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Complex Predicates and Light Verb Constructions in Modern Irish

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Abstract

This paper characterises complex predicates and light verb constructions in Modern Irish. Light verbs are attested in many of the world's languages (Butt 1995, Butt 2003, Alsina et al. 2001). Cross linguistically, there appears to be a common class of verbs involved in these constructions and generally there is agreement that light verbs contribute to the formation of complex predicates. Light verbs seem have a non-light or 'heavy' verb counterpart. In this paper we discuss the light verb constructions (LVC) as found in modern Irish and how they form complex predicates. We claim that the light verb (LV) encodes the event process initiation (or cause) and the matrix verb indicates the bounded component or result. In light verb constructions, the matrix verb appears in Modern Irish syntax as a verbal-noun form. The function of light verbs in these constructions is to modulate the event and sub-event semantics. We distinguish between auxiliary verbs constructions (AVC) and those constructions involving complex predicated and light verbs (Anderson 2006, Aikhenvald and Dixon 2006). We provide evidence based on an analysis of Irish data that shows how aspect and argument structure considerations are resolved for the complex predicate within the light verb construction via the linking system between semantics and syntax. We motivate a functional account, based on Role and Reference Grammar (Nolan 2012, Nolan, and Diedrichsen. 2013. Van Valin and LaPolla 1997, Van Valin 2005), that appeals to the analysis of complex predicates within a consideration of the layered structure of the clause.

1. Introduction

In this paper we argue that that the light verb within Irish instantiates the process phase change (or cause) and the matrix verb indicates the bounded component or result. In Irish light verb constructions, the matrix verb appears in syntax as a verbal noun form. The function of light verbs in these constructions is to modulate the event and sub-event semantics and different light verbs do so in different ways. From Butt 2003, the intuition behind light verbs is that these constructions appear to be semantically light in the sense that they are contributing something to the joint predication, but not predicating fully. What this contribution is can be difficult to characterise and seems to vary across languages. In Japanese, for example, the light verb construction consists of a light verb and verbal noun (Siegel and Bender 2002), where the verbal noun occurs in a construction with a verb that has only marginal semantic information. We posit, for Irish, that the syntactic, semantic and pragmatic information on the LV complex is a combination of the information within the complete LV construction. The lexical specification of the verbal noun contains argument and situation type information.

Evidence from scholars indicates that light verbs seem to have developed from the main verb and the light form of which has lost some of its semantic component through diachronic change. The term *complex predicate* is used to designate a construction that involved two or more predicational elements (such as nouns, verbs or adjectives), which contribute a single component in that their arguments map into a single monoclausal syntactic structure. The light verb constructions typically affect the aktionsarten of the joint predication and argument sharing across the complex predication. Hopper and Traugott (1993: 108) propose light verbs as an optional stage (1) on the grammaticalization cline.

(1)   Full verb > (light verb) > auxiliary > clitic > affix

Anderson (2006:331) proposes a slightly different relationship between lexical verbs, serial, light and auxiliary verb constructions (2).

(2)

Lexical verb → Serial verb → light verb

Serial verb → auxiliary verb

light verb → auxiliary verb
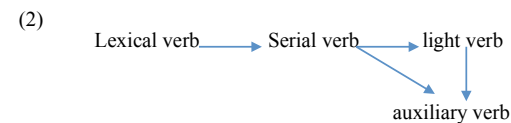
Light verbs contribute to the predication but require a resolution of the argument structure composition, and other elements, within the complex predication. The grammatical structure is that of a single complex predicate. That is to say, light verbs always form a complex predicate. Butt (2003) makes a clear distinction between auxiliary verb constructions and constructions involving light verbs, based on cross-linguistic evidence. Light verbs serve to modulate the event described by the matrix verb in a manner distinct from auxiliaries. Complex predicates allow two or more predicational elements to co-predicate in a monoclausal structure.

In Irish, the light verbs are morpho-syntactically form identical with their main lexical verb equivalent but, at the construction level, they exhibit a particular usage pattern in which a second verbal predicate is involved, the matrix verb. We will discuss this in more detail later within the paper. For Irish, light verbs supply the initial event predication with the matrix verb supplying information about the initial event involved. For example, the particular event type, or the manner in which the event unfolds, along with any means or path details, is contributed to the complex

predication by the matrix verb and its narrow scope adverbials, rather than the LV. Additionally, the light verb constructions of Irish may encode a cause and result within the complex predication. Importantly, light verb constructions resolve boundedness, telicity, and possibly causation in certain instances, within the complex predicate.

For Irish, we claim that the light verb instantiates the process (or cause), and flags a phase change in the event. The matrix verb indicates the bounded component or result. The function of these light verbs is therefore to modulate the event and sub-event semantics. Different light verbs do so in different ways. In the case of Irish, a verbal noun with matrix verb functions is used with the light verb to form the complex predicate. When the verbal noun morpho-syntactic form is used for the matrix verb, the valence is retained. This is fused within the complex predicate with the particular light verb in the light verb construction. Interestingly, LVs can also occur with auxiliary verbs in an AVC construction.

2. The RRG view of complex predications

We will argue that an account of the complex predications found in light verb constructions can be provided within the theory of Role and Reference Grammar (RRG). Within the theory, we will appeal to the treatment of coordination, subordination and, importantly, cosubordination. In the RRG model (Van Valin 2005: 183*ff*), coordination is characterised by the joining of two or more units of equal size and status, and in the case of whole clauses, all of the clauses have the form of dependent main clauses. Subordination involves the embedding of one unit within another. RRG therefore posits three nexus relations (coordination, subordination and cosubordination) between units in complex sentences. The essential property distinguishing cosubordination from coordination is operator dependence in that all the shared operators are clausal operators. According to Cristofaro (2003:23), coordination is characterised by the absence of both dependency and subordination; subordination involves both. Cosubordination, however, draws from elements of both coordination and subordination. Like coordination, cosubordination involves no embedding and, like subordination, it involves dependency. Cristofaro (2003:23)

argues that cosubordination may be seen as occupying an intermediate position in a continuum having coordination and subordination as opposite poles.

Nexus relations are therefore the syntactic relations between the units in a complex construction. Related to nexus relations is the nature of the units being linked, that is, the juncture types within RRG. Linkage of subclausal units is common in complex sentences cross-linguistically. The subclausal units of interest are those within the RRG conception of the layered structure of the clause and, within the literature, these nexus-juncture relations have acceptance and application. For example, Anderson (2006:9ff) appeals to core and nuclear juncture formations in his account of complex predications involving auxiliary verbs constructions (AVCs) and uses these abstractions to distinguish the AVCs from serial verb constructions (SVCs). Aikhenvald (2006: 50) and Solnit (2006: 146) apply elements of nexus-juncture relations in their respective accounts of SVCs. We will apply the nexus-juncture relations (3), and related parts of the RRG model, to further our account of light verb constructions of Irish.

(3)   The nexus-juncture relations

Nuclear juncture	[CORE … [NUC …] .. + .. [NUC …] …]
Core juncture	[CLAUSE … [CORE …] .. + .. [CORE …] …]
Clause juncture	[SENTENCE … [CLAUSE …] .. + .. [CLAUSE …] …]

Light verbs in Irish are to do with encoding a phase change, i.e., initiation, of the event and the matrix verb, in VN form, determines the type of event. The argument structure is resolved by fusion of the logical structures (LS) of the LV and VN predicates in a principled manner, i.e., [BEGIN [BECOME **do'**$(x, [\dots y\dots])$]], where y is a LS. The boundedness of the event is determined by the contribution of the VN to the overall predication. This is explicated within the RRG model via nexus-juncture relations and the application of the linking system.

The light verbs of Irish are not bleached just for argument structure when they appear as part of a complex predicate but also for aspect and event structure. The light verbs have a lexical specification containing a logical structure and may be intransitive or transitive.

3. The facts about the light verb data in LVCs

Light verbs occur in clauses of Irish with the following (4) clause grammaticalisation patterns. The differences are due to the transitivity of the non-light verb. In addition, the preposition *ag* 'at' is optional in intransitive clauses of this nature. The non-light verb, the matrix verb, is in the morphosyntactic form of a verbal noun (VN) in this construction. This use of a nominalised form of a lexical verb is particular to the Celtic languages (Anderson 2006:60*ff*, 98).

(4)   a. V_1 NP (Prep) V_2 (NP)

    Where, depending on the transitivity of the V_2, this will be of the following actual grammatical form as a light verb construction.

    b. LV_1 NP *ag* VN_2 NP   (transitive VN)

    c. LV_1 NP VN_2 (intransitive VN)

    Where VN means verbal noun

We will use the notation LV to refer to the light verb instead of V_1, and VN to refer to the non-light verb instead of V_2. A preliminary example of this type of construction is shown in (5), following. In this example the optional preposition *ag* 'at' is used. We will introduce more data examples later within the paper across a number of verbs.

(5)   *Thosaigh an traein ag   bogadh   ar   aghaidh*
    start-PST   DET train:N at:PREP moving:VN on:PREP forward:Adv
    go   mall
    to:PREP slow:Adv
    The train started moving forward slowly

While the clause has two verb forms in it, the construal in this particular clausal construction is that of a single event predication. In RRG terms this means that the clause has a single event logical structure and the various arguments are linked to the single predication of the event in a principled way. Additionally, the class of verbs (6) that seems to occur within this light verb construction have characteristics in common in that they are concerned with 1) causation and/or 2) the start, continuation of process, or termination of the event, whatever its particular event type. In this regard,

the verbal noun form within the clause denotes the type of the event itself, as this information of contributed by the semantics of the particular matrix verb. All of the light verbs within this class have 'heavy' counterparts. In turn, the means, manner or path of the verbal action may be denoted by an adverbial phrase with a narrow scope over the VN component of the event predication and not over the light verb. In this sense, therefore, the first verb form, the light verb, is semantically bleached in that it does not provide information on the nature of the event, or its manner, means, position or path.

(6)   Members of the class of verbs that can form LVCs

    Déan 'do/make'
    Thósaigh 'start'
    Ceadaigh 'let'
    Lig 'allow'
    Éirigh 'rise'
    Iarraigh 'try'
    Tóg 'take'
    Gabh 'take'
    Tabhair 'give'
    Chuir 'put
    Chaith 'spend
    Buail 'hit'
    Téigh 'go'
    Seas 'stand'
    Coinnigh 'continue'
    Stad 'stop'

It would also seem to be the case that members of the class of verbs of motion and path do not partake in light verb constructions, with one exception, the verb *téigh* 'go'. We merely highlight this fact here but discuss it, with examples, later in the paper. Some members of this category of verbs of motion and path class are indicated in (7), below.

(7)   Members of the category of Irish verbs of motion and path that cannot
        form LVCs

        Saothraigh 'do/obtain'

        Glac 'take'

        Géill 'yield'

        Aimsigh 'hit'

        Iompaigh 'turn'

        Tiontaigh 'turn'

        Imigh 'depart'

        Tar 'come'

        Téigh 'go'

This class of light verbs of interest to us here is concerned with phase change with respect to the event denoted in the clause, and with informing or modulating the sub-event semantics in some way.

Phase verbs make reference to a particular part or phase of an event construal. This requires a means of conceptualising the sub-event semantics. Following Toratoni (2002) and Freed (1979), we can usefully consider an event as decomposing into three temporal segments, or sub-event parts: an event ONSET, a event NUCLEUS, and an event CODA, with the event NUCLEUS further divided into INITIAL, MIDDLE, and FINAL. However, the first two terms are potentially ambiguous with other senses in linguistic theory in that 'onset' is used to denote the starting point, and NUCLEUS in RRG refers to a syntactic unit. Toratani, to avoid terminology confusion, renames them as 'PREINCEPTIVE', following Binnick (1991), and 'MAIN EVENT'. Toratani also calls the INITIAL as INCEPTIVE in order to be consistent with PREINCEPTIVE. A general schema of the internal phases of an event can be presented as in Figure.1.

The PREINCEPTIVE is the temporal segment where the event has not completely started yet but may imminently be starting. The MAIN EVENT is the 'progressing' phase of the eventuality, which can be further divided into: INCEPTIVE, MIDDLE, and FINAL. According to Freed (1979), the INCEPTIVE phase is not qualitatively

distinct from the rest of the phases. If the event has already set in at this phase but was interrupted, then it is accurate to state that the event was in progress. Toratani contrasts this with PREINCEPTIVE, where cancellation of the event at the PREINCEPTIVE phase does not entail that the event was in progress. The MIDDLE and FINAL phases are the phases past the INCEPTIVE phase. The CODA can be thought of as the post-event phase.
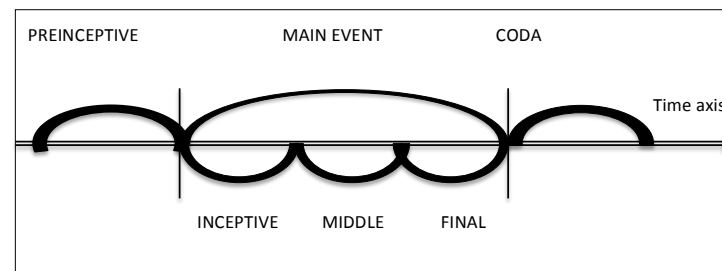

Figure 1: General schema of the internal phases of an event (following Toratani 2002)

In RRG terms, these phase characteristics are captured within the interclausal semantic relations (8) and the interclausal relations hierarchy (Van Valin 2005: 211) and, with the syntactic juncture-nexus types, are used to express certain semantic relations between the units in the juncture, for example, causation, phase, purpose and temporal sequence.

With phase, for example, a separate verb describes a facet of the temporal envelope of the SoA. These relations have been given a formal characterisation in Van Valin (2005: 207). For purposes of the paper, we can see that the semantic elements pertaining to the verbs under discussion are to be found at the top part of this hierarchy. This is, we claim, no accident and we will refer to this in our analysis of the data. The interclausal semantic relations are listed as follows, from Van Valin (2005: 206); we have highlighted in bold the elements under discussion.

An additional fact pertaining to these light verbs is that they can occur within auxiliary verb constructions and, when this occurs, the light verb itself also takes on

the morphological form of a verbal noun. The AVC, therefore, exhibits the clausal pattern in (9). The AVC may have two LVs in sequence, both in VN form. There is some variation within this pattern to do with the transitivity, for example, of the right-most verbal form, which describes the event type, as per our earlier observation. We provide an initial example in (10) of an AVC construction that uses a light verb and will discuss these in more detail later in the paper.

(8)　Interclausal semantic relations
　　a.　Causation [1]
　　b.　**Phase**: a separate verb describes a facet of the temporal envelope of the states of affairs (SoA)
　　c.　**Modifying subevents**
　　　1: manner
　　　2: motion
　　　3: position
　　　4: means
　　d.　Psych-action
　　e.　Purposive
　　f.　Jussive
　　g.　Causative [2]
　　h.　Direct perception
　　i.　Indirect perception
　　j.　Propositional attitude
　　k.　Cognition
　　l.　Indirect discourse
　　m.　Direct discourse
　　n.　Circumstances
　　o.　Reason
　　p.　Conditional
　　q.　Concessive
　　r.　Temporal
　　　1: simultaneous SoA
　　　2: sequential SoA
　　s.　Temporally unordered SoA

(9)　Syntactic construction signatures of AVCs utilising a light verb in Irish
　　a.　AUX NP LV$_{VN}$
　　b.　AUX NP (*ag:*PREP) LV$_{VN}$ NP
　　c.　AUX NP (*ag:*PREP) LV$_{VN}$ (*ag:*PREP) VN NP
　　　Where, in the AVC construction, the light verb - LV$_{VN}$ - is found in the morphosyntactic form of a verbal noun.

(10)　*Bhí　　Trevors　ag　　iarraidh　　éalú*

AUX-PST Trevors:N at:PREP attempting:VN escaping:VN

trasna　　na bpáirceanna.
across:PREP DET park:N

LIT: Trevors was attempting escaping across the park.

Trevors was attempting an escape across the park.

In the next section we provide data examples for each of the verb class mentioned as relevant to light verbs, with a discussion.

4. The examples of light verbs in Irish

We have made the claim that the class of verbs that lend themselves to use within light verb constructions have a number of important elements in common. They are semantically bleached in certain characteristics to do with the designation of the event type, they form part of a single predication, and have to do with the encoding of causation, denotation of phase or the modulation of the event and possibly the manner, means, motion or path of the event. We also noted that lexical verbs of motion and path do not generally seem to be amenable to use as light verbs. We noted one exception to this. In this section we provide data examples of each of the verbs mentioned that can occur as light verbs. We will also provide later a detailed analysis of a representative number of the examples. We begin with the verb *rinne* which can allow an interpretation of either 'do' or 'make' according to context. The 'make' reading is causative. We gloss this verb as 'do.make' or simply 'make' as appropriate.

(11)　*Rinne　　duine　　ionsaí　　　ar　　　Threvors*

Make-PST person:N attacking:VN on:PREP Trevors:N

san　　　áit　　sin.
in:PREP+DET place:N that:DEM

A person made an attack on Trevors in that place.

in.that.place'[[**do'**(person, ⊘), [**make**.**attack'**(person, Trevors)])]]]

In this example (11) of *rinne*, we have an explicit actor coding for both agency and volition. The actor is a shared argument over both verbal predicates. In figure 2 we provide an RRG structural representation of the nexus-juncture relations. We can see that this example is a nuclear juncture with two nuclei residing under a topmost

nucleus within the clausal core. The nuclear operators are shared across the verbal predicates, in this instance the operator codes tense. The actor NP is a shared argument of both verbal predicates and the undergoer is clearly indicated. The locative adverbial indicates the place where the event occurred. As this has wide scope it is therefore positioned at the topmost nucleus and ranges over the complete event.
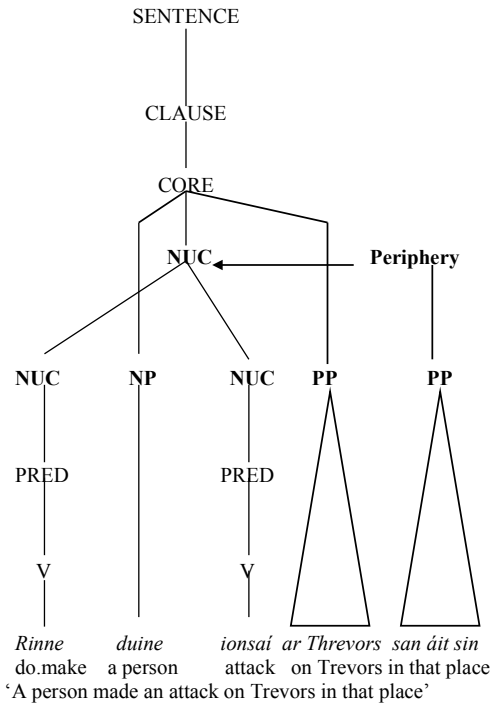
in.that.place'[[**do'**(person, ◌), [**make.attack'**(person, Trevors)])]]]

Figure 2: Nuclear cosubordination of complex predicate (Example 11)

Use of the verb *rinne* in this way is reasonably productive and examples (12) and (13) demonstrate this pattern and phenomena. It can also be used within a yes-no question construct (14).

(12) *Ansin   rinne   na   páistí   gáire.*
      then:Adv do.make:-PST DET-PL children:N laughing:VN

LIT: Then the children made laughing.

Then the children laughed.

then'[**do'**(the children, ◌), [**made.laugh'**(the children)]]

(13) *Déaneann   mé   scrúdú   uirthi.*
      do.make-PRS 1SG examining:VN on:PREP+3SG.F

LIT: I did make examining on her.

I made/did an examination on her.

(14) *An ndearna   tú   scrúdú   air?*
      DET do.make-PST 2SG examining:VN on:PREP+3SG.M

LIT: Did you do/make examining on it

Did you examine him/it?

The next example of interest is to do with phase rather than causation, as we indicated within the interclausal semantic relations hierarchy. The verb here is *thosaigh* ' start'. In example (15), we can observe that there is a shared argument *said go leir* 'they all' between both verbal predicates. The first verbal predicate, the LV, is intransitive while the matrix verb, in VN form, is also intransitive. We can note that agency exists with the shared argument as the participants and animate and volitional. Similarly in (16) we have a shared actor argument and we can observe that agency exists. The major difference with this example in contrast to the previous one is that the matrix verb is transitive and an undergoer can be identified as *cluiche peile* 'game of ball = football'.

(15) *Thosaigh siad go   leír   ag   troid.*
      start-PST 3PL to:PREP all:QTY at:PREP fighting:VN

They all started fighting

[**do'**(they.all, [**start'**(they.all, [**fight'**(they.all)])])]

(16) *Thosaigh siad ag   imirt   cluiche peile.*
      start-PST 3PL at:PREP playing:VN   game:N ball:N

They started playing a game of football

[**do'**(they, [**start'**(they, [**play'**(they, football)])])]

A shared argument is also to be found in (17), similar to above, and the same discussion applies. In this instance, however, we can note that two adverbial phrases

with narrow scope modify the matrix verb and not the light verb. The adverbials provide phase related information on the manner of motion and path of the action (see figure 3). There is an implied agency over the initial inanimate shared argument. However, this argument *an traein* 'the train' is actually an effector.

(17) *Thosaigh   an traein   ag   bogadh   ar   aghaidh*
      start-PST   DET train:N at:PREP moving:VN on:PREP forward:Adv
      go   mall.
      to:PREP slow:ADV
      The train started moving forward slowly
      do'(train, [**start'(**train, [**move'**(train)]
          ∧ **manner.of.motion.slowly'**(train) ∧ **path.forward'**(train))])]
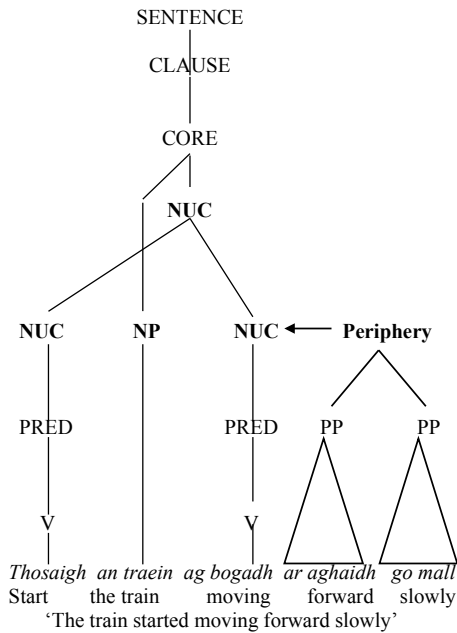

Figure 3: Nuclear cosubordination of complex predicate (example 17)

(18) *Thosaigh sé   ag   foghlaim   Béarla.*
      Start-PST 3SG.M at:PREP learning:VN English:N

He started learning English.
do'(he, [**start'(**he, [**learn'**(English)]
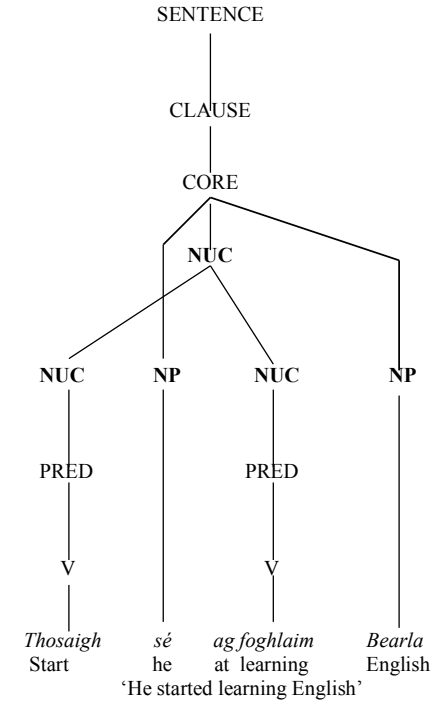
Figure 4: Nuclear cosubordination of complex predicate (Example 18)

A verb somewhat analogous to *thosaigh* ' start' is *thaifigh* 'begin' and we provide an example of this in (19). This behaves in exactly the same manner as the examples above.

(19) *Taifeadadh Findlay   ag   canadh   amhrán seicteacha.*
      Begin-PRS   Findlay:N at:PREP singing:VN song:N seventies:ADJ
      Findlay began singing a seventies song.

We now provide a data example for each of the members of the class of verbs that can form LVCs, as indicated in (6) above. These examples following allow for the same analysis as given for examples (11), (17) and (18) and figures 2, 3 and 4.

(20) *Buailfidh mé   ag   siúlóid*
Hit-FUT 1SG at:PREP walking:VN
go   dtraothfaidh mé   mo   bhéilí .
to:PREP digest-FUT 1SG my:PN-POSS meal:N
LIT: 'I will hit at walking until I will digest my meal'.
I will start walking until I digest my food.

(21) *Chaith   John seacht   mbliana   ag   canadh*
Spend-PST John:N seven:NUM years:N.PL at:PREP singing:VN
leis   an ngrúpa   'The Stargazers'.
with:PREP DET group:N 'The Stargazers':NP
John spent seven years singing with the group 'The Stargazers'.

(22) *Sheasfá   sa   sneachta ag   éisteacht*
Stand-COND+1SG in:PREP+DET snow:N at:PREP listening:VN
léi.
to:PREP+3SG.F
I would stand in the snow listening to her.

(23) *Stad   mé féin   den   tsníomhachán.*
Stop: V-Past I:PN self:Refx.Intensifier of:Prep+the:DET spinning:VN
I myself stopped the spinning.

(24) *Coinníonn   sé ag   cur   ceisteanna ort.*
Continues-PRS 3SG.M at:PREP putting:VN questions:N to:PREP+2sg
He continues putting questions to you.

(25) *Coinníonn   sé air   ag   ól.*
Continues-PRS 3SG.M on:PREP+3SG.M at:PREP drinking:VN
Lit: 'He continues on his drinking'.
He continues his drinking.

Example (26) and (27) indicate a lexical causative, (28) indicates manner path, while (29) and (30) indicates an instance of the impersonal passive within a light verb construction. Example (31) indicates the event path source trajectory.

(26) *Chuireas   roinnt   laethanta dorcha isteach*
Put-PST+1SG some:QTY days:N.PL dark:ADJ inside:ADV
ag   gabháil   de   ghnáthobair   na hoifige.
at:PREP attending:VN to:PREP business:N+work:N (of) DET office:N
I put in several dark days inside attending to office work.
[**do'**(I) CAUSE [BECOME (**attend'**(I) ∧ [**be-at'**(office work, I)]]

(27) *Cuirfidh muid ag   snámh   iad.*
Put-FUT 1PL   at:PREP swimming:VN 3PL
We will put them swimming.
[**do'**(we) CAUSE [BECOME (**swim'**(them))]]

(28) *D'éirigh said leis   sin   éalú*
Rise-PST 3PL   with:PREP that:DEM escaping:VN
ar   a   bhealach féin   abhaile
on:PREP a:PN-POSS way:N   RFX-PART home:N
go   Cúige   Uladh.
to:PREP province:N Ulster:N
LIT: They arose then with escaping on their own way home to Ulster
They then succeeded escaping in their own way home to Ulster
[**do'**(they, [**rise'**(they, [**escape'**(they) ∧ [**be-at'**(home, they)] ∧
[**path.of.escape'**(to Ulster)] ∧ [**manner.of.esape'**(in their own way)]])])]

This example (28) indicates the encoding of manner and path as well as the destination location.

(29) *Tosaíodh   ag   gabháil de   chiceanna agus*
Start-IMP-PASS-PRS at:PREP going:VN with:PREP kicks:N   and
de   bhuillí orm.
with:PREP blows:N on:PREP+1SG
Someone started going with kicks and blows on me.

(30) *Tógadh   liú   mór   nuair   a*
Take-Imp.Pass-Pst shouting:VN big:ADJ when:COND REL

chonacthas   an Tánaiste ag   iarraidh   fuinneog a
see-Imp.Pass-Pst DET chief:N   at:Prep attempting:VN window:N REL

bhriseadh.
breaking:VN

Lit: Someone took a shout when they saw the chief attempting the breaking of
the window.

Someone shouted when they saw the chief attempting the breaking of the
window.

The examples in (29) and (30) of *tosaigh* 'start' and *tóg* 'take', respectively, are
particularly interesting in that the light verb uses the impersonal passive voice. All
verbs of Irish, with the sole exception of the copula, can take the impersonal passive
form, across all tenses. What is important here is that it can occur within a light verb
construction. In the impersonal passive of Irish, the verb marking encodes specificity
and indefiniteness, as well as tense. Irish has a personal passive form as well as the
impersonal.

(31) *Lig   Kenneth   liú   as.*
Let-pst Kenneth:N shouting:VN from:Prep+(3sg.m)

LIT: Kenneth let shouting out

Kenneth let out a shout.

[**do'**(Kenneth₁, [**let'**(Kenneth, [**shout'**(Kenneth)] ∧ [**path.source'**(self₁)])]

(32) *Thug   sí   iarraidh   labhairt.*
Give-PST 3sg.f attempting:VN speaking:VN

LIT: She gave an attempt at speaking.

She attempted speaking.

[**do'**(she, [**give'**(she, [**attempt'**(she, [**speak'**(she)])])])]

(33) *Uaireanta,   téann sé   ag   snámh.*
frequently:ADV go-PRS 3sg.m at:Prep swimming:VN

Occasionally, he goes swimming.

Occasionally'[**do'**(he, [**go'**(he, [**swim'**(he)])])]

(34) *Ragham   ag   fiach.*
Go-Fut+3pl at:Prep hunting:VN

We will go hunting.

[**do'**(we, [**go'**(we, [**hunt'**(we)])])])]

We can see from the analysis of these examples that the nature of the event, the type
itself, is provided by the matrix verb and that this occurs in VN form within the LVC.
The LV is concerned with the initiation, continuation or completion of the event, that
is, its phase. We have also argued that the RRG conception of cosubordination in the
nexus-juncture relation is the most effective way of explaining the LV behaviour, in
particular, the resolution of argument sharing within the complex predication. The
particular nexus-juncture relation involved in LVCs is nuclear cosubordination. We
have also discussed examples within the LVC of nuclear cosubordination where the
means, manner, position or path is included with narrow scope on the matrix verb.

As we will see next, some additional evidence to support our analysis comes from
examining the exceptions, that is those verbs of motion and path that cannot form
light verbs constructions.

5. Exceptions – verbs of motion and path that cannot form LVCs

As we mentioned earlier, there is a class of verbs in Irish that at first glance we might
expect to behave as light verbs, but do not. These are the class of verbs of motion and
path and, like many of the earlier mentioned verbs, have to do with phase initiation of
a motion event or its continuation in a path of some kind. As Levin (1993:263ff)
notes, the lexical meaning of these verbs include, along with the specification of some
kind of event, a specification of the direction of motion, even if that motion is simply
towards or away from the event participant.

We might speculate that it is precisely because of the lexical specification of specific
event type that members of this verb class cannot occur as light verbs within LVCs.

This is evidence to support our hypothesis. Some representative examples from this class – which do not exhibit the light verb phenomena - include the following (35-42) and the verb under discussion is underlined in each. We provide a logical structure representation for several to indicate path and manner information, as necessary to support the discussion. Note: These examples are simply to illustrate members of the class – they are not LVCs.

(35) _Shaothraigh_ _sí_ _a_   _MA in Education_
Cultivate-Pst 3sg.f her:PN-poss MA in Education
leis   _an_   _Open University_.
with:Prep det Open University.
She obtained her MA in Education from the Open University.

(36) _Glacann_ _an fear_ _lámh_ _dheas_ _na_ _mná_
Take-Pst det man:N hand:N right:ADJ (of).det woman:N
 ina   _láimh_ _féin_.
in:Prep+his:PN-poss hand:N refx-prt.
The man took the right hand of the woman in his own hand.

(37) a.   _Níor_   _ghéill_ _sé_ _di_.
            NOT:Neg yield-Pst 3sg.m to:Prep+3sg.f
            He would not yield to her.

   b.   _Tá_   _an chré_ _bog_   _agus_ _géilleann_
            Be-Pres det grave:N soft:ADJ and yield-Prs
            _sí_ _go_ _h-éasca_.
            3sg.f to:Prep easy:ADJ
            The grave is soft and it yields easily.

(38) _Ag_   _an am_ _céanna,_ _d'iompaigh roinnt_   _Lochlannaigh_
at:Prep det   time:N same:ADJ turn-Pst several:QTY Vikings:N
_ón_   _bPágánacht go_   _dtí_   _an Chríostaíocht_.
from:Prep Paganism:N to:Prep at:Prep det Christianity:N
At the same time, several Vikings turned from Paganism towards Christianity.
At.the same.time'(do´(Vikings, [**turn´**(Vikings)])

                ∧ ¬ [**be-at´**(Paganism, Vikings)])

                ∧ [BECOME [**be-at´**(Christianity, Vikings)])

(39) _Tháinig_ _muid_ _ar_   _saoire_   _cois_   _na_   _farraige_.
Come-Pst 1PL   on:Prep holidays:N beside:Prep det sea:N
We come on holidays beside the sea.
[**do´**(we, [**come´**(we)]) ∧ [(BECOME [**be-at´**(holidays, we)]
                    ∧ [(BECOME [**be-at´**(the sea, we)]]

(40) _Dé_ _hAoine, téann_   _sé_   _go_   _dtí_
Day:N Friday:N go-PRS.HAB 3sg.m to:Prep.to:Prep
an teach _tábhairne_.
det house:N bar:N
On Fridays, he goes to the pub.
on.Friday'(do´(he, [**go´**(he)]) & INGR [**be-at´**(pub, he)])

(41) a.   _D'imigh_   _an scáth_   _as_   _tóin_   _a_
            Go.depart-Pst det shadow:N from:Prep base:N of:Prep
            'tsléibh.
            mountain:N
            The shadow cleared from the foot of the mountain.
            [**do´**(⊘, [**go´**(shadow)])
                    ∧ NOT (INGR [**be-at´**(foot of the mountain, shadow)])]

   b.   _I lár na 18ú aoise, d'imigh an-chuid Protastúnaigh go Meiriceá, ina measc siúd baill na hEaglaise Módhaigh (Methodists) agus Cumann na gCairde (Quakers) ar thóir saoise creidimh san cóilíni nua._

            In the middle of the 18th century, many Protestants went to America, a majority of them members of the Methodists and Quakers seeking freedom of religion in the new colonies.

   b'   _d'imigh_   _an-chuid_ _Protastúnaigh go_   _Meiriceá_
            go.depart-Pst many:QTY Protestants:N to:Prep America;N
            Many Protestants went to America.
            [**do´**(many Protestants, [**go´**(many Protestants)])
                    ∧ (INGR [**be-at´**(America, many Protestants)])]

(42) *Agus mé ag léamh roinnt blaganna anseo ar Blogger, d'aimsigh mé roinnt dánta atá thar a bheith iontach le fear darb ainm Colm (ní fios a shloinne).*

And me reading various blogs here on Blogger, I <u>hit</u> upon various poems that were wonderful by a man whose name is Colm (I don't know his title).

We now examine auxiliary verb constructions where the light verb is utilised.

6. Auxiliary verb constructions that utilise light verbs

We can usefully provide a brief contrast of the LVC discussed earlier with some auxiliary verb constructions (AVCs). Auxiliary verb constructions are defined by Anderson (2006: 7) as a "*monoclausal structure minimally consisting of a lexical verb element that contributes lexical content to the construction and an auxiliary verb element that contributes some grammatical or functional content to the construction*". AVCs therefore represent a cluster of syntactic, semantic and morphosyntactic features. We can see this in the data and more particularly in the Aux constructional schema presented in (48), later.

There are many different types of auxiliary verb constructions within Irish but we will only discuss the AVCs that use light verbs. These AVCs of Irish involve the same light verbs as discussed earlier but employ them in the morphosyntactic form of verbal noun within the AVC. These AVCs express imperfectivity and the progressive.

The auxiliary verb used is one of the forms of the verb 'to be' in Irish, the other form of 'to be' being the copula *is* 'be'. The auxiliary verb here can record tense. This non-copula form of the verb 'to be' has a number of functions and it is also occasionally called the existential verb. As it provides auxiliary functions here we will label it in the gloss as Aux. The Aux may also express a negative or positive polarity. The AVC construction involves the nominalised form of the lexical verb, that is, as a VN within the construction [Aux VN].

The AVCs differ from LVCs in a number of important characteristics, apart from those mentioned earlier. The AVC includes an auxiliary verb that encodes tense (an operator in the layered structure of the clause (LSC) in RRG) and possibly negative

polarity (also an operator) whereas in an LVC, the tense is recorded on the light verb. In both construction types, the operators are projected across the whole construction. Within this AVC type, the construction encodes progressive aspect and, as we have see in figure 1, this denotes the progressing transition from PREINCEPTIVE to INCEPTIVE in the sub-event phases. In the AVC type under discussion – those that utilise LVs - the INCEPTIVE phase of the sub-event is not yet reached, within the main event construal.

Of interest too is that we can directly relate the AVC construction to the grammaticalisation patterns portrayed in (1) and (2). Here we can record the observation that there is no evidence for a serial verb construction in Irish, but that the [lexical verb – light verb – auxiliary verb] continuum is productive. Under this, the auxiliary verb construction is more grammatical in nature than the LVC. However, the resolution of the LVs themselves is lexical in nature. We will discuss the criteria by which we argue this in (53), later.

The actual patterns of occurrence are in (43).

(43) Syntactix constructional signatures of AVCs utilising light verb
   a. AUX NP LV$_{VN}$
   b. AUX NP (*ag:*PREP) LV$_{VN}$ NP
   c. AUX NP (*ag:*PREP) LV$_{VN}$ (*ag:*PREP) VN NP

   Where, in the AVC construction, the light verb - LV$_{VN}$ - is found in the morphosyntactic form of a verbal noun.

In Irish, the preposition *ag* 'at:PREP' in this function encodes for progressive aspect. We see this when it occurs in the construction [*ag* VN].

We now provide some examples of each (44, 45, and 46) that illustrate the patterns of occurrence of AVCs, utilising light verbs, along with RRG structural representations of the constituent and operator projections showing the nuclear cosubordination.

(44) *Bhí   Trevors   ag   iarraidh   éalú*

Aux-PST Trevors:N at:PREP attempting:VN escaping:VN

trasna   na   bpáirceanna

across:PREP DET   park:N

LIT: Trevors was attempting escaping across the park.
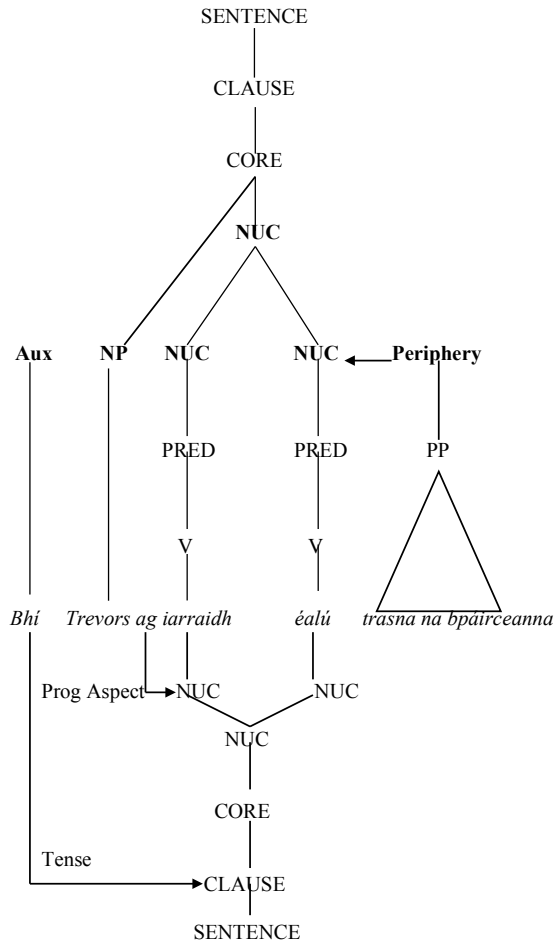
Trevors was attempting an escape across the park.

Figure 5: RRG projection of example (44)

NEG.AUX-PRS 1SG   at:PREP attempting:VN going:VN across:PREP
an lá   seo
DET day:N this:Dem

LIT: I am not attempting going through this day.
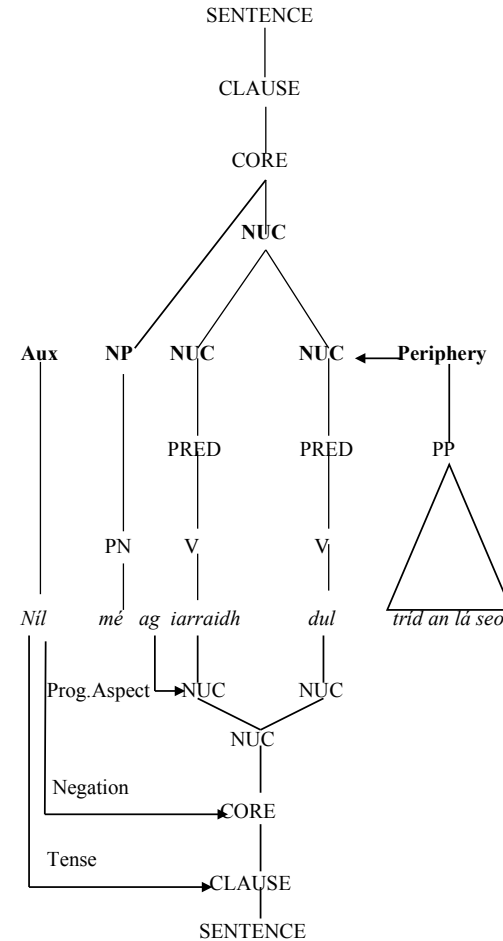
I am not trying to go through this day.

Figure 6: RRG projection of example (45)

(45)   *Níl   mé   ag   iarraidh   dul   tríd*

(46) *Tá   cúr   ag   tosaí   ag   tíocht   orthu*
AUX-PRS froth:N at:PREP starting:VN at:PREP coming:VN on:PREP+3PL

LIT: A froth is starting coming on them.

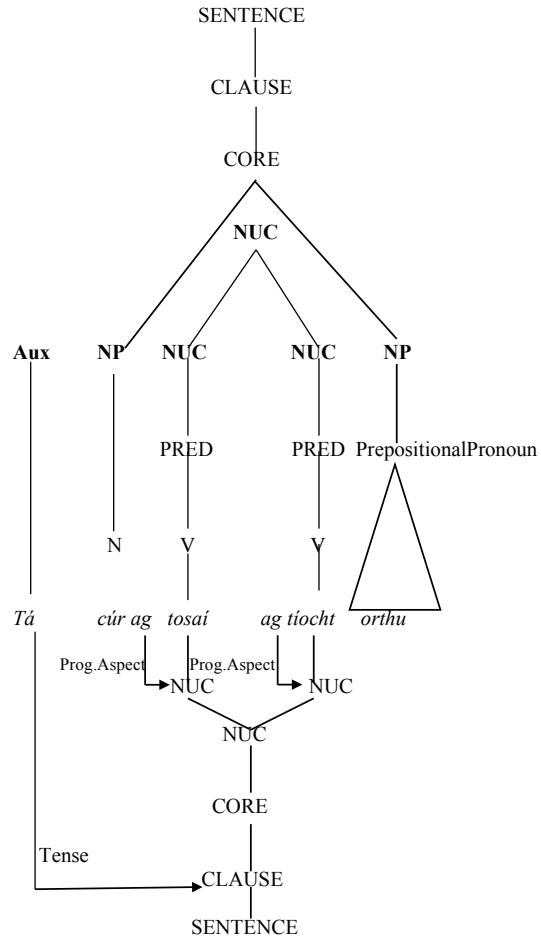Froth is starting to come on them.

Figure 7: RRG projection of example (46)

7. The constructional schemata

The constructional schema for the Irish nuclear juncture LVC type with nuclear cosubordination is indicated in (47), with the constructional schema for the auxiliary verb construction that utilises light verbs shown in (48).

(47)   Constructional schema for the Irish Light Verb Construction

CONSTRUCTION:	Irish Light Verb Construction
Syntax	
Juncture:	nuclear
Nexus:	cosubordination
Construction type:	light verb
	[Clause [CORE NP [**NUC** [NUC…] [NUC…]] NP…]…]
PSA:	Immediate post verbal direct core argument according to actor-undergoer hierarchy and RRG linking principles
Linking:	Link the NUCs to a single CORE
	If the verb in NUC2 is transitive
	Then its logical structure may assign 2 macroroles.
Morphology:	The V_2, the matrix verb, takes VN form
Semantics:	[PRED$_{NUC1}$] PHASE-CHANGE [PRED$_{NUC2}$]
Pragmatics:	unspecified

(48)   Constructional schema for the Irish Auxiliary Verb Construction

CONSTRUCTION:	Irish Aux with Light Verb Construction
Syntax	
Juncture:	nuclear
Nexus:	cosubordination
Construction type:	Auxiliary verb
	[Clause [CORE Aux NP [**NUC** [NUC…] [NUC…]] NP…]…]
PSA:	Immediate post Aux direct core argument according to actor-undergoer hierarchy and RRG linking principles
Linking:	Link the NUCs to a single CORE
Morphology:	The LV and Matrix verb both take VN form as [Aux VN VN]
Semantics:	[PRED$_{NUC1}$] PHASE-CHANGE [PRED$_{NUC2}$]
	Domain of Aux is tense, aspect, voice, negative polarity
Pragmatics:	unspecified

We now briefly review the RRG approach to characterising complex predicates.

8. The RRG approach to characterising complex predicates

We have mentioned earlier that the RRG model posits three nexus relations (coordination, subordination and cosubordination) between clauses in complex sentences. We also noted (49) that related to nexus relations is the nature of the units being linked, the juncture types within RRG.

(49)

Nuclear juncture	[CORE … [NUC …] .. + .. [NUC …] …]
Core juncture	[CLAUSE … [CORE …] .. + .. [CORE …] …]
Clause juncture	[SENTENCE … [CLAUSE …] .. + .. [CLAUSE …] …]

Of particular interest to us here in our examination of Irish light verb constructions and complex predicates is the nuclear juncture. In a nuclear juncture, a number of nuclei combine to form a single, complex nucleus with a single set of core arguments. In nuclear junctures all of the arguments of the component verbs are pooled to create a single set of core arguments for the derived complex nucleus. The syntactic juncture-nexus types are used to express certain semantic relations between the units in the juncture, for example, causation, purpose and temporal sequence. A subset of interclausal semantic relations (50) is relevant for this discussion – those to do with phase and sub-event modification.

(50)   Formal characterisation of relevant subset of interclausal semantic relations

   Phase: BECOME/INGR, KEEP, TERMINATE
   Modifying
   subevents:
   1: manner   **do'**(x, [**MOTION'**(x)]… ^ [**MANNER**.**OF**.**MOTION'**(x)])
   2: motion   **do'**(x, [**MOTION'**(x)]… ^ [**pred₂'**(x, (y))])
   3: position   **do'**(x, [**STANCE'**(x)]… ^ [**pred₂'**(x, (y))])
   4: means   **do'**(x, [**…**]… ^ [**pred₂'**(x, y)])

The semantic relations form a continuum expressing the degree of semantic cohesion between the propositional units links in the complex structure (Van Valin (2005: 208). That is, the degree to which they express components of a single action or event, or discrete actions or events. The syntactic linkage relations are posited within RRG to be ranked hierarchically as a function of the strength of the syntactic bond between the units.

9. Discussion

We have argued for the nexus-juncture type of nuclear cosubordination and for Irish light verbs that the interaction of the cohesion continuum of semantic relations with the hierarchy of clausal linkage across nexus-juncture types is at the strongest pole with the semantic relations covering phase and modifying subevents. We have also demonstrated that an account of Irish light verbs is within the domain of nuclear cosubordination. Within this account of Irish light verbs and nuclear junctures, the argument structures of the component logical structures are pooled to yield the composite arguments of the structure of the entire logical structure and, therefore, the logical structure maps into a single core.

Furthermore, the discussion on the Irish light verb supports the idea that these light verb constructions are formed pre-syntactically in the lexicon. We argue towards this conclusion based on the following criteria as to what constitutes lexical behaviours. In RRG a criteria distinction is made between lexical and syntactic phenomena (Van Valin 1997: 389-392, 667 and Van Valin 2005: 158-160). That is, in RRG a phenomenon is considered to be lexical if it meets the criteria in (51).

(51)   Diagnostics of lexical phenomenon in RRG:
    a) changes the logical structure and aktionsarten properties of the event
    b) affects the argument structure of the predicate,
    c) alters the semantic construal of the predicate, and
    d) affects the actor and undergoer assignment in the semantics to syntax linking system (Van Valin 2005: 136*ff* and 149*ff*)

(52)   Diagnostic of syntactic phenomenon in RRG:
    a)   Mapping between macroroles and the syntactic representation

Correspondingly if the phenomenon corresponds to (52), the mapping between macroroles and the syntactic representation, it is referred to as syntactic phenomenon since this affects the selection of the privileged syntactic argument and the linking between macroroles (for example, actor and undergoer, active vs. periphrastic passive) and the subsequent morphosyntactic realisation of the macroroles and the other clausal core arguments.

We can see from the discussion earlier on the patterns of occurrence of light verbs that the formation of these constructions meets the diagnostic criteria for lexical phenomena. That is, the fusion of the argument structure of the light verb and matrix verb within a nuclear cosubordination relationship; it affects the predicate's Aktionsarten class and its associated logical structure; it contributes semantic content, and, via the linking system, modulates the actor-undergoer assignment.

The parameters of variation we have considered in our discussion of the patterns of occurrence of LVCs in Irish, and the AVCs that utilise light verbs, are (53):

(53) The parameters of variation of Irish light verbs

1. The LVC constitutes a single event predication.
2. The phenomena of light verbs and LVCs are treated as lexical in Irish.
3. The single event predication and associated logical structure are input to the (RRG) linking system.
4. Light verbs can occur in LVCs and also auxiliary verb constructions.
5. The single marking of tense is on the light verb in the LVC (and on the Aux in the AVC) that employs the LV. This is evident in the RRG operator projection in a structural diagram of the LVC.
6. The Aux in the AVC when a LV is employed also records the single marking of tense. This is evident in the RRG operator projection in a structural diagram of the AVC.
7. The LV in the AVC takes the VN morphosyntactic form, as well as the matrix verb, which is also in VN form.
8. Progressive aspect is recorded in the AVC that employs the LV through use of a preposition *ag* followed by the LV in VN form. This is evident in the RRG operator projection in a structural diagram of the AVC.
9. The LV is semantically bleached with respect to event type and event attributes.
10. The matrix verb in the LVC is morphologically marked as a verbal noun (This is a common feature of Celtic languages)
11. The class of light verbs is isomorphic with the class of phase verbs.
12. Verbs of motion and path are excluded from acting as light verbs in a LVC or AVC.
13. The LVC can occur within an impersonal passive construction.

We have demonstrated this across light verb constructions and those auxiliary verb constructions that use the light verb.

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