Non-Verbal Predication in Irish: A Reanalysis

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This paper presents a reanalysis of non-verbal predication in Irish. The previous analyses involving head movement of a maximal projection (esp. Carnie 1995) are outlined and shown to be empirically inadequate and theoretically undesirable. An alternative analysis is proposed in which the non-verbal predicate undergoes XP movement to the specifier of TP, following an analysis of Nivean non-verbal predication (Massam & Smallwood 1996). The three arguments employed in the previous analyses to support head movement of the non-verbal predicate are examined and rejected. Particular attention is paid to the impossibility of extraction out of the non-verbal predicate, which is shown to follow from the independently-motivated process of obligatory predicate reconstruction. The paper concludes with a consideration of the cross-linguistic implications of the analysis.

0. Introduction

Recent syntactic research has begun to re-examine the issue of non-verbal predication in human language (e.g. Carnie 1993, 1995, 1996; Carnie & Harley 1994a,b; Doherty 19961; Massam & Smallwood 1996). This area of study has always represented an opportunity to test and expand syntactic theories which have been largely formulated on the basis of verbal predication. Non-verbal predication in Irish is particularly interesting because the predicate XPs appear to occupy the same syntactic position as verbs. Both appear between the complementizer and the subject, as is seen in the following examples:

(1) Verbal Predication
\[
\begin{align*}
\text{Ní} & \quad \text{ritheann} & \quad \text{Seán} \\
\text{Neg.C} & \quad \text{run+3s} & \quad \text{Sean} \\
\text{C} & \quad \text{V} & \quad \text{S} \\
\text{"Sean does not run"} & \quad (\text{Carnie 1995})
\end{align*}
\]

(2) Nominal Predication
\[
\begin{align*}
\text{Ní} & \quad \text{dochtúir} & \quad \text{capall} & \quad \text{é} & \quad \text{Liam} \\
\text{Neg.C} & \quad \text{doctor} & \quad \text{horses.gen} & \quad \text{3s} & \quad \text{Liam} \\
\text{C} & \quad \text{DP} & \quad \text{S} \\
\text{"Liam is not a doctor of horses"} & \quad 2
\end{align*}
\]

(3) Adjectival Predication
\[
\begin{align*}
\text{Más} & \quad \text{ceart} & \quad \text{mo chuímhne} \\
\text{if.C} & \quad \text{right} & \quad \text{my memory} \\
\text{C} & \quad \text{AP} & \quad \text{S} \\
\text{"if my memory is right"} & \quad (\text{Doherty 1992})
\end{align*}
\]
Prepositional Predication

(4) Ni as Bhaile Atha Cliath Liam
Neg.C out.of Dublin Liam
C PP S

"Liam is not from Dublin"

This fact poses a challenge for generative syntactic theories, including GB and Minimalism, which hold the \( \text{x}_0 \) versus XP distinction as fundamental. According to such theories, \( \text{x}_0 \)-level categories, like verbs, and XP-level categories, like DPs, APs, and PPs, can never appear in the same syntactic position. \( \text{x}_0 \)-level categories must appear in the head position, whereas XP-level categories must appear in either the specifier or the complement position.

The problem is amplified by extraction facts. It is generally possible to violate island conditions in Irish (Carnie 1995; McCloskey 1990), as long as a resumptive pronoun is employed. This is illustrated in (5) in which extraction of the possessor from 'the man's mother' is perfectly grammatical, the resumptive pronoun a "his" being present.

(5) a. Tá maitheair an thiar san othrílann
    is mother the man.gen in.the hospital
    "The man's mother is in the hospital"

b. Cé a bhfuil a mháthair san othrílann
   who C is his mother in.the hospital
   "Who is his mother in the hospital" (Carnie 1995:193)

Notice that the English translation in (5b) is ungrammatical. Unlike Irish, English does not allow island violations.

Despite the fact that extraction from islands is possible in Irish, extraction from non-verbal predicates is not possible. This is illustrated in (6) where extraction from the nominal predicate 'a song which the bagpiper is going to play' is ungrammatical:

(6) a. Is [amhrán a bhuaifeadh an píobaire ec] "Yellow Submarine"
    C [song C play.cond the piper ]
    C DP S
    "'Yellow Submarine' is a song which the bagpiper is going to play"

b. *Cén píobairearb [amhrán a bhuaifeadh sé] ec] "Yellow Submarine"
   which piper rel [song C play.cond he ]
   WH C DP S
   "Which bagpiper is 'Yellow Submarine' a song which he is going to play?" (Carnie 1995:194)

Thus, the predicate DP apparently behaves like an \( \text{x}_0 \)-level category (that is to say a word) in not allowing extraction. It has therefore been claimed (Carnie 1993, 1995, 1996; Carnie & Harley 1994a,b) that (6b) is ungrammatical because extraction out of a word is not possible.
Irish predicate nominals thus pose a serious challenge to GB and Minimalist syntactic theories. These theories hold that X’s and XPs do not appear in the same environments and do not exhibit the same behaviour. In Irish non-verbal predication, however, it seems that an XP-level category not only appears in the same syntactic position as an Xo-level category, but also exhibits the same behaviour as Xo-level categories in prohibiting extraction. These facts must be accounted for.

Recent treatments of non-verbal predication in Irish have employed head movement of an apparently maximal projection, i.e. the predicate DP/AP/PP. Initially this was accomplished through incorporation (Carnie 1993; Carnie & Harley 1994a,b), however empirical difficulties forced a revised approach (Carnie 1995, 1996) in which Minimalist syntactic theory (Chomsky 1993, 1995a) was significantly altered to allow XPs to behave as Xo’s. This paper proposes an alternative analysis of Irish predicate nominals in which XPs do not undergo head movement.

I propose that verbal predicates in Irish occupy the head of TP whereas non-verbal predicates occupy the specifier of TP. In this I follow the analysis of Niuean nominal predicates argued for by Massam & Smallwood (1996). I will demonstrate that extraction from Irish non-verbal predicates can be ruled out on independent grounds. Its impossibility will be shown to follow from the fact that predicates obligatorily reconstruct at LF (Barss 1986, 1988; Cinque 1984; Heycock 1995; Huang 1993).

In section 1, the incorporation analysis of Irish non-verbal predication (Carnie 1993; Carnie & Harley 1994a,b) is outlined, and the theoretical and empirical difficulties with the approach are considered. In section 2, the derived phrasality analysis (Carnie 1995, 1996) is examined and it is shown to be theoretically undesirable. Section 3 presents an alternative analysis, which maintains the distinction between Xo and XP-level categories, while accounting for the data which led the previous researchers to propose head-movement of the non-verbal predicates. Section 4 concludes with a consideration of the cross-linguistic implications of the proposed analysis.

Let us begin with an outline of the incorporation approach to Irish non-verbal predication and its difficulties.

1. Previous Analyses: Incorporation

Carnie (1993) and Carnie & Harley (1994a,b) analyse Irish non-verbal predicates by means of incorporation, occurring in several stages. Starting from the bottom of the non-verbal predicate phrase, each head incorporates into the one above it, ending with incorporation of the complex head into an empty determiner which was claimed to head all non-verbal predicates. An example of this process is illustrated in (7b) for the predicate nominal 'a doctor of horses', and the resulting structure is given in (7c):

(7) a. dochtuir  capall
doctor  horses.gen

"a doctor of horses" (Carnie 1995:183)
Thus, the noun 'horses' incorporated into its determiner, the complex determiner incorporated into the noun 'doctor', and finally the complex noun incorporated into its null determiner. At this point the complex D head could undergo head movement to T, just as would a verbal head. The apparent X₀ status of predicate nominals could thus be accounted for.

There are, however, difficulties with this approach. On a theoretical level, it is not clear how such movement could be motivated. The analysis was presented in a Minimalist syntactic framework (Chomsky 1993, 1995a). Movement in these frameworks is motivated by the need to check strong features, features being morphological in nature (including tense, case, number, gender, and so on). Unchecked strong features result in ungrammaticality. The movement of a noun to its determiner at some syntactic level is relatively uncontroversial cross-linguistically, the noun needing to check a nominal feature of the determiner (Chomsky 1995). Movement of a determiner into a noun, on the other hand, would be highly unusual. This movement would have to be motivated by the need to check a strong feature of the noun, however, nouns often do not take a DP complement. In such constructions, a D would not be present to check the strong feature of the noun, and therefore an unchecked strong feature would result. How these constructions could escape ungrammaticality is not addressed, representing a serious problem for this model.

There are also empirical difficulties with this approach, as outlined in Carnie (1995). The analysis predicts that any specifiers in the non-verbal predicate should be stranded when the complex D head undergoes movement to T. Since only heads in the predicate nominal were to incorporate into each other, specifiers were left unaffected. Example (8) shows that specifiers are, in fact, not stranded when the predicate nominal undergoes head movement.

(8) Is [teangeolai ar phóg Seán] Peadar (*Seán)
    C [linguist C kissed Seán] Peter (*Seán)
    C DP
    "Peter is a linguist who Sean kissed" (Carnie 1995:199)

'Sean', the subject of the relative clause, occupies a specifier position, like all subjects. In (8), however, it undergoes movement along with the rest of the predicate nominal. The incorporation approach is thus empirically flawed, and was replaced by a derived phrasality approach to Irish predicate nominals.
2 Previous Analyses: Derived Phrasality

Carnie (1995, 1996) proposes an alternative approach to Irish predicate nominals which would represent a significant alteration to generative syntax. He rejects the long-standing assumption of a basic distinction between $X^o$ and XP-level categories. Instead, he claims that the traditional labels simply represent two clusterings of syntactic behaviours (e.g. 'theta markers' and 'select for complements', versus 'theta marked' and 'are selected for'), and that a particular element may have behaviours belonging to one or both groups. In regards to movement, Carnie states that elements that bear tense and agreement features undergo head movement, whereas elements that bear case features undergo XP movement\(^3\). Thus, categories which check tense would be $X^o$-level, whether or not they appear to be phrasal, and, conversely, categories that check case would be XP-level.

Carnie claims that non-verbal predicates in Irish are $X^o$s, since they move to check T, although they appear to be phrasal. Carnie's structure for the predicate nominal 'a doctor of horses' is shown in (9):

(9) a. dochtuir  capall
donär  horses.gen
"a doctor of horses" (Carnie 1995:183)

(9) b. \[
\begin{array}{c}
D \\
| \\
D & NP \\
| \\
N & DP \\
| \\
dochtuir & NP \\
| \\
N & capall
\end{array}
\]

The entire predicate nominal is a complex D head, since it must undergo head movement to check T.

This proposal represents a significant alternation to syntactic theory, the consequences of which are entirely unexplored. It is important to note that it differs radically from other research in generative syntax which argued that the $X^o$ versus XP distinction is derived rather than primitive (Chomsky 1995a,b; Speas 1990). According to such an analysis, "a category that does not project any further is a maximal projection XP and one that is not a projection at all is a minimal projection $X^o$" (Chomsky 1995a:396). However, even under these proposals, the $X^o$ or XP status of a category determines its behaviour.

Carnie's proposal, on the other hand, entails a rejection of this basic assumption. Instead, the opposite is maintained: the behaviour of a node determines its status as $X^o$ or XP-level.
category. The adoption of Carnie's approach to Irish non-verbal predicates would thus require rethinking many decades worth of syntactic research which assumed that the X₀ versus XP status determined behaviour. An alternative analysis of Irish non-verbal predication which allowed the retention of this assumption would be preferable.

3. An Alternative Analysis

I propose that non-verbal predicates in Irish undergo XP-movement to the specifier of TP, whereas verbal predicates undergo head-movement to the head of TP. In this I follow the analysis of Nuean predicate nominal constructions presented by Massam & Smallwood (1996). In order to maintain this analysis for Irish, however, it is necessary to reanalyse the data presented by Carnie (1995, 1996) in support of his claim that non-verbal predicates occupy the head of TP. He cited data from extraction, word order, and the responsive system. I will begin with the extraction data, since it provides the most compelling argument.

3.1. Extraction and Reconstruction

In order to maintain that non-verbal predicates in Irish are XPs occupying the specifier of TP, one must explain why extraction from these XPs is impossible. We have already seen that island conditions are violable in Irish, and the impossibility of extraction out of nominal predicates thus cannot be reduced to such a restriction. The relevant data is repeated below. (10) illustrates the grammaticality of island violations, and (11) illustrates the ungrammaticality of extraction from non-verbal predicates.

(10) Cé, a bhfuil a mháthair san otharlann
who, C is his mother in the hospital
"Who is his mother in the hospital" (Carnie 1995:193)

(11) *Cé, piobaire, arb [amhrán, a bhuaifeadh sé, ec, J] "Yellow Submarine"
which piper rel [song C play,cond he ]
WH C DP S
"Which bagpiper is 'Yellow Submarine' a song which he is going to play?" (Carnie 1995:194)

I propose that the ungrammaticality of extraction out of nominal predicates follows from the process of LF reconstruction. It has been argued (Barss 1986, 1988; Cinque 1984; Heycock 1995; Huang 1993) that LF reconstruction is optional for arguments, but obligatory for predicates. In addition, it has been argued (Carnie 1993, 1995, 1996; Carnie & Harley 1994a,b) that LF reconstruction is necessary for Irish predicates in particular. Let us consider how this process proceeds.

All movement, under a Minimalist account, is a process of copying. Thus, when a DP moves, a complete copy of the DP remains in its base position. This is shown in (12) for the DP 'a doctor of horses'. When it moves from its merged position after the subject to the specifier of TP, it leaves behind a complete copy of itself in its merged position:
At PF (the phonetic interface), all of the copies in a chain are eliminated save the highest. Thus only the highest link in the chain is pronounced.

At LF as well (the semantic interface), copies in a chain are deleted. Deletion within A-chains at LF affects all intermediate copies, with the highest and lowest links remaining unaffected. Thus in (13b) the intermediate copy of the subject deletes, while the copy occupying the merged position is retained for interpretation of the chain's theta-relation, and the link occupying the specifier of TP is retained for interpretation of scopal and prominence effects:

(13)  a. Alex seemed to kick the ball.
       b. \[TP_{DP}[Alex]\] \[VP[seemed]\] \[CP_{TP_{DP}[Alex]}\] \[\text{to}_{vmax_{DP}[Alex]}\] kick the ball

In A'-chains, however, reconstruction typically occurs, deleting the highest links in the chain at LF. This is shown in (14b).

(14)  a. Kick himself, Alex should not.
       b. \[CP_{vmax_{DP}[kick\text{-}himself]}\] \[\text{TP}_{DP}[Alex]\] \[\text{should not}_{vmax_{DP}[kick\text{-}himself]}\]

Note that this process accounts for interesting binding facts. Binding Condition A states that anaphors, like 'himself' must be c-commanded by their antecedent at LF. In (14), then, the highest copy of 'kick himself' must delete, for if the lower copy were to delete, the anaphor would not be c-commanded by its antecedent 'Alex' and the sentence would be ruled ungrammatical.

Reconstruction is optional for wh-chains, since they are not predicates, and when reconstruction of a wh-chain does occur, it proceeds slightly differently. At LF, the wh-operator must remain in its highest position for interpretation of its scope effects, and it must c-command its variable. To accomplish this, either the chain does not reconstruct, or an LF operation (Chomsky 1995a:202-212) reconstructs only a part of the chain, leaving the wh-operator in its highest position. These possibilities are shown in (15). Example (15b) illustrates the LF configuration resulting when reconstruction does not occur, and (15c) illustrates the configuration resulting from partial reconstruction.

(15)  a. [which house\textsubscript{i}] did John live in [which house\textsubscript{i}]
       b. [which house\textsubscript{i}] did John live in [which house],
       c. [which house\textsubscript{i}] did John live in [which house],

(adapted from Chomsky 1995:202-203)

Given these LF reconstruction operations, let us consider the case of Irish non-verbal predication.

Previous analyses of Irish non-verbal predication (Carnie 1993, 1995, 1999; Carnie & Harley 1994a,b) required the operation of predicate reconstruction at LF in order to account for
binding facts. An anaphor within the non-verbal predicate can be bound by the subject, as shown in (16):

(16) Is [cosúil lena chéile] iad,
C [like with.their each-other] they
C AP S
"They are like one another" (Doherty 1992)

In order for 'they' to serve as the antecedent for 'each other', the predicate AP must reconstruct at LF. This is demonstrated in (17):

(17) a. Is [cosúil lena chéile] iad, [cosúil lena chéile]
   C [like with.their each-other] they [like with.their each-other]
   "They are like one another"

b. *Is [cosúil lena chéile] iad, [cosúil lena chéile]
   C [like with.their each-other] they [like-with-their each-other]
   "They are like one another"

Binding Condition A requires an anaphor to be c-commanded by its antecedent at LF. In (17a), reconstruction of the adjectival predicate occurred. The antecedent 'they' c-commands the anaphor 'each other' and the sentence is grammatical. In (17b), on the other hand, reconstruction did not occur. The anaphor is not c-commanded by its antecedent, Binding Condition A is violated, and the sentence is ungrammatical.

The process of LF reconstruction provides an alternative explanation for the impossibility of extraction from Irish non-verbal predicates. Example (18) illustrates the LF structure of such an ungrammatical sentence prior to reconstruction:

(18) *CP[|Cén piobaire|] arb TP[amhrán| a bhuaifeadh |cén piobaire|] ec jk "Yellow Submarine"
    CP[|which piper|] rel TP[|song| play.cond |which piper|] jk
    DP[amhrán| a bhuaifeadh cén piobaire ec|] jk
    pp[|song| C play.cond which piper] jk
    "Which bagpiper is 'Yellow Submarine' a song which he is going to play?"

The predicate nominal 'a song that which piper is going to play' has been moved to the specifier of TP, with a copy left in its merged position. Then, the wh-phrase 'which piper' has been fronted to the specifier of CP, leaving a copy inside the predicate nominal in the specifier of TP. There are thus two chains in this structure, one composed of the two copies of the predicate nominal (one copy in DP and the other in TP), and the other composed of the two copies of the wh-phrase (one in TP and the other in CP).

Let us now consider how reconstruction will affect this structure. The non-verbal predicate obligatorily reconstructs and the wh-chain optionally reconstructs, thus there are two possible LF configurations for this sentence. We will examine each in turn. Example (19)
indicates the LF configuration resulting when the predicate reconstructs but the wh-chain does not.

(19) \[ \text{CP} \{ \text{Cé a pióbaire}, \text{amhrán á bhuaifeadh cé a pióbaire} \text{ec} \} \rightarrow \text{TP} \{ \text{C play.cond \{which\ piper\} \} \rightarrow \text{CP} \text{[which piper]} \rightarrow \text{TP} \{ \text{song - C play.cond \{which\ piper\} \} \rightarrow \text{DP} \text{[amhrán a bhuaifeadh cé a pióbaire ec]} \rightarrow \text{DP} \text{[song - C play.cond \{which\ piper\] \}

"Which bagpiper is 'Yellow Submarine' a song which he is going to play?"

The chain of the wh-expression is now broken. Recall that the chain of the fronted wh-expression 'which piper' had two members—one in CP and the other in TP. The instance of 'which piper' contained in the base DP never formed a link in this chain. Thus, when the link of the chain in TP is deleted, the wh-expression in CP is stranded with no means of determining how it should be interpreted with regards to the rest of the sentence. It thus fails to be interpreted, and the derivation is ungrammatical.

Support for this interpretation of (19), i.e. that the sole remaining link of the wh-chain in CP cannot be interpreted through the instance of 'which piper' in the base DP, comes from an analysis of reflexives presented by Chomsky (1995a:209). He proposes a LF operation whereby reflexives raise to adjoin to the verb dominating them. He then considers how reconstruction would interact with this operation. Consider example (20) (adapted from Chomsky 1995a:209). The configuration before reconstruction of the wh-chain appears in (20a) and the LF configuration after reconstruction appears in (20b):

(20) a. John [himself] wondered [which picture of [himself]] he saw [which picture of himself]
   b. John [himself] wondered [which picture of [himself]] he saw [which picture of himself]

Note that the configuration in (20b) is analogous to that in (19), since the second link of the two-link chain 'himself' is deleted through reconstruction of a lower chain. Chomsky remarks that reconstruction of the wh-chain (as shown in (20b)) "would break the chain \{self, t\} \rightarrow \{himself, himself\}, leaving the reflexive element without a 0-role at LF. We must therefore select the interpretative option [...] without reconstruction" (209). Thus, the configuration in (20b) is ungrammatical because the chain \{himself, himself\} is broken. In order to obtain a grammatical configuration, the wh-chain must not reconstruct, yielding (21):

(21) John [himself] wondered [which picture of [himself]] he saw [which picture of himself]

This option is not available, however, for Irish non-verbal predicates, since predicates obligatorily reconstruct. Thus, no grammatical LF representation is possible for extraction out of non-verbal predicates when the wh-chain does not reconstruct.

Let us therefore consider the option in which both the wh-chain and the non-verbal predicate chain reconstruct. The order in which these operations would occur is not clear. If the non-verbal predicate reconstructed first, however, the configuration in (19), repeated below in (22), would again result. The wh-phrase would be unable to reconstruct, its link in TP having already been deleted:

(22) *CP \{Cé a pióbaire\} \rightarrow \text{TP} \{ \text{amhrán á bhuaifeadh cé a pióbaire} \text{ec} \} \rightarrow \text{CP} \{ \text{which piper} \} \rightarrow \text{TP} \{ \text{song - C play.cond \{which\ piper\} \} \rightarrow \text{DP} \text{[amhrán a bhuaifeadh cé a pióbaire ec]} \rightarrow \text{DP} \text{[song - C play.cond \{which\ piper\] \}

"Which bagpiper is 'Yellow Submarine' a song which he is going to play?"
The resulting configuration in (23b) is problematic as well. In this configuration, the operator 'which' in CP no longer has a variable to quantify, 'piper' in TP having been deleted through reconstruction of the non-verbal predicate. This is thus an instance of vacuous quantification. An operator (or quantifier) is present that does not c-command a variable. In vacuous quantification, the operator cannot be interpreted and the sentence is ungrammatical.

Therefore, no grammatical LF configuration exists for sentences involving extraction out of a predicate. Reconstruction of the predicate will always prevent the extracted element from being interpreted, either by breaking its chain or by deleting its variable. Therefore, the impossibility of extraction out of Irish non-verbal predicates is due to obligatory LF reconstruction of predicates. The claim that it is due to the X_

status of the predicate nominal is unnecessary. Predicate nominals in Irish are XP-level categories that undergo XP-movement to the specifier of TP. As predicates, they are subject to obligatory LF reconstruction and thus extraction out of them is impossible.

Let us contrast extraction out of non-verbal predicates in Irish with extraction out of islands. Example (24) provides the LF configuration for the grammatical nominal island violation presented in (5) above.

(24) CP[[Cé], m bhuí, X_P[wbhúil, [cé, mháthair], v_{max}, [cé, mháthair]]], san otharlann
CP[who], C is X_P[[whose, mother], [whose mother], in the hospital
"Who, is his, mother in the hospital"
As in English, Irish subjects undergo A-movement. Recall that A-chains are not subject to reconstruction, instead all but the highest and lowest copies delete. Therefore, the wh-chain composed of 'who' in CP and 'whose' in XP remains intact. The wh-expression in CP can be interpreted and the structure is perfectly grammatical. The grammaticality distinction in Irish between extraction out of islands, which is grammatical, and extraction out of nominal predicates, which is ungrammatical, is accounted for.

We may therefore conclude that the extraction facts of Irish non-verbal predicates can be accounted for without head-movement of XP-level categories. Extraction is ruled out by obligatory predicate reconstruction, an operation supported cross-linguistically and required by previous analyses of Irish non-verbal predicates.

The following sections will consider the remaining arguments presented by Carnie (1995, 1996) in favour of non-verbal predicates in Irish occupying the head, rather than the specifier, of TP.

### 3.2 Word Order

Carnie (1996) claims that the word order in non-verbal predicates indicates that the DP/AP/PP is in the head, rather than the specifier, of TP. Complementizers in Irish lower at PF to cliticize onto T (McCloskey 1992). Carnie states that if Irish non-verbal predicates occupied the specifier of TP, and the complementizer cliticized onto the head of T, the complementizer should appear after the predicate in these constructions. Example (2) above, repeated in (25), illustrates that this is contra to fact.

\[(25) \text{ Ní dochtaír capall é Liam } \]
\[
\text{Neg.C doctor horses.gen 3s Liam C DP S}
\]

"Liam is not a doctor of horses"

Thus, it appears that the non-verbal predicate must occupy the head of TP in order to appear after the complementizer, also in the head of TP.

This argument, however, fails to consider the basic nature of cliticization. PF movement of clitics is driven by the clitic's need to adjoin to a phonological host. In verbal predicate constructions, the specifier of TP is empty and the head of TP is filled by the verb. The complementizer clitic therefore gains a host by adjoining to the verb in the head of T. In non-verbal predicates, however, the specifier of TP is filled by the predicate and the head of TP is phonologically empty. Therefore, the clitic can only gain a host by cliticizing onto the predicate in the specifier of TP. The head of TP, being phonologically empty, is not a possible host for the clitic. The C-PREDICATE-S word order in Irish non-verbal predicates is thus a result of cliticization rather than being an indication of the X₀ status of the predicate.³⁵

Carnie's final argument for the X₀ status of Irish non-verbal predicates invokes the responsive system.
3.3 Responsive System

In Irish, no words exist for the English 'yes' and 'no'. Instead, the complementizer and the verb are repeated, using a negative or positive complementizer as appropriate. Examples of this are given in (26) (note that the matrix declarative, positive complementizer used with verbal predicates is null):

(26) a. An bhfaca tú an Ferengi?
   Q saw you the Ferengi
   "Did you see the Ferengi?"

   b. Ní fhaca Chonaic
      Neg.C saw saw
      "No" "Yes" (Carnie 1995:195)

Carnie analyses these facts as the elision of everything in the clause except the head of TP. He then notes that the responsive system does not elide the non-verbal predicate. Instead, nominal predicates are replaced by the dummy pronoun ea, as in (27a), and adjectival or prepositional predicates are repeated, as in (27b).

(27) a. An dochtúir Leonard McCoy?
   Q doctor
   "Is Leonard McCoy a doctor?"
   Is ea C pron.
   "Yes"

   b. An ceart mo chuimhne?
      Q right my memory
      "Is my memory right?"
      Is ceart C right
      "Yes" (Carnie 1995:196)

This, he claims, indicates that the non-verbal predicate occupies the head of TP, otherwise it would have been elided.

There is, however, another possible analysis of the Irish responsive system. Both the head and the specifier of TP could be retained. In verbal predicates, the specifier of TP is always empty, so only the material in the head, i.e. the complementizer and the verb, will be pronounced. In non-verbal predication, on the other hand, the head of TP is always phonologically empty, thus only the material in the specifier, i.e. the complementizer and the predicate, will be pronounced. This analysis is as plausible as that of Carnie (1995, 1996) and allows us to maintain the distinction between X₀ and XP-level categories.

Thus, none of the arguments presented by Carnie (1995, 1996) require the conclusion that Irish non-verbal predicates are X₀-level categories occupying the head of TP. His modifications to syntactic theory are unnecessary, since this paper has demonstrated that these constructions can be easily accommodated within existing theory.
4. Conclusion and Extensions

We may thus conclude that Irish non-verbal predicates are indeed XP-level categories, contra Carnie (1993, 1995, 1996) and Carnie & Harley (1994a,b). Non-verbal predicates undergo XP-movement to the specifier of TP while verbal predicates head-adjoin to T. Carnie's most compelling data against such an analysis, the impossibility of extraction from non-verbal predicates, is predicted by the independently-motivated process of obligatory predicate reconstruction at LF.

This analysis has implications for the cross-linguistic understanding of extraction. It predicts that any phrase which is subject to reconstruction will not tolerate extraction\textsuperscript{6}. The effect of this can be observed, for example, in the English data in (28):

\begin{enumerate}
\item [(28)] \begin{enumerate}
\item What do you think kick t\textsubscript{i} Alex should not?
\item \textsuperscript{6} Because the predicate chain 'kick who' is subject to reconstruction, the wh-chain (\textit{who}, \textit{who}) is broken. Thus, 'who' in the matrix CP fails to be interpreted and the sentence is ungrammatical. This example contrasts with (29), in which the vmax has not been topicalized and so predicate reconstruction does not occur. Example (29b) provides the LF configuration before reconstruction and (29c) illustrates the configuration after deletion of the lowest copy of the wh-chain.
\item [c. CP[[who]], do you think $\text{CP}_{\text{TP}}[\text{Alex should not $\text{vmax}$[kick [who]$_{i}$]]}$
\end{enumerate}
\end{enumerate}

The wh-chain is not broken by predicate reconstruction, allowing 'who' in the matrix CP to be interpreted, and the sentence is grammatical.

The effect of reconstruction should also be visible in double wh-constructions. Any language which allows wh-extraction out of a phrase which has already undergone wh-movement should only do so under an interpretation without reconstruction. My fieldwork has revealed that Irish is such a language. This is illustrated in (30).

\begin{enumerate}
\item [(30)] \text{Cé acu}, an dóigh leat [cén pictiur t$_{j}$] ar maith le Síle t$_{i}$
\item what at him, C think with, you [which picture t$_{j}$] C good with Síle t$_{i}$
\item ["Of whom do you think which picture Síle likes?"
\end{enumerate}

The testing of reconstruction effects on these constructions will be the subject of future research.

References


Notes

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1Doherty's analysis is based on entirely different assumptions from those employed in the present work. It will, therefore, not be examined in this paper.

2Unreferenced data are from my own field notes.

3Note that both verbs and argument DPs bear case and agreement features, case being intrinsic on verbs and optional on arguments, and agreement being optional on both. We will assume with Carnie that the features can be can be classified in such a way so that predicates have the features forcing head movement and arguments the features forcing XP movement.

4The details of subject movement have been omitted from this and following structures for the sake of clarity. The subject originates in the specifier of DP and then moves to the specifier of a maximal projection between DP and TP. See Legate (1996) and McCloskey (1996) for discussion.

5It is important to note, however, that a purely linear approach to complementizer cliticization in Irish is untenable. Complementizers lower around TR-adjointed adverbials:

(i) Deiridí [an chéad Nollaig eile] go dtiocfadh sé aníos
    say 3pl.imperf. [the first Christmas other] C come.cond. he up
    "They used to say that next Christmas he would come up" (McCloskey 1992)

Thus, we conclude that the complementizer clitic must adjoin to the predicate of the clause.

6Early observations that moved elements often become islands for extraction include the Freezing Principle of Wexler & Culicover (1980), and Restrictions 2-5 of Hamburger & Wexler (1975).