for the “verbal noun” according to any traditional Irish grammar, but only these preposition-marked constructions act like true nominals, taking genitives and allowing non-verbal nominals. Take for instance:

(26)   a. Tá Séamus ag léamh_{VN} leabhair_{GEN}
       “Séamus is reading a book.”
   b. Ba mhaith le Séamus leabhar_{NOM} a léamh_{VN}
       “Séamus would like to read a book.”

As the examples above show, despite the identical surface forms of the “verbal noun” in these two constructions, only one gives us any direct motivation for classifying it as nominal in nature. The other one will still be called the verbal noun form (in deference to the Irish grammatical tradition), but for the rest of this discussion, only the truly nominalized aspectual forms will be dealt with, and called for lack of a better term the “verbal noun proper.” The LS for the Irish sentence, as well as the English sentence, given in (26) above would be do’(Séamus, [read’Séamus, leabhar]) & BECOME read’(leabhar), an active accomplishment predicate. The utility of the RRG LS here is that it makes the attractive, and intuitive, claim that deverbal nominals have the exact same logical structure as their verbal counterparts (VVLP 186), but without requiring us to make the theoretically burdensome claim that the verbal nominal is derived “on-line” from an underlying verbal form (Nunes 1993). This also neatly accounts for the fact that, as Nunes (1993) points out, nominals seem to have access to the prepositions associated with a given verb (cf. James presented Brian with the award and the presentation of Brian with the award.) Similar LS’s beget similar prepositional distribution. Furthermore, being that nominals are parallel with their verbal and clausal counterparts in lexical representation, it stands to reason that the same principles that govern non-predicating preposition distribution and case assignment at
the clause level operate here, assigning prepositions and, here in Irish, the genitive case. The linking of the arguments of the verbal nominal will be discussed in turn.

The basic properties of the Irish verbal noun have already been discussed: the syntactically nominal construction that predicates and determines the syntactic valence for a given clause that it contains. We can now make a very rudimentary statement about these constructions: as the predicating elements, they are in the domain of the nucleus. As it was pointed out above, the semantic representations of a verb-headed NUC and a deverbal nominal are the same, so in essence it is the same semantic representation in the nucleus.

In RRG, the nominal head of an NP (in the NUC_N) heads a REF node (instead of say, the PRED node underneath the NUC). The theoretical impetus for designating clausal NUC as PRED, and nominal NUC as REF, is to capture the fact that clausal NUCs predicate clauses, and that nominals are in the vast majority referring expressions and hence designated as ‘REF’.

However, do we want to say that these nominals are different, somehow, from REF nominals? Let’s look at other nuclear nominals, those found in attributive constructions like below:

(27) a. Is dochúir mé
    COP doctor me
    “I am a doctor”

As a non-equative (Van Valin maintains that equatives are the only true predicative uses of copular elements), the nominal dochúir would find itself under the main, predicating NUC. The use of dochúir here is not, however, referential in the strict semantic sense (Saeed 2003)- a referential use would give us an equative, and the NUC would thus be occupied by the copula. Referential NPs thus do not usually find themselves in the nucleus. So we can convincingly say that nominals do happily occupy the NUC in non-referential functions. What is tricky about these, however, is that unlike (#) above, it is not a “bare” nominal in the NUC. We have to account for the fact that, along with being nominalized with the predicating verbal noun to form one constituent, the argument of the nominal must be in the NUC along with the verbal noun, and that this argument can indeed be a fully referential NP. This means what we canonically know as a
core argument must be embedded in the nucleus. In VVLP (27), the core is defined as being the syntactic realization of what is semantically the arguments that complete the LS of a given predicking element. The explanation we’ve been developing so far of the verbal noun, which requires that the genitive argument of such a nominal co-occupies the NUC, runs in some sense contrary to this definition of what it means to be a core argument:

$$\begin{array}{c}
(28) \quad \text{a. CORE} \\
\quad \text{NUC} \\
\quad \text{AUX} \\
\quad \text{CORE}_{\text{NP}} \\
\quad \text{NUC}_{\text{NP}} \\
\quad \text{NP} \\
\quad \text{NP} \\
\quad \text{Is} \\
\quad \text{dochtúirmé} \\
\quad \text{N} \\
\quad \text{N} \\
\end{array}$$

$$\begin{array}{c}
(28) \quad \text{b. CORE} \\
\quad \text{NUC} \\
\quad \text{PRED} \\
\quad \text{NP} \\
\quad \text{NP} \\
\quad \text{CORE}_{\text{NP}} \\
\quad \text{NUC}_{\text{NP}} \\
\quad \text{NP} \\
\quad \text{PRED} \\
\quad \text{PRO} \\
\quad \text{NP} \\
\quad \text{NP} \\
\quad \text{Is} \\
\quad \text{dochtúirmé} \\
\quad \text{N} \\
\quad \text{N} \\
\end{array}$$

$Tá Séamus ag léamh leabhair$

The abbreviated RRG LSC diagrams above render the asymmetries in the nominal structures quite plain. The argument must be contained in the NUC to capture the fact that the verbal nominal and its argument form one NP, and that this NP is the predcating, or nuclear, element in the clause. This is not completely out of left field, however, and we can see this closely resembles a better-known phenomenon, whereby arguments (and not surprisingly always undergoer arguments, at that) are realized in the NUC of a given clause: the process of noun incorporation. This is a process whereby a nominal is phonologically and syntactically “incorporated” into the verb or predcating element of a sentence, in the usual case. Along with this overt change in surface formation, it is assumed that there are changes in the underlying syntactic framework as well. The point which is relevant to our discussion here is that the change in syntactic underpinnings which Van Valin links to this type of argument shifting parallel those which we predicted for the Irish verbal noun constructions: in both cases, an argument is realized in an
unusual position underneath the NUC, instead of occupying the core, its expected position. Below
is an example from Greenlandic (VVLP 65) of a noun-incorporation process seen in an
(abbreviated) LSC, with the NP representing the undergoer semantic argument being realized
under NUC:

(29)  
<table>
<thead>
<tr>
<th></th>
<th>CORE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUC ARG</td>
</tr>
<tr>
<td>NP</td>
<td>PRED PRO</td>
</tr>
<tr>
<td>V</td>
<td></td>
</tr>
</tbody>
</table>

\textit{Marlunnik ammassat – tor - punga}  
\textit{Marluk-nik ammassak-tor-punga}  
two-INSTpl sardine-eat-1sgINDIC  
“I ate two sardines”

Since the LSC above is an abbreviated version, it lacks the nodes above CORE, and it
lacks the LSC of the NP of \textit{ammassak}. However, it is a fully privileged NP, which in RRG means it
would have the full set of operators and so on, despite its incorporated status. This accounts for
the operator in the Greenlandic example above, which can still qualify the NP despite its new
syntactic position simply by acting as an operator to the pertinent levels of the fully detailed NP
structure. It is no surprise then that the objects of verbal nominals in Irish can be qualified and
have referential functions like other nouns, because they are expected to have the same NP
layers to accept the operators. In fact, structurally, the Irish verbal noun aspect constructions
differ from these noun-incorporation structures in only one key aspect (with respect to their
respective LSCs): the Irish nominals are verbal elements nominalized to form an NP complex
which predicates, whereas in Greenlandic above, the nominal elements are joined with the verb
instead. In short, Irish has a predicking NP whereas Greenlandic does not. This being the only
difference is really only a trivial matter to resolve in the LSC.
A more interesting matter is the internal structure of these NPs. Nunes (1993) pioneered the concept of argument linking in “derived” nominals (derived here, again, does not imply any sort of on-line derivation.) In her classification of the types of derived nominals, she makes a split between process and result VNs, which are just as their names intuitively describe: nominals which describe a process, and those which describe a result. A given Irish verbal noun is almost always a result, according to her tests: they can pluralize, can take the demonstrative that, and reject modifiers like constant:

(30) a. *na fásanna (*minic) sin
   the growings frequent that
   “those (frequent) growings”

Above, we see a conflation of all three tests in one noun phrase. However, the noun phrase above is conspicuously not part of the aspect constructions that we are discussing. In fact, we find that in the context of the verbal noun proper construction in question, the opposite is true— in this case the VN cannot be pluralized, it is extremely semantically bizarre (and borderline ungrammatical) to qualify it with the demonstrative sin ‘that,’ and it can take the modifier minic:

(31) a. Bíonn an buachaill sin ag imirt go minic
   “That boy is frequently playing.”

Nunes warns against taking these tests as foolproof, but there is no reason to be suspicious of the results they give us. Instinctively, one might expect nominals that predicate a progressive construction to be process, rather than result nominals.

Nunes also makes an important generalization of the coding of arguments on nominals: they are inherently intransitive, and no matter how many macroroles a given deverbal may have, only one is realized as a direct NP core argument. This is certainly borne out in the Irish data, precluding the possibility of forms like “Bhí ag imirt chartáibh na mbuachaillí, with both macroroles realized as genitive core NP arguments. Nunes remarks that there is a general “Direct-Core-Argument Linking Hierarchy” in English deverbal nominals: U > A. This means that the coding of direct core nominal arguments follows an ergative patterning. Irish is like English in this respect,
but only in terms of result nominals, which aren’t those in question here. The verbal noun proper, those process nominals in question, are similar insofar as we see a preference for undergoer linking to the nominal. But to say that it follows the ergative hierarchy is ignoring an important fact of their distribution: they have two macroroles to give, and they also have PSA selection to satisfy. We have shown Irish to be accusative in this respect, with the Linking Hierarchy: A > U. Thus we find in M-intransitive clauses, that the Macrorole [S] argument will be realized as the PSA, and that it is only in M-transitive clauses with an extra core argument that the possibility of being linked to the nominal is raised, and it is this fact of distribution which logically dictates that only undergoer arguments will ever be linked to the nominal in these aspect constructions, for [A] and [U] arguments will always be chosen, as per the accusative hierarchy given above, as the PSA. Again it is important to note that this distribution is intrinsically linked to their status as predicating elements bearing the responsibility of providing a PSA. In result nominals in non-predicating positions, the ergative distribution is perfectly fine as is described by Nunes, seen in simple NPs such as \textit{an bás an bhuaclála} \textit{\text{GEN[S]}} \text{‘the death of the boy,’} and \textit{an fáil an bhuaclála} \textit{\text{GEN[U]}/*\text{chailín}\text{\text{GEN[A]}} \text{‘the finding of the boy’} (cf. \textit{Fuair an cailín an buachaill} \text{‘the girl found the boy.’}), and this is a cross-linguistic norm (Van Valin, p.c.). Even activity predicates, which Nunes points out in English show accusative patterning in that it is the actor argument which is preferred for core argument-hood, are subject to the same restriction in Irish, whereby after PSA selection only an undergoer argument is available for realization as a nominal core argument. Positing a selection linking hierarchy for these core arguments in nominals is thus almost superfluous in these verbal noun proper constructions, as they are subject to the hierarchies of PSA selection in Irish, a much broader process in the language.

RRG allows us a great flexibility here, in recognizing the importance of the construction: a construction being “any syntactic pattern which is assigned one or more conventional functions in a language,” (Fillmore 1988). We want to say that these verbal noun clauses are patterns, they have conventional functions, and they are thus grammatical constructions. So we can assign to them constructional templates which would be part of a speaker’s grammar, giving them a ‘road-
map’ as they go from semantics to syntax. The verbal noun proper clause, such as *Tá mé ag léamh leabhair* ‘I’m reading a book,’ would thus have a constructional template such as the one below:

**CONSTRUCTION:** Irish Finite Verbal Noun Construction

**SYNTAX:**
- Templates: Irish VN Core (See below)
- PSA: Default
- Linking: Undergoer = incorporated into nominalized structure

**MORPHOLOGY:**
- Verb: Nominalized
- Aux: *Bí*

**SEMANTICS:**
- Necessary to express aspect on a finite construction. Triggered by a semantic representation with operators acting on the aspect level: i.e. 
  \(<_{\text{ASP}} \text{PROG <do'(Séamus, ...)}}>\)

**PRAGMATIC:**
- IF: Unspecified
- FS: Default

Figure 1: Irish Verbal Noun Proper Construction

Basically, what the above template specifies is that in order to express aspect on an Irish finite clause, the verb and undergoer must be nominalized together. Nominalizing the undergoer accounts for the distribution of the genitive realization of both full NPs and pronominal arguments. It is necessary to specify a specific template for this construction, as RRG draws on a mental store of constructional templates that combine in various ways to give rise to the surface syntax. The template would be:

(32) a. CORE
     NUC ARG
As VVLP notes, the construction description given above is not a formalism by any stretch. Rather, it is just a cursory run-through of the salient aspects of a given construction. The core template given above, too, is merely a descriptive tool— it is the “skeleton” onto which an Irish speaker maps the LS in a semantics to syntax linking process involving this construction, and it captures the fact that the CORE of these constructions differs in several key ways from the normal Irish core, notably in having an NP under the PRED node, and having an ARG node underneath the CORE of that NP. The above template is an extremely powerful tool— it attempts to recognize the conventional pattern shown in the Irish data and represent what speakers must know in order to use this pattern productively. As such, it accounts for this phenomenon neatly.

2.5 Voice Modulation in Irish:

Irish is a very flexible language when it comes to constructions involving voice modulation. In RRG, talking about voice modulation involves issues such as PSA-hood and the rules that specific languages, and to be more precise, their constructions, require for the linking algorithm. There are two basic manifestations of Irish voice modulation: the personal passive, which is linked to very specific constructions and aspects, and the impersonal, which is a broad construction applicable to almost every verb in every tense/aspect combination in the language. There are, of course, various other voice modulations including combinations of these two basic formats and middle-type verbs. The discussion will start with the more general impersonal construction, which has a much broader distribution. The ‘impersonal’ form of the verb can shown below:
In both cases above, the verb takes very specific impersonal morphology, a synthetic suffix which has a distribution which parallels synthetic suffixes that have survived in certain person/tense combinations, such as Chualais and Chuala tú, both of which mean “you heard,” the difference being mainly a dialectal difference: speakers of the Munster dialect must use the former, and elsewhere the latter is used. The tendency is towards analytic pronouns, but the point remains that there is a complementary distribution between these synthetic verbal person endings and the analytic person pronouns, and that the morphology of the impersonal is extremely similar in nature to these synthetic endings, so much so it is easy to imagine that their diachronic source was some sort of regular personal ending. It was remarked earlier that this was a synchronic work which took Irish as it is today, and this is an important concept here. In (#.b) the agent can be expressed by an oblique, though Nolan and my informants report this to be a very recent linguistic innovation. However, all Irish speakers I consulted found the agent phrase acceptable, and the fact that we are assuming these agent phrases as basic to this construction will have great bearing on our discussion of impersonals.

Let us first approach the notion of impersonal voice modulation constructions in general, and what they entail. The canonical passive construction in, say, English, which is the standard example of a voice modulation construction, involves two components: first, there is a demotion, or backgrounding, of the subject (actor) argument, which is either deleted or expressed as an oblique, and a raising of the object (undergoer) argument, which by a process of syntactic raising attains what in RRG terms would be the PSA position and its subsequent properties. Comrie (1977) calls the impersonal passive “spontaneous demotion,” referring to the fact that these constructions only have one property of the two described above—that of subject demotion. This
immediately explains their feasibility with intransitive verbs (cf. *Siúltar* ‘one walks/there is walking’). But more importantly it highlights the fact that, like other phenomena described above, the co-occurrence of two phenomena does not necessarily imply that they are inseparable. In transitive verbs that take this impersonal construction, the actor is backgrounded or deleted, but the other argument isn’t required to be syntactically upgraded. Furthermore, the example in (#.b) above goes one step further in showing that both arguments can even be expressed, with no syntactic shifting, or in RRG, upgrading to PSA-hood. So the two aspects of voice modulation can effectively be teased apart:

<table>
<thead>
<tr>
<th>Demotion</th>
<th>Promotion</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+ ]</td>
<td>[+ ]</td>
<td>Bhi sé buailte aici</td>
</tr>
<tr>
<td>[+ ]</td>
<td>[- ]</td>
<td>Bhuailleadh é_{ACC} léi</td>
</tr>
<tr>
<td>[- ]</td>
<td>[+ ]</td>
<td>-</td>
</tr>
<tr>
<td>[- ]</td>
<td>[- ]</td>
<td>Bhuail s_{NOM} é_{ACC}</td>
</tr>
</tbody>
</table>

Table 3: Voice modulation of the sentence *Bhuail si é*, ‘She hit him.’

The table above outlines the four logical possibilities for the interaction of demotion and promotion of the subject, or PSA. In RRG, voice modulation is centered around the notion of the PSA, with different constructions specifying alternative choices for PSA and disallowing others from acting as PSA and so on. So the basic sentence *Bhuail si é*, ‘she hit him,’ is the norm and has neither promotion nor demotion. The impersonal *Bhuailleadh é léi* ‘there was a hitting of him with her,’ has demotion of the actor argument to the oblique actor expression léi, but the undergoer é does not get raised to PSA-hood. The so-called ‘personal passive’ has both of these properties, giving us *tá sé buailte aici*, ‘he has been hit by her.’ There is one logical possibility conspicuously absent, that of promotion with no demotion. Indeed, Comrie (1977) remarks that this has not been, to the best of his knowledge, attested in any of the world’s languages. The reason is evident: there can only be one PSA in a given clause. Without knocking the current PSA off its throne, so to speak, there is no position to which another argument can be raised. We can expect the gap in table 3, then, to remain unfilled.

So we have three of the four logical possibilities attested in Irish, and not surprising it goes even deeper. There is a certain amount of recursion available in these processes in that
more than one set of these operations can be imposed on a given clause, giving a combination of
the personal and the impersonal passive (cf. Noonan 1990):

(34)  a. \textit{Bhuail Seosamh Brian}
       \textit{hit Seosamh Brian}
       \textbf{“Seosamh hit Brian.”}

   b. \textit{Bhí Brian á bhualadh ag Seosamh}
       \textbf{“Brian was being hit by Seosamh.”}

   c. \textit{Bhuileadh Brian le Seosamh}
       \textbf{hit.IMP with}
       \textbf{“Brian was hit by Seosamh.”}

   d. \textit{Bhiothas á bhualadh ag Seosamh}
       \textbf{was.IMP to+his hitting at}
       \textbf{“Someone was getting hit by Joseph.”}

In the above example, (34.a) is the clause that has the actor and undergoer arguments in
non-modulated positions. (34.b) is the personal progressive passive, which involves undergoer
promotion to PSA and demotion of the actor clause. (34.c) is the impersonal modulation, which
involves strictly PSA demotion. Lastly, there is a combination of the two in (34.d): there is a
raising of the object to PSA position (which licenses the \textit{á ‘to his’) with a concomitant demotion of
the actor argument, and then the newly derived PSA is then spontaneously demoted, and
unsurprisingly there is no newly derived PSA, for at this point both of the arguments have been
demoted. Interestingly enough, there is no expression of the undergoer argument allowed here in
(34.d)- the oblique argument phrases seem to thus apply in this situation exclusively to actor
arguments.

At this point, it would be relevant to look into what the impersonal passive means in the
RRG view, and for the time being the personal passive series (progressive-, perfective-, and
prospective-type constructions) will be left alone, assuming that the mechanism for these
constructions is already well-described in the RRG framework (traditional constructional voice-
modulation). Some relevant features for this discussion of the impersonal construction can be
seen below (Noonan 1990):

(35)  a. \textit{*D’oltai leann dubh agus d’feicinn iad/é}
       \textit{drink.IMP.PAST stout and used.to.see.1SG them/him}
“They/Someone/One used to drink stout and I would see them/him.”

b. *Glantair é féin
   clean.IMP him self
   “One cleans onself.”

c. Glannann duine an duine féin
   cleans person the person self
   “One cleans oneself.”

As can be seen above, the impersonal fails to license a grammatical reflexive or serve as an antecedent. This rules out an indefinite pronoun-type explanation, as such pronouns often allow these grammatical processes: someone drinks stout there, and I see him all the time, it is best for one to clean oneself every day, and so on. RRG convincingly motivates reflexivization as a semantically motivated process: certain verb classes aside, an actor can serve as an antecedent for an undergoer reflexive. Indeed, this generalization is borne out in all other Irish reflexive constructions, so why not in this impersonal construction? The only logical conclusion is that there is no actor-undergoer relation present in this construction, which precludes the analysis of these as indefinite pronoun-type suffixes. Another piece of evidence against such an analysis is that in the impersonal constructions, there is possible syntactic valence for both arguments in the clause in the sense that the impersonal still allows both arguments to have a definite, expressed referent, a possibility which an indefinite pronoun serves to eliminate. Saying, then, that the impersonal is the overt expression of a zero or some other unspecified referent in the logical structure simply cannot account for sentences like Bhuaileadh é léi ‘he was hit by her’, where the logical structure would clearly need to be do’(3SG.FEM, hit’(3SG.FEM, 3SG.MASC)) to account for the only available reading of the phrase in question. There is no room for an unspecified pronoun in this fully specified semantic structure. However, bearing this in mind, let us come back to the conclusion we tentatively reached from the reflexive example: there is no actor to undergoer relation. This leaves only one logical conclusion: if the personal passive (traditional passive) serves to modulate the syntactic transitivity of a given clause, then the impersonal passive in Irish serves to modulate the M-transitivity of a given clause.
How would a modulation M-transitivity function? Imagine a simple sentence like *Siúltar abhaile léi*, which has an available reading something like ‘there was a walking home by her.’ We have already mentioned that we expect arguments that lack macroroles to have certain distributional properties in terms of pronouns, etc. Like the ‘subject-less’ clauses above, and like the ‘quirky’ case in Icelandic, these arguments just lack a semantic macrorole. So we can start by saying that a semantic structure like *do*’(3SG.FEM, *walk*’(3SG.FEM)) is M-intransitive, and can be realized as such in a clause like *Siúleann sí abhaile* ‘she walks home,’ which takes the canonical nominative pronoun. Under this hypothesis of M-transitivity modulation, we want to say that there is a decrease by one in the macroroles that a clause has, and this claim invites the assumption that along with the decrease, there will be a change in the argument structure that parallels that of other macrorole-less arguments. Indeed, assuming the impersonal ending –*tar* in *Siúltar abhaile léi* is merely a morphological indicator of this change in M-transitivity, the only other observable difference is a different realization of the core argument, here as an oblique, just as one would expect from a macrorole-less argument.

Admittedly, this approach does not account for the fact that, as seen in (35.a) above, the impersonal cannot serve as an antecedent for a pronoun. If we are assuming a fully specified underlying logical structure, we would expect such a string to be perfectly felicitous. Though merely saying that the impersonal accepts a fully specified semantic underpinning does not imply that it is required, and indeed, if in the LS there is an unspecified pronoun like the French *on*, such behavior would be accounted for, even expected (example from J.P. Koenig):

(36)   a. *On, a tué la présidente. Il était du Berry, paraît-il.*
       “Someone killed the president. He was from Berry, it seems.”

The unspecified pronoun *on* cannot act as the antecedent, much as it cannot in the Irish impersonal example in (35.a) above. The impersonal passive is thus fairly inert to the actual contents of its LS, and this is proven when there is an unambiguously fully specified LS:

(37)   a. *Bhuailéadh mo charr leis an buachaill, chonaic mé é, á bhuiladh!*
       hit.IMP my car with.the boy saw I him to.its hitting
       “The boy, hit my car, I saw him, hitting it!”
Indeed, the intuition for the uses of an impersonal-type construction would be that they serve to bring something other than the actor into focus, and this happens too with indefinite pronouns. Without getting to deep into the matter, it suffices to say that although the canonical impersonal construction most likely involves an unspecified pronoun in the LS, this is not the cause of the impersonal manifestation, nor is it required by the construction. This construction is motivated by pragmatic choices, then, rather than choices which are exclusively based on the semantics, such as the selection of unspecified pronouns like on in French.

Lastly, constructions which have expletive pronouns are blocked from participating in the impersonal construction:

(38)  a. Chuir sé sneachta
       put he snow
       “It snowed”

   b. *Chuireadh sneachta
       put.IMPER.S.PAST

The predicate, cuir sneachta, takes an expletive pronoun. We do not want to say that this clause assigns any macroroles, and thus it would not have any macroroles which could participate in this M-transitivity modulation. Lastly, what Noonan calls the ‘prepositional actives,’ what we are labeling M-atransitive verbs which take two oblique core arguments, do not participate in the impersonal construction. Noonan calls the impersonal construction and the ability to undergo this spontaneous demotion properties of the “canonical subject” in Irish. In other words, only constructions which are at least M-intransitive can partake in this construction. So from a theoretical standpoint, we want to say the impersonal construction decreases M-transitivity by one, and that those arguments that are available for demotion in this sense follow an accusative pattern- that is to say, we’ve seen [S], [A], and [d-S] partake in this construction- are those PSAs that also have a macrorole (for we have shown that the two are not mutually exclusive).

The last word on passives is that Irish does indeed have a more traditional passive voice modulation ala VVLP, whereby the only systems under modulation are those involving PSA
selection and demotion. Unlike the impersonal, which operates under any tense/mood/aspect so long as the construction in question isn’t M-atransitive, the personal passive voice modulation is inseparably linked to certain mood/aspect constructions (examples from Noonan):

(39)  

a. *Cheannaigh sí beacáin*  
   bought she mushrooms  
   “She bought mushrooms.”

b. *Bhí na beacáin á gceannach aici*  
   were the to.their buying at.her  
   “The mushrooms were being bought by her.”

c. *Bhí na beacáin ceannaithe aici*  
   bought  
   “The mushrooms had been bought by her.”

d. *Bhí na beacáin le ceannach aici*  
   with buying  
   “The mushrooms were to be bought by her”

These “personal” passives (as opposed to the impersonal) all have very specific aspects linked to them: above we see the unmodified clause, following by the passive progressive, the passive perfective, and the passive necessitative-prospective. Again, these are construction dominated, and nothing more than simply stipulating a difference in PSA selection and putting the agent in an oblique needs to be done for each construction.

2.6 The Utility of the LSC in Regards to Irish:

2.6.1: The Case of the Construct State:

This section is meant to illustrate briefly how the LSC of RRG handles two types of phenomena which are often discussed in the literature on Irish. The first of these will be the Irish ‘construct state,’ a genitive construction so named for its resemblance to the construction in Modern Hebrew of the same name. In short, these constructions only allow one definite article for the whole nominal complex:

(40)  

a. *teach an thair*  
   house the man.GEN  
   “the man’s house/the house of the man”

b. *an teach an thair*  
   the house the man.GEN
How to account for the fact that there is a definite reading on *teach*, despite its complete rejection of the definite article? The answer is alarmingly straightforward in RRG. In RRG, the LSC of noun phrases has a series of operators just like the LSC of a clause, and just like these clausal LSCs, different operators operate at different levels in the LSC. In regards to this construction, *an* represents the definite operator, which is a core operator in the LSC of the NP. Being a core operator means that it will have scope over both the head noun and its genitive argument, and thus is sufficient to render definiteness for both nominals in this particular construction.

### 2.6.2: Irish Phrasal Heads:

The other phenomenon which is easily accounted for by RRG, and, as Everett(year) puts it, is almost predicted by the LSC, is that of Irish phrasal heads:

\[ (41) \]

a. *Is dochtúir capall (é) Cathal*  
   COP doctor horses-GEN AGR Cathal  
   “Cathal is a doctor of horses.”

b. *Is amhran a bhualfidh an píobáire (é) “Yellow Submarine”*  
   COP song CLM play.FUT the piper AGR  
   “Yellow submarine is a song the piper will play.”

The examples above serve to contrast a regular attributive sentence (41.a) with an NP head (and as mentioned above, nominal NUC) with an attributive NP that has a clausal component. Carnie (year) attempted to explain these phrasal heads in the minimalist program by incorporated elements of distributed morphology (see Carnie year), but Everett uses these very same examples as corroboration of his theory of asymmetrical linking in RRG. In his paper (year, reference?), he discusses a similar phenomenon in Wari, where complete phrases happily occupy the predicating nucleus of the LSC. In his data, fully inflected clauses act as nuclei, taking inflectional suffixes which he analyses as post-nuclear clitics (referring to their normal distribution as post-verbal clitics). His explanation for this is simply asymmetrical linking- the NUC node dominates a CLAUSE node, and thus everything a CLAUSE node normally licenses could, in theory, be as it would be, were it not under the predicating NUC. He ports this analysis seamlessly onto the Irish data. We have already determined that these attributive sentences are
NPs linked under the NUC, and this means that they should license everything a “free” NP would. Here, this means that a restrictive relative clause- a clausal complement to the NP- is perfectly felicitous. The attractiveness of the RRG claim versus the minimalist claim is that in RRG, the clausal complement *a bhualfidh an píobaire* ‘that the piper will play' is more closely tied to the NP it modifies than it is in the minimalist program, which treats it as a separate clause. This assumption of the association of the restrictive relative clause is highly intuitively plausible, and the LSC of RRG is set up in such a way that the associations of these different sub-clausal constituents can be mapped out in a more accurate way.

### 3. Semantics

#### 3.0 Irish Semantics

Now that a basic typology and groundwork has been laid for Irish syntax within the RRG framework, a brief run-down of RRG-style semantics as they relate to Irish will be presented, before tackling theoretical issues that Irish brings to the table in the RRG framework.

Discussing semantics in the RRG arena means discussing lexical representations, verb classes, and logical structures (VV 28). Using a refined form of Vendler’s original verb class distinctions (states, achievements, activities- Vendler 1967), Van Valin proposes through RRG that this classification is of extreme salience, given great cross-linguistic variation (VV 28). Thus, we expect to find the same underpinnings of the verb class skeleton underlying the Irish verbs as well.

#### 3.1 Aktionsart and Modern Irish

The discussion of Aktionsart here is going to draw heavily from Brian Nolan’s (2001) work on the subject. In his discussion, Nolan adapts the Vendler tests for use on Irish, proposing a distinct set of diagnostic tests for Irish (Nolan 13):
The values in the table ahead require some elaboration. First of all, the values given above are those given in VVLP for the analogous tests. Nolan, in his discussion, proposes different values for some tests in Irish. The spirit of the tests in RRG however requires that the same standards be applied to all verbs. Instead of using English diagnostics to determine Irish verb classes, the absolute RRG rule above should instead be applied to ensure that Irish verbs find themselves in their right verb classes. Secondly, Nolan’s assessment predated the type of verbs known as Active Accomplishments, which would have greatly aided his discussion (instead, he concludes that Accomplishments pass test 2 in Irish). We are going to say if a verb patterns like an accomplishment in all but test 2, taking a dynamic adverb, that it is in fact an Active Accomplishment (VV 31). Bearing these guidelines in mind, we can ask the question: Are these verb classes thus motivated in Irish?

States are not going to pass any of the tests, save the durative time adverbials. Indeed, we see some of the canonical ‘state’ predicates do pattern the same way in Irish:

(43)

a. *Tá an oraiste ag bheith blasta
   be the orange at be.VN tasty
   “The orange is tasty vigorously”

b. *Tá an oraiste blasta go briomh (Nolan 23)
   “The orange is tasty vigorously”

c. *Tá an oraiste blasta go tapadh (Nolan 23)
   “The orange is tasty slowly”

d. Bhí an oraiste blasta ar feadh dhá lá
   “The orange was tasty for two days (but has since rotted).”

e. *Bhí an oraiste blasta in uair (Nolan 23)
   “The orange was tasty in an hour.”
The state here is being orange, with a logical structure of a state: **tasty** (oraiste). It patterns just as states would be expected to. Nolan states that in Irish, states do take *in*-adverbials, citing (Nolan 50):

(44)  
\begin{align*}
\text{Beidh orm a bheith ar ais sa Bhruiséil i gceann ocht lá} & \\
& \text{“I must be back in Brussels in eight days”}
\end{align*}

However, the reading for the sentence above does not pass the test Nolan intended it to. Here, the *i*-adverbial refers to the time in the future at which point the speaker must be back in Brussels. It is not a time frame adverbial in the sense of the test. Using a time frame adverbial with a clear-cut state, as in (43.e) above, is actually infelicitous.

Achievements should not pass any tests, according the VVLP table above. Take the following examples of a verb which would be an Irish achievement verb:

(45)  
\begin{align*}
\text{a. } & *\text{Tá an fhuinneog ag pléasach} & \text{“The window is shattering”} \\
& \text{b. } *\text{Phléasc an fhuinneog go bríomhar} & \text{“The window shattered vigorously”} \\
& \text{c. } *\text{Phléasc an fhuinneog go mall} & \text{“The window shattered slowly”} \\
& \text{d. } *\text{Phléasc an fhuinneog ar feadh lá} & \text{“The window shattered for a day”} \\
& \text{e. } *\text{Phléasc an fhuinneog in uair} & \text{“The window shattered in an hour”} \\
& \text{f. Phléasc an fhuinneog} & \text{“The window shattered.”}
\end{align*}

True achievements in Irish do act as expected. In Nolan’s discussion, he cites *bris*, ‘to break’, as his achievement verb. This verb is not an achievement in Irish, as it isn’t in English (Nolan 31):

(46)  
\begin{align*}
\text{a. Bhríse sé a chos go tapadh} & \text{“He broke his foot quickly”} \\
& \text{b. Bhríse sé a chos go cúramach} & \text{“He broke his foot carefully”} \\
& \text{c. Bhríse sé a chos i nóiméad} & \text{“He broke his foot in an instant”}
\end{align*}
Clearly, as the sentences above demonstrate, *bris* is an (active) accomplishment, not an achievement, in Irish. Therefore we can say that achievements in Irish actually do pace adverials, and like the canonical Aktionsart achievement should pass the pace, durative, and frame adverbial tests, as well as the progressive test. In addition, active accomplishments can take dynamic adverbials. Nolan’s analysis says that in Irish accomplishments don’t take progressive, and they do take dynamic adverbs. Obviously, since Nolan’s analysis predated active accomplishments, we can now confidently say that those accomplishments which he cites as taking *go bríomhar* are actually active accomplishments, as shown below:

(47)  
   a. *Tá mé ag ól pionta*  
   “I am drinking a pint.”  
   b. *Tá mé ag ól pionta go bríomhar*  
   “I am vigorously drinking a pint.”  
   c. *D’ól mé pionta go tapadh*  
   “I vigorously drank a pint”  
   d. *D’ól mé pionta ar feadh cúpla nóiméad*  
   “I drank a pint for a couple minutes.”  
   e. *D’ól mé pionta i nóiméad*  
   “I drank a pint in a minute”

The active accomplishment showed above passes all tests. Nolan’s basis for stating that Irish accomplishments fail the progressive test is based on (48) below (Nolan 18):

(48)  
   a. *Bhí Brian ag ól tae in uair*  
   “Brian was drinking tea in an hour.”

However, Nolan explicitly states that speakers found it bad *because of the in-adverbial,* and not because of the progressive. Considering this utterance is being used to draw conclusions about the distribution of the progressive, the *in*-adverbial shouldn’t be a factor here. It is indeed the case that the string *Bhí Brian ag ól tae,* ‘Brian was drinking tea,’ is grammatical. Secondly, rather than being put into the accomplishment class, it should have been instead put it into the activity class: activities do not take in adverbials, but otherwise pattern like active accomplishments. There is no reason to believe Irish accomplishments somehow act differently than the Aktionsart canonical accomplishment: hence their being labeled universal verb classes.
Activities are the last verb class that will be motivated in this discussion. As said above, they act like active accomplishments sans in-adverbials.

(49)  
a. Bhí Brian ag ól tae  
“Brian was drinking tea”  
b. Bhí Brian ag ól tae go bríomhar  
“Brian was drinking tea vigorously”  
c. Bhí Brian ag ól tae go mall  
“Brian was drinking tea slowly”  
d. Bhí Brian ag ól tae ar feadh cúpla nóiméad  
“Brian was drinking tea for a couple of minutes.”

e. *Bhí Brian ag ól tae in uair  
“Brian was drinking tea in an hour.”

And it follows that there are verbs in Irish which clearly follow the Vendlerian activity pattern. While not an exhaustive analysis of the verbal classes in Irish, the discussion hitherto has served to simply underline the fact that, in a very broad manner, the Aktionsart RRG classes do in fact have validity in a discussion of the Irish verbal system.

5.0 Conclusion

The discussion up to this point has been primarily concerned with looking at how Irish operates within RRG. Irish has been shown to fit neatly within said framework, and in a few domains has been shown to give particular strength to some of the claims made by RRG. In particular, the notion of the PSA- the core syntactic role in RRG- has been shown to have wide-ranging explanatory power in describing the behavior of a number of Irish constructions. The Aktionsart classes have been shown to underpin the verbal semantics of Irish.

WORKS CITED:


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