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Nominally Phrasal Copular Constructions*

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0. Introduction

In this paper, we will account for some puzzling alternations of word order found in Modern Irish copular constructions. We will claim, in particular, that these alternations are part of a complex interaction between head movement of predicates, definiteness effects, and pronominal object shift. In particular, we argue that complex phrasal nominal predicates undergo head movement in Modern Irish.

The various orderings of the modern Irish copular constructions are seen in the sentences in (1). (Throughout, the notional **subject** is indicated in **bold**, the *property* being attributed to that subject is indicated in *italics*.)

- 1) a) Is é **Jean Luc Picard** *an captaen*
C him the captain
“Jean Luc Picard is the captain”
- b) Is *dochtúir ainmhithe* (í) **Beverly Crusher**
C doctor animals (agr)
“Beverly Crusher is a doctor of animals”
- c) Is é *an dochtúir* é
C him the doctor him
“he is the doctor”

In sentences (b) and (c), the subject follows the predicate, while in (a) the reverse order appears.

We will start out by quickly sketching our analysis of Irish copular constructions and discussing the structure of sentences like those in (1). We will then present some evidence from extraction phenomena, anaphoric islands, and the responsive system to support our hypothesis.

- b) Is í **Beverly Crusher** *an dochtúir ainmhithe*
 "Beverly Crusher is the doctor of animals"

In most of the traditional literature (e.g. ó Siadhail (1989)), the *is* morpheme is treated like a verb. We assume, following Carnie (1993), Doherty (1992) and Ahlqvist (1972) that it is really a complementizer particle, which bears aspect and tense features, i.e. is not a lexical verb. *Tá*, on the other hand is a real verb. It functions as an auxiliary and is found productively with adjectival, adverbial, PP, and verbal predicates. It is never found with nominal predicates:

- 8) a) Tá sé mór "he is big"
Be.pres he big
 b) Tá Seán go maith "John is well"
be.pres John adv well
 c) Tá Seán i mBaile Átha Claith "John is in Dublin"
be.pres J in Dublin
 d) Tá Seán ag rith "John is running"
be.pres J prog run.dvn
 e) *Tá sé dochtúir "He is a doctor"
be.pres he doctor

Is is found almost exclusively with nominal predicates. It is generally not found with adjectival or prepositional predicates (9):

- 9) a) Is dochtúir mé "I am a doctor" (NPs - Productive)
C doctor I
 b) *Is cliste iad "they are clever" (*adj)
C clever them
 c) *Is i nDaoire Seán "*John is in Derry" (*PP)
C in Derry J
 d) *Is ag rith é "he is running" (*Verb)
C prog run him

The few adjectival and prepositional exceptions to this rule, as noted by Doherty (1992), are all individual level predicates (10):

- 10) a) *fiú* worthwhile *fíor* true
maith good *olc* evil
aisteach odd *iontach* wonderful
ceart right *cóir* just
leor sufficient *mór* big
beag small *fuair* cold
gruama gloomy *cosúil* similar
ionann equivalent *greannmhar* funny
mall slow

- b) Más ceart mo chuimhne "If my memory is right"
if right my memory (Doherty 1992)

c)	de	“of”	meaning origin
	as	“out of”	meaning origin
	ó	“from”	meaning origin
	le	“with”	indicating possession

d) Is liomsa an t-Alfa Romeo sin “I own that Alfa Romeo”
C with.me the Alfa Romeo that (from Doherty 1992)

Doherty (1992) claims that the choice between *is* and *tá* follows from the stage/individual level distinction of Carlson (1977), *is* being found exclusively with individual level predicates. This is consistent with the interpretation of nominal clauses in Irish. In English, a sentence like (11a) is ambiguous in its readings. The Irish equivalent in (12) can only have individual level readings. To get the stage level reading, a different construction must be used: that in (13), which uses the stative aspectual preposition *ina*. The *Is* morpheme is ungrammatical in this context (14).

- 11) a. John was a doctor
 b. PAST [doctor’(John)] Individual level
 c. (∃L)[PAST(L) & doctor’(John,L)] Stage level

12) Ba dhochtúir Seán
C.past doctor him
 “he was a doctor”

13) Bhí Seán ina dhochtúir (ach níl díolúine aige anois)
Be.past J in.his doctor (but be.not license at.3.s now)
 “John was a doctor (but he doesn’t have a license now)”

14) *Ba dhochtúir é ach níl díolúine aige anois
 “He was a doctor but now he doesn’t have a license”

Unfortunately, the stage/individual level distinction does not suffice to determine when you use *is* or *tá*. There are some individual level predicates that only ever appear with *tá*. This is seen in (15)

15)a) Bhí sé cliste b) Bíonn madraí ag amhastrach
be.past he clever *be.habitual dogs prog bark*
 “He was clever” “Dogs bark”

c) *Ba Chliste é
C.past clever him
 “He was clever (before he died)”

Carnie (1993) argues that the distinction follows rather from what elements are allowed to undergo head movement for feature checking in a given language. He argued there that nominal predicates are allowed to bear inflectional features in Irish, and behave like verbs in that they undergo head movement to the front of the clause, as schematized abstractly in (16).

16) $[_{FP} \dots \overset{\uparrow}{F} \dots F \dots [_{NP} N] \dots]]$

This approach is supported by facts from small clauses (Chung and McCloskey 1987) where, unlike other non-verbal predicates, nominal predicates are not allowed (17). The ungrammaticality of (17b) follows from the fact that nominal predicates in Irish must bear inflectional features. Since small clauses don't have inflectional heads, this predicate has nothing to check its features against.

- 17) a) Agus [é i gCalafóirnia]... “And he is/was in California”
And him in California
- b) *agus [é dlíodóir] “and he is/was a lawyer”
and him lawyer

2. Two Kinds of Is

The analysis above leads us to a very straightforward account of the word order alternation seen in (7) above. Recall the two different word orders, seen in (18) below. The *predicate* (b) first order is found with indefinite attributed properties, the **subject** first order is found only with definite attributed properties.

- 18)a) Is é **Jean Luc Picard** *an captaen*
C agr the captain
“Jean Luc Picard is the captain”
- b) Is *dochtúir* (í) **Beverly Crusher**
C doctor (agr)
“Beverly Crusher is a doctor”

Notice that this word order alternation is very different from the canonical/reverse distinction of Moro (1993). The alternation seen here is completely dependent upon the definiteness of the predicate NP-- a feature not found in the alternations Moro discusses¹. In fact, the reverse/canonical alternation can be found only as a subtype of the clauses seen in (18a). Note in particular the positioning of the agreement morpheme, which precedes both nominals.

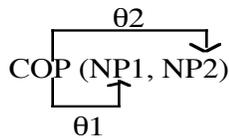
- 19) a) Is é Jean Luc Picard an captaen (canonical)
b) Is é an Captaen Jean Luc Picard (reverse)

The reader will note that in contrast to the sentences in (19), the optional agreement morpheme in sentence (18b) must follow the indefinite predicate NP and precede the subject NP. In addition the reverse/canonical pairs are never allowed with sentences of the type seen in (18b). The alternation in (18) thus seems to be of a different nature than those treated by Moro, and we will not discuss the canonical/reverse distinction further. For more discussion see Carnie (forthcoming).

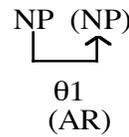
The predicate first order is immediately accounted for by the head raising analysis presented in section (1), i.e. the indefinite nominal predicate raises just like a

verb. The subject first order is more complex, however. We follow Rapoport (1987), among many others, in assuming that definite and indefinite attributed properties have different argument structures (contra Heggie (1988) and Moro (1993)). Sentences like (18a) have an abstract two place COP predicate which take both the subject and the property being assigned to that subject as arguments (20a) which are assigned different theta roles (attribute, and attribute recipient). The indefinites, on the other hand, directly theta-mark their subject with the recipient role (20b). This corresponds to the fact that definite NPs are referring expressions and have saturated argument structures, whereas indefinite NPs are not referring expressions and can directly predicate another noun.

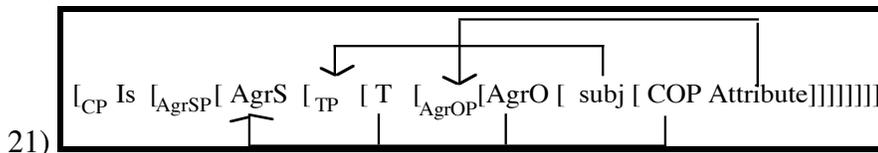
20) a)



b)



With definite predicates like that in (18a) then, it is the abstract predicate COP, not the nominal predicate, that undergoes head movement. The COP morpheme is realized phonologically with the subject agreement features of the AgrS head, in the form of a pronominal element. Both nominals appear in argument positions. This is seen in (21):



This can be contrasted with indefinite predicates, where the predicate nominal itself undergoes the raising (22)².



There is, in fact, one more non-clefted order of the Irish copula construction seen in (23).

23) Is é an dochtúir é
 C agr the doctor him
 “he is the doctor”

Given that there is a definite predicate or attribute, we predict that the subject pronoun should follow the agreement morpheme in the “subject” position. Instead it appears after the predicate. To account for this order, we turn to the phenomenon of Weak Pronoun Post-posing discussed in Chung and McCloskey (1987) and Duffield (1994). Weak pronominal objects shift to the right as seen in (24)

- 24)a) Scaoil an Captaen **na féasair** ag na Clingíonaí
 Fired the Captain the phasers at the Klingons
 “The Captain fired the phasers at the Klingons”
- b) ?Scaoil an Captaen **iad** ag na Clingíonaí
 “The Captain fired them at the Klingons”
- c) Scaoil an Captaen ag na Clingíonaí **iad**
 “The Captain fired them at the Klingons”

Since the pronominals in the copular clause are weak grade, they are also subject to this rightward movement (25)

25) [Is [[AgrS^é] [TP^é [an dochtúir]]]]] 

This, then, derives the three basic word orders of Irish copular clauses. A summary of clause types is given in (26).

26)

C (Particle)	AgrS (Predicate)	Spec,TP (Subject)	Spec,AgrO (Object)	R-adj	
Ní <i>Neg</i>	fhaca <i>Saw</i>	Seán <i>John</i>	an dochtúir <i>the doctor</i>		Verb
Ní <i>Neg</i>	dochtúir <i>doctor</i>	Seán <i>John</i>			Indef N
Ní <i>Neg</i>	hé <i>COP</i>	Séan <i>John</i>	an dochtúir <i>the doctor</i>		Def NP
Ní <i>Neg</i>	hé <i>COP</i>	t _i	an dochtúir <i>the doctor</i>	é _i <i>she</i>	pro subj

3. Evidence for the Head Movement Analysis

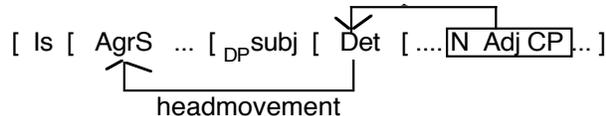
In section 2, we proposed that indefinite nominal predicates undergo head raising for feature checking in order to account for their initial position in the clause. Given that by definition head movement is the raising of heads, the question of how a phrasal or complex nominal predicate can participate in this process arises. Surprisingly in Irish, entire phrasal and complex NPs appear in this first position (27), a position we claim is associated with head movement.

27) Is [dochtúir ainmhithe] Seán
C doctor animals.gen John
 “He is a doctor of animals”

At first, this may seem to be strong evidence against the head movement analysis suggested above. However, there is extensive evidence that in fact these complex phrasal elements are behaving like heads. We suggest that for all indefinite

nominal predicates it is really the indefinite determiner (a normally phonologically null element) which functions predicationally, and that all the complements to this determiner incorporate into it. It is this determiner head, then, which undergoes the head movement (28), thus accounting for the apparent anomalous appearance of complex predicates in a position normally reserved exclusively for heads.

28)



In this section, we will present three types of evidence that show that such incorporation takes place. Evidence from wh-extraction, anaphoric islands, and the responsive system all suggest that indefinite NP predicates form incorporated heads, since they behave more like words than phrases.

3.1 Evidence from wh-extraction.

One piece of evidence in favor of the incorporated status of indefinite nominal predicates comes from wh-extraction. The argument is as follows. If predicates have undergone head movement forming complex heads, then the subcomponents should not be able to extract via wh-movement. Before proceeding to the actual test, it is worth noting that Moro (1993) and Heycock (1991) have argued that a similar blocking of extraction from copular clauses in English can be accounted for using subjacency. However, Irish does consistently allow subjacency/ECP type violations (McCloskey 1979). If the speaker leaves a resumptive pronoun at the extraction site and changes the highest complementizer from a^L to a^N , then a sentence with such a violation is rendered grammatical (see McCloskey 1979 for more details). This is seen in the following examples. In (29), we have an example of a sentence with a wh-island. Wh-movement of the subject of the embedded clause (29b) is licit, as long as the highest complementizer is a^N , and the resumptive pronoun *sé* 'him' is found at the extraction site. The ECP and subjacency are allowed to be violated under such conditions. Similar facts are found with nominal islands as is seen in (30).

29) a) *Bíonn fios agat i gconai [CP caidé_i a^L bhuaifidh an píobaire t_i]*
be.hab know at.2.s always what_i COMP play.fut the piper t_i
 "You always know what the piper will play"

b) *Cén Píobaire_j [CP a^N mbíonn fios agat i gconai [CP caidé_i a^L bhuaifidh sé_j t_i]]*
Which piper COMP be.hab know at.2.s always what_i COMP play.fut. him
 "Which piper do you always know what he will play"

30) a) *Tá máthair an fhir san otharlann*
Be.pres mother the man.gen in.the hospital
 "The man's mother is in the hospital"

b) *Cé a^N bhfuil a_i mháthair san otharlann*

who COMP be.pres his mother in.the hospital
 “Who is (his) mother in the hospital”

Given that such extraction is licit, we can use wh-extraction as a test for the “word” or incorporated status of a nominal, in contrast to the situation found in English, discussed by Moro (1993) and Heycock (1991) where subjacency violations are indications of islandhood. If wh-extraction is licit, then the sequence of morphemes is phrasal, if wh-extraction is illicit, then it is functioning like a single word.

This pattern is exactly what we find with nominal predicates. An incorporated indefinite NP predicate like that in (31) does not allow extraction, despite the fact that Irish normally allows extraction out of nominal islands (*arb* is the special form of a^N found in copular clauses).

31)a) Is [_{NP} amhrán_i [_{CP}^{aL} bhuaifidh an píobaire t_i]](é) “Yellow Submarine”
C song COMP play.fut. the piper agr
 “‘Yellow Submarine’ is a song which the piper is going to play”

b) *Cén Píobaire_j arb [_{NP} amhrán_i [_{CP}^{aL} bhuaifeadh sé_j t_i]](é) "Yellow Sub"
Which piper rel song COMP play.cond him agr
 “*Which Piper is ‘Yellow Submarine’ a song which he/t_i is going to play”

These can be strikingly contrasted with the definite NP attributes, which are not predicates and do not undergo incorporation or head movement. In these sentences wh-extraction from the definite NP is licit.

32) a) Is é “Yellow Submarine” [_{NP} an t-amhrán_i [_{CP}^{aL} bhuaifidh an píobaire t_i]]
C agr the song COMP play.fut. the piper
 “‘Yellow Submarine’ is the song which the piper is going to play”

b) Cén Píobaire_j arb é ‘Yellow Submarine’ [_{NP} an t-amhrán_i [_{CP}^{aL} bhuaifeadh sé_j t_i]]
Which piper rel agr the song COMP play.cond him
 “Which Piper is ‘Yellow Submarine’ the song which he/t_i is going to play”

This conclusion is given support by the *in situ* status of wh-questions of subconstituents in Irish questions. In Irish, wh-movement is always marked by a wh-complementizer. In the formation of wh-questions of indefinite nominal predicate constituents, however, no such wh-complementizer is ever found (33), showing that questions have the wh-element *in situ*. Wh-*in situ* is found nowhere else in this language.

33)a) *Cad arb a dhochtuir (é) McCoy
What rel his doctor agr McCoy
 “*What would McCoy be a doctor of?”

b) Cén sort dochtúra (é) McCoy
What kind doctor.gen agr McCoy
 “McCoy is what kind of Doctor?”

3.2 Evidence from Anaphoric Islands

Slightly more subtle evidence comes from the binding theory. In English, binding out of a phrase (as in 34a) is licit. The word “animal” can serve as an antecedent to the pronoun. In (34b and c) however, we see that binding out of a syntactic compound is noticeably degraded³, and that binding from a lexical compound is completely ungrammatical.

- 34) a) *Binding from a phrase:*
John is [a doctor of [animals]_i] but he is allergic to them_i
- b) *From a “syntactic” compound:*
?John is [an [animal]_i doctor] but he is allergic to them_i
- c) *From a lexical compound:*
*My favorite tool is the fly_i-swatter but they_i are all extinct

We can use this as a diagnostic for “word” status. If we compare the definite and indefinite sentences we see there is a similar contrast in the binding facts. Binding out of the incorporated indefinite is less grammatical (35a) than binding out of the clearly phrasal element in (35b)

- 35)a) ?Is dochtúir ainmhithe_i Seán ach is fuath leis iad_i
C doctor animals John but C hate with.3 them
John is a doctor of animals but he hates them(animals)
- b) Is é Seán an dochtúir ainmhithe_i ach is fuath leis iad_i
C agr J the doctor of animals but C hate with.3 them
John is the doctor of animals but he hates them(animals)

This is consistent with the notion that the indefinite head moved predicate NP is really an incorporated structure.

2.3 Evidence from the Responsive System.

Finally, there is some evidence that not only are these predicates incorporated words, but that they are not in a specifier position either. Moro (1993), Heggie(1988), and Heycock (1991) have all argued that in the English reverse copular construction the predicate NP is in a specifier position (For Moro and Heycock this is the specifier of IP, for Heggie the specifier of CP). We claim that there is substantial evidence that this is incorrect at least for Irish. This evidence comes from the responsive system.

In order to understand how this works, however, we must first discuss complementizer cliticization. McCloskey (1992) argues in some detail that complementizers in Irish lower to adjoin to the verb in its inflectional head. This is schematized in (36). We refer you to his work for more details.

36) $\left[\begin{array}{c} \text{CP} \\ \text{C} \mid \text{AgrSP} \text{ V+AgrS} \dots \end{array} \right]$

Turning now to the issue at hand, Irish has no words for yes or no,. Instead the verb is repeated in either the positive or negative form as seen in (37), where the negative form is indicated by an adjoined complementizer:

37)a) An bhfaca tú an Ferengí? b) Ní fhaca OR c) Chonaic
 Q saw you the Ferengi Neg saw Saw
 "Did you see the Ferengi?" "no" "yes"

This can be analyzed as the elision of everything to the right of the verb in a manner familiar from VP ellipsis (38).

38) Elide everything except AgrS (and adjoined complementizer)

For example, you elide the shaded parts of the sentence schematized in (39).

39)

C +	AgrS	Spec,TP	Spec,AgrO	R-adj
Ní	fhaca	Seán	an ferengí	inné
Neg	Saw	John	the Ferengi	today

Given that we have claimed predicates in copular clauses are in AgrS, then when this elision occurs, then the predicate should remain. At least for the adjectival and prepositional predicates that appear in this construction this is true (40-41).

40) Q: An le Seán an Subaru? A: Is leis "Yes"
 Q with J the Subaru C AgrS
 "Does John own the Subaru?" C with.him

41) Q An ceart mo chuimhne A: Is ceart "Yes"
 Q right my memory C AgrS
 "Is my memory is right?" (from Doherty 1992)

In sentences with definite NP predicates, this is also true. Recall that in the analysis sketched above, definite NP predicates do not incorporate, rather, they are the argument of an abstract COP predicate. Thus in sentences with definite NPs we expect only the pronominal agreement realization of the abstract predicate to remain (42). This predication is true.

42) Q: An é Ceannasaí an Enterprise William Riker? Is é
 Q COP Commander the C AgrS
 "Is William Riker the Commander of the Enterprise?"

The situation is more complex with indefinite nominal predicates (43) which we argue appear in AgrS. In these cases the predicate does not surface, but is replaced by the dummy pronominal "ea"

43) a) An dochtúir Leonard McCoy? b) *Is dochtúir

Q Doctor
"Is Leonard McCoy a doctor?"

✓Is ea

This is a kind of “do support”. This dummy pronominal shows up when you have an indefinite predicate. What is crucial here is that the element appearing in the Agr head is retained (via the pro-form “ea”) in responsives, supporting the analysis that these complex nominal predicates are incorporated into AgrS.

Now let us consider the status of specifiers. This issue is very difficult to test since the highest specifier never seems to be filled by anything in Irish. McCloskey (1993), however, points out that there is a set of elements that appear to be IP-initial or IP-adjoined elements. Based on scope and negative polarity items, he claims that the sentence initial adverbs in (44a) are IP adjoined (in our terms AgrS-adjoined). We refer the reader to that work for arguments in favor of this position.

40)a) I lár an gheimhridh, an bhfaca tú do chara,
in middle the winter, Q see you your friend
In the middle of winter, did you see your friend

b) Ní fhaca
No.

What is interesting about these cases is that in the responsive system the elements which are either in the specifier or adjoined are omitted. Again, only the C-V-AgrS head remains. If we follow Kayne (1993) in assuming that specifiers and adjuncts are the same kind of object, we have strong evidence against predicates being in an specifier position. The responsive system of Irish only repeats the AgrS head all other specifiers and adjuncts are omitted. If the predicates in Irish were in such a position we would expect them too to be omitted. This is contra to fact.

4. Conclusion

In this short paper, we have attempted to provide a non-stipulative account of complex word order facts in copular clauses in Irish. In essence, we have claimed that there are three different types of non-verbal predicates in Modern Irish, each requiring their own construction; the forms requiring verbal *tá*, and two forms using the complementizer *is*, one with an abstract COP predicate (the definite nominals) and one in which the nominal itself acts as the predicate (the indefinite nominals). We have argued, using facts from extraction phenomena, anaphoric islands and the responsive system, that the indefinite cases constitute a set of complex nominal predicates in Irish that bear inflectional features, that incorporate into a single word, and undergo head movement to check features.

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¹This of course is a simplification, since there are cases where indefinite NPs cannot participate in the canonical/reverse construction discussed in Moro. We will not discuss this here, and refer the reader to Moro (1993) for discussion.

²We have not attempted to deal with the issue of case here. However, we can speculate briefly about the accusative case found on the subject nominal.

- i.) Is dochtúir é
Cop doctor him.acc
He is a doctor.

It appears as if the subject is showing up with accusative case. We believe that, surface phonology to the contrary, these NPs are not, in fact, accusative (for an alternative view see Carnie 1993). For all NPs, except 3rd person pronouns, there is no morphological case difference between nominative and accusative case. Nominative case pronouns are simply the accusative forms preceded by an “s” (/f/) (ii):

- | | | | | |
|-----|------|--------|-----|--------|
| ii) | sé | “he” | é | “him” |
| | sí | “she” | í | “her” |
| | siad | “they” | iad | “them” |

Ken Hale (p.c.) has pointed out to us that the “s” forms are never found anywhere except to the immediate right of a tensed verb. For example, in co-ordinate NP subjects, a pronominal subject does not show up with “s”, even though it is in a nominative case position (iii):

- iii) Chuir Lwaxana Troi agus é an ríomhaire sa réaltlong
Put.past and him the computer in.the starship
“He and Lwaxana Troi put the computer in the starship”

The “s” forms are only a feature of the basic “é/í/iad” set being cliticized to the right of a tense verb (iv):

- iv) Chuir sé an ríomhaire sa réaltlong
Chuir+s+é
Put.past he the computer in.the starship
He put the computer in the starship

On this account, nominative case is assigned to the subjects of copular clauses, just as in normal verbal clauses. The lack of the “s” is attributable to the fact that these pronouns are not adjacent to a tensed verb, but to a noun (or abstract COP).

³Thanks to Michael Rochemont for pointing this out to us.

References

- Ahlqvist, A (1972) "Some aspects of the copula in Irish". *Éigse* 14, 4.
- Bobaljik, J. and A. Carnie (1994) "A Minimalist Approach to some Problems of Irish Word Order". To appear in R. Borsley and I. Roberts, *Celtic and Beyond*. Cambridge University Press
- Carnie, A (1993) Nominal Predicates and Absolute case in Modern Irish MITWPL19
- (forthcoming) On the theory of head movement and non-verbal predication. Ph.D. dissertation, MIT Cambridge Ma
- Carlson (1977) *Reference to Kinds in English*, University of Massachusetts Amherst Ph.D. diss.
- Chung, S & J McCloskey (1987), "Government, Barriers, and Small Clauses in Modern Irish," *Linguistic Inquiry* 18.2: 173-238.
- Doherty, C (1992) "Clausal Structure and the Modern Irish Copula". *Syntax at Santa Cruz* Vol. 1.
- Duffield, N (1994) "Are you right?". Paper presented at the Conference on Language in Ireland, University of Ulster Jordanstown
- Heggie, L (1988) "The Syntax of Copular Structures" Ph.D. Dissertation University of Southern California
- Hendrick, R (1991) "The Celtic Copula and Head Raising." Paper presented at the Verb Movement Workshop, University of Maryland
- Heycock (1991) "Layers of Predication: The nonlexical syntax of clauses" Ph.D. Dissertation, University of Pennsylvania
- Kayne (1993) The Antisymmetry of Syntax. Ms CUNY.
- McCloskey, J (1979) *Transformational Syntax and Model Theoretic Semantics: A Case Study in Modern Irish*. Reidel Publications Dordrecht.
- (1990) "Resumptive Pronouns. ABar binding and Levels of Representation in Irish." *Syntax and Semantics* 23
- (1992a) "Adjunction, Selection and Embedded Verb Second" Ms UCSC
- (1992b) "On the Scope of Verb Movement in Irish." Ms: UCSC
- Moro, A (1993) The Raising of Predicates Ms. Istituto Universitario Lingue Moderne Milan
- Ó Siadhail (1989) *Modern Irish: grammatical structure and dialectal variation*. Cambridge University Press
- Rapoport, T (1987) *Copular Nominal and Small Clauses* Ph.D. Dissertation MIT

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