*(very tentative, loose ends abound)*

# Obviation in Modern Irish

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In an extremely important recent work, James McCloskey (1978) presents a detailed account of the syntax and semantics of relative clauses, questions, and cleft constructions in Modern Irish (henceforth simply 'Irish'). This work not only develops a thorough and very credible analysis of these structures, but it also provides a respectable body of data from a language of great theoretical interest. McCloskey's analysis speaks for itself, so I will not attempt to describe it here. Instead, I would like to present an alternative view of the same data, not by way of criticism but in order to sketch out an account of certain Irish facts which may ultimately turn out to be a special case of a widely reported linguistic phenomenon -- i.e., 'obviation' (cf., Hale 1969 and the reference there to Grimes 1967, Voegelin and Voegelin 1975, Jeanne 1978) or 'switch reference' (Jacobsen 1967). I will concentrate on the relative clause, and I will be concerned primarily with the syntax of relativization rather than with the semantics. Most examples will be taken from McCloskey and will be accompanied by a page reference.

There are two forms of the relative clause in Irish. In the so-called <u>direct</u> relative, the relativization site (or 'relative argument', as it will be termed henceforth) is represented by a gap, as in the following (McCloskey, p. 7):

    (1)    ... an scríbhneoir a mholann na mic-léinn ___.

               (... the writer COMP praise the students ___)

               '... the writer whom the students praise'

In the <u>indirect</u> relative, by contrast, the relative argument is represented by a pronoun, agreeing in person, number and gender with the head noun phrase.  Thus, the following (from McCloskey p. 7):

(2)   ... an scríbhneoir a molann na mic-léinn é.   *is é cliticized?*

      (... the writer COMP praise the students him)

      '... the writer whom the students praise (him)'

I will assume, following McCloskey, that the Irish relative clause is a left-headed structure of the form depicted below:

(3)
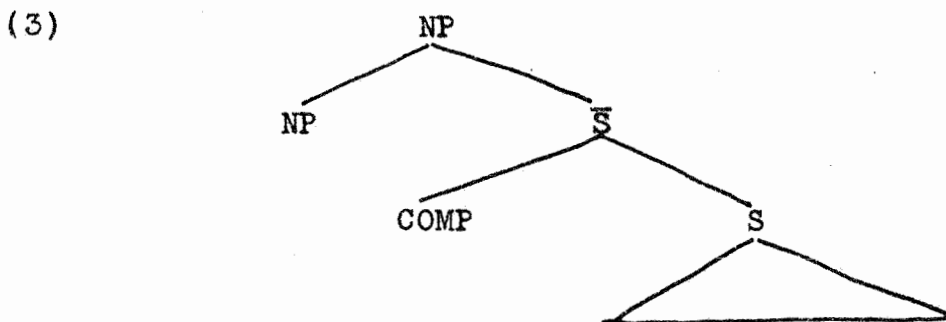


*al = dir*
*an = ind.*

And, I will also assume with McCloskey that the elements introducing the dependent sentence in a relative clause (e.g., the leniting particle <u>a</u> in (1) above and the nasalizing particle <u>a</u> in (2)) are complementizers, not relative pronouns.  McCloskey proposes that the direct relative, i.e., the one with the gap in the relative argument position, comes about by means of a deletion rule.  I will depart from his analysis at this point and propose, rather, that the direct relative has, in relative argument position, the $_{NP}[e]$ structure -- i.e., NP dominating the identity element -- arising in the base by virtue of the optionality of phrase structure rules (cf. Chomsky and Lasnik 1977).  For the sake of typographical convenience, I will represent this element as PRO (or, in phrase structure trees, as NP dominating PRO).

With McCloskey, I will assume that the input to the translation rules of the semantics consist , in part at least, of indexed trees, and further that the well-formedness of a relative clause depends, again in part, upon the head NP being coindexed with a pronoun (whether PRO or an overt pronoun) in the $\bar{S}$ which it commands. With regard to indexing, I will assume, unlike McCloskey, that NP nodes are simply supplied with indices in the base -- there is no specific process with coindexes NP nodes, though, of course, two or more NPs in a given structure may happen to have the same index. And I will follow Bresnan and Grimshaw (1978) in assuming that COMPs are also indexed. Putting all this together, the indexed phrase marker for the relative clauses (1, 2) above is roughly as follows:

(4)
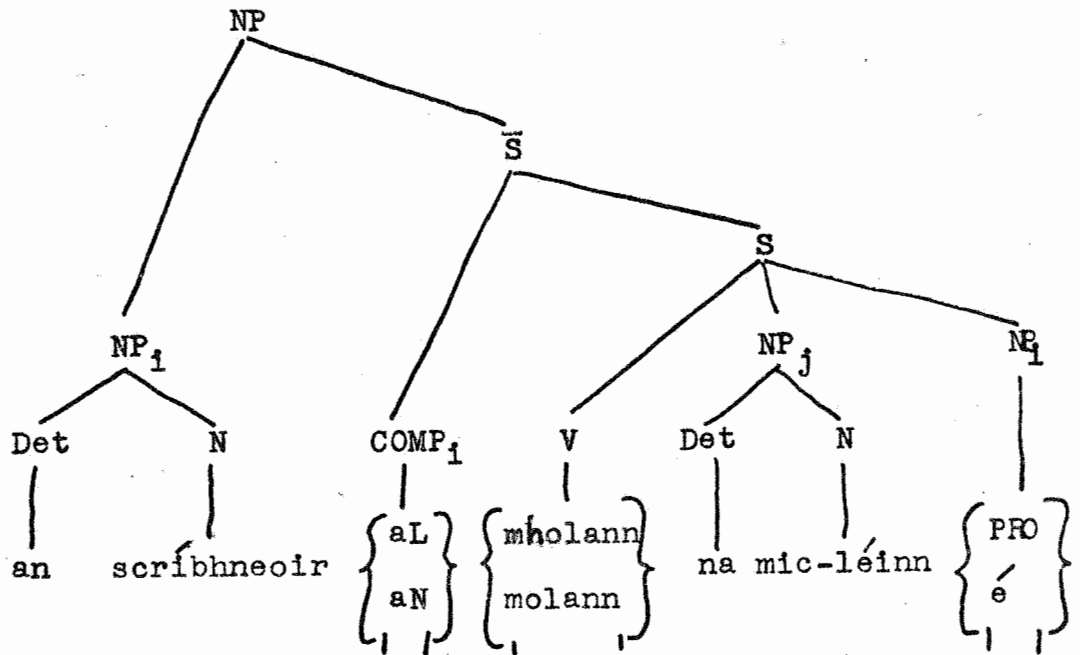


The upper-case letters following the complementizers -- aL, aN -- are McCloskey's notation for the distinct mutation effects induced by the two otherwise homophonous forms: L for 'leniting', N for 'nasalizing' (see any grammar of Modern Irish for a discussion of the mutations, traditionally called 'aspiration' and 'eclipsis' (séimhiú and urú)).

Notice that the COMP in (4) is coindexed with the head NP. Although it is logically possible for the COMP to bear a different index from the head, I will claim here that, to be well-formed, as a relative clause at least, the 'headed structure' must have the head NP coindexed with the immediately following COMP -- later COMPs, if any occur, may or may not be coindexed with the head, but the first (left-most) must be.

Now the choice of the direct or indirect relative is not free in Irish. There are cases in which only the indirect relative may be used, and there are cases in which only the direct relative may be used. The structure depicted in (4) above represents the rather limited circumstance in which either form may be used. My ultimate interest in this paper is in cases where the direct relative must be used, but I will deal first with those in which the indirect relative is the only possibility.

Essentially the facts are these. The indirect relative must be used where (a) the relative argument is the possessor in a possessive construction, (b) the relative argument is the object of a preposition, or (c) the relative argument is in an 'island' (Ross 1967). These three cases are illustrated by (5, 6) (from McCloskey p. 8) and (7) (from McCloskey, p. 61) below:

(5)   ... an fear$_i$ aN$_i$ bhfuil a$_i$ mháthair sa bhaile

      (... the man$_i$ COMP$_i$ is his$_i$ mother at home)

      '... the man whose mother is at home'

(6)   ... an fear$_i$ aN$_i$ dtabharann tú an t-airgead dó$_i$

      (... the man$_i$ COMP$_i$ give you the money to-him$_i$)

      '... the man to whom you give the money'

(7) ... an píobaire$_i$ aN$_i$ mbíonn fhios agat i-gcónaí
caidé aL bhuaifidh sé$_i$

(... the piper$_i$ COMP$_i$ is its-knowledge at-you always
what COMP will-play he$_i$)

'... the piper that you always know what he is
going to play'

The direct relative is impossible here:

(5') *... an fear$_1$ aL$_1$ tá PRO$_1$ máthair sa bhaile

(6') *... an fear$_1$ aL$_1$ thabharann tú an t-airgead do PRO$_1$

(7') *... an píobaire$_i$ aL$_1$ bhíomfhios agat i-gcónaí
caidé aL bhuailfidh PRO$_1$

McCloskey accounts for this by (i) placing a condition on
his rule of Relative Deletion to the effect that it is blocked
if the target pronoun is not a subject or object in its own
clause, thereby preventing deletion in (5, 6), and (ii) by proposing
that Relative Deletion is subject to the Island Constraints, thereby
blocking deletion in (7). Later on in the work, he proposes that
(i) above be handled by filters rather than rule-specific conditions,
while continuing to maintain that the deletion is subject to the
more general Island Constraints.

I must handle these facts differently, since I do not have a
transformational rule of any sort in my grammar of relative structures.
I will assume that the proper constraining mechanism is the
Subjacency Condition (Chomsky, 1977), although its constraining
effect is somewhat indirect in the grammar which I will propose.
In appealing to subjacency, I will assume that the relevant nodes
in Irish are S, NP, and PP. Subjacency enters the picture in the
definition of a transitive relation which I will term syntactic
binding (or simply binding, but of unknown relationship to the
logical notion of variable binding, if any):

(8)  Syntactic Binding

If A and B are coindexed, and if B is subjacent
to A, then A binds B, and B is bound to A.

Syntactic binding is transitive -- thus, if A binds B and B binds
C, then A binds C (and by similar reasoning C is bound to A).

Now I propose that the pronominal elements of Irish are
partitioned into two subsets -- anaphoric pronouns and nonanaphoric
(or deictic) pronouns.  Overt pronouns in Irish are nonanaphoric,
while PRO is anaphoric.  And I assume that there is a general con-
dition on the occurrence of anaphoric pronouns (probably universal,
though certainly not in the form given here):

(9)  Condition on Anaphoric Pronouns

An anaphoric pronoun must be syntactically
bound to a head NP.

It follows from this that 'long distance' direct relativization, as
in (10) below (from McCloskey, p. 61) must be via successively
subjacent COMPs.  That is to say, the condition expressed in (9)
obtains the same result as the indexing procedure of Bresnan and
Grimshaw (1977, p. 76) and, in fact, my proposal is probably a
variant of theirs, properly speaking.[1]  The following exemplifies
long-distance direct relativization (indexing supplied):

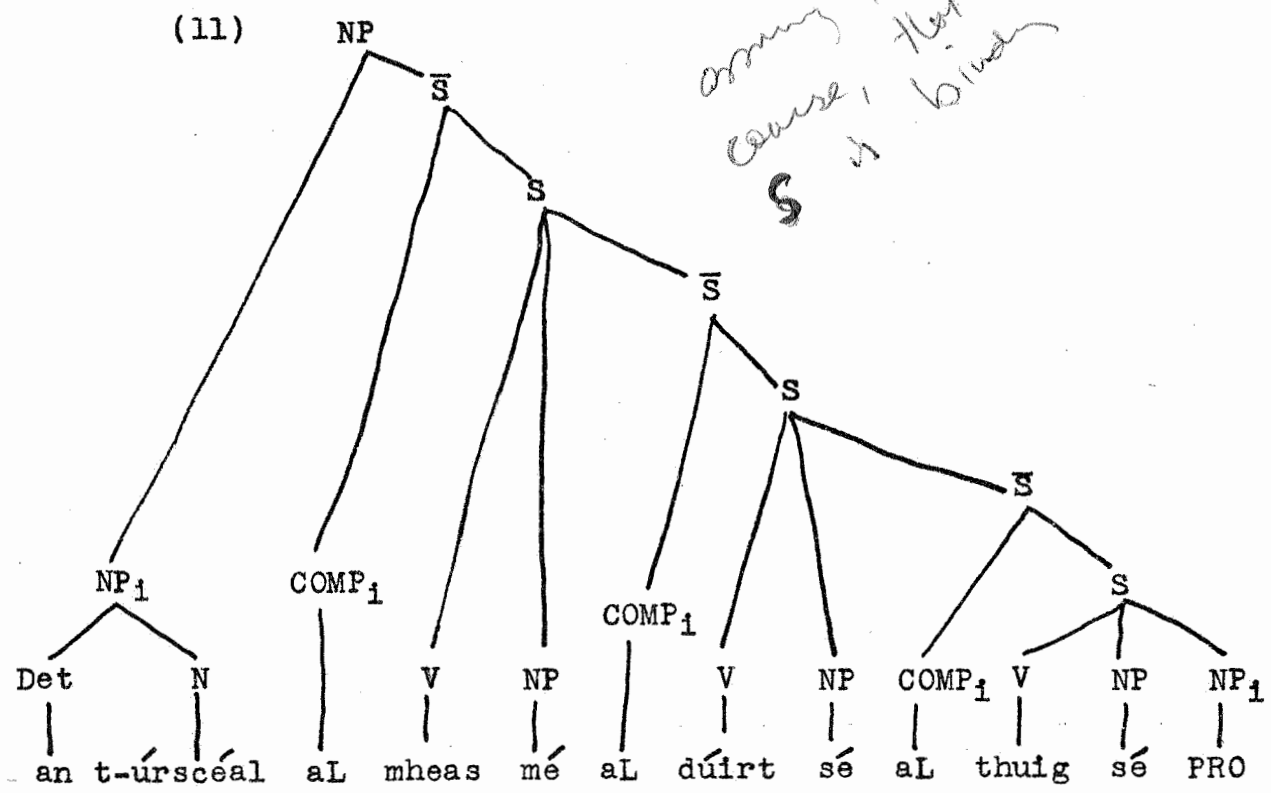(10)  ... an t-úrscéal$_i$ aL$_i$ mheas mé aL$_i$ dúirt sé
aL$_i$ thuig sé PRO$_i$

(... the novel$_i$ COMP$_i$ thought I COMP$_i$ said he
COMP$_i$ understood he PRO$_i$)

'... the novel that I thought he said he understood'

As can be seen from the following phrase marker, the PRO is proper-
ly bound to the head NP in accordance with the definition of syntactic
binding expressed in (8), under the assumption, of course, that it
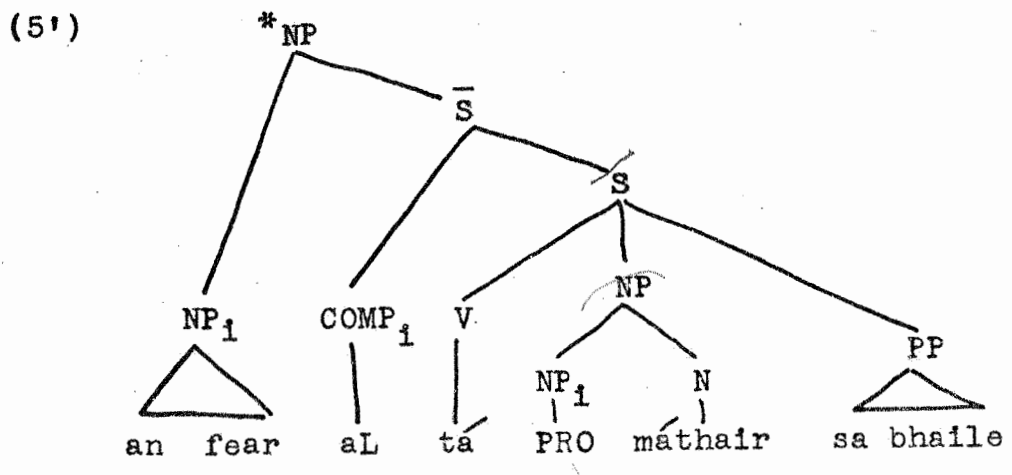is a transitive relation:

(11)

NP
 S̄
  S
   S̄
    S
     S̄
      S

NP₁   COMP₁   V   NP   COMP₁   V   NP   COMP₁   V   NP   NP₁
Det  N

an t-úrscéal   aL   mheas   mé   aL   dúirt   sé   aL   thuig   sé   PRO

The PRO element is linked to the head through a chain of successively subjacent COMPs.

So far as I can see, the Condition on Anaphoric Pronouns in (9), together with the other assumptions we have made, will account for the facts discussed so far. In particular, it will account for the ill-formedness of (5'-7'). In each case, the PRO is not properly bound, since it is not subjacent to an element which is co-indexed with it:

(5')

*NP
  S̄
   S

NP₁   COMP₁   V   NP   PP
                NP₁  N

an fear   aL   tá   PRO   máthair   sa bhaile

(6')

*NP — $\bar{S}$ — S

NP$_1$ COMP$_1$ V NP NP PP (P NP$_i$)

an fear    aL    thabharann    tú    an t-airgead    do    PRO

(7')

*NP — $\bar{S}$ — S — NPq — $\bar{S}$ — S

NP$_1$ COMP$_1$ V NP PP Adv NPq$_j$ COMP$_j$ V NP$_1$ NP$_j$

an píobaire aL bhíonn fhios agat i-gcónaí caidé aL bhuailfidh PRO PRO
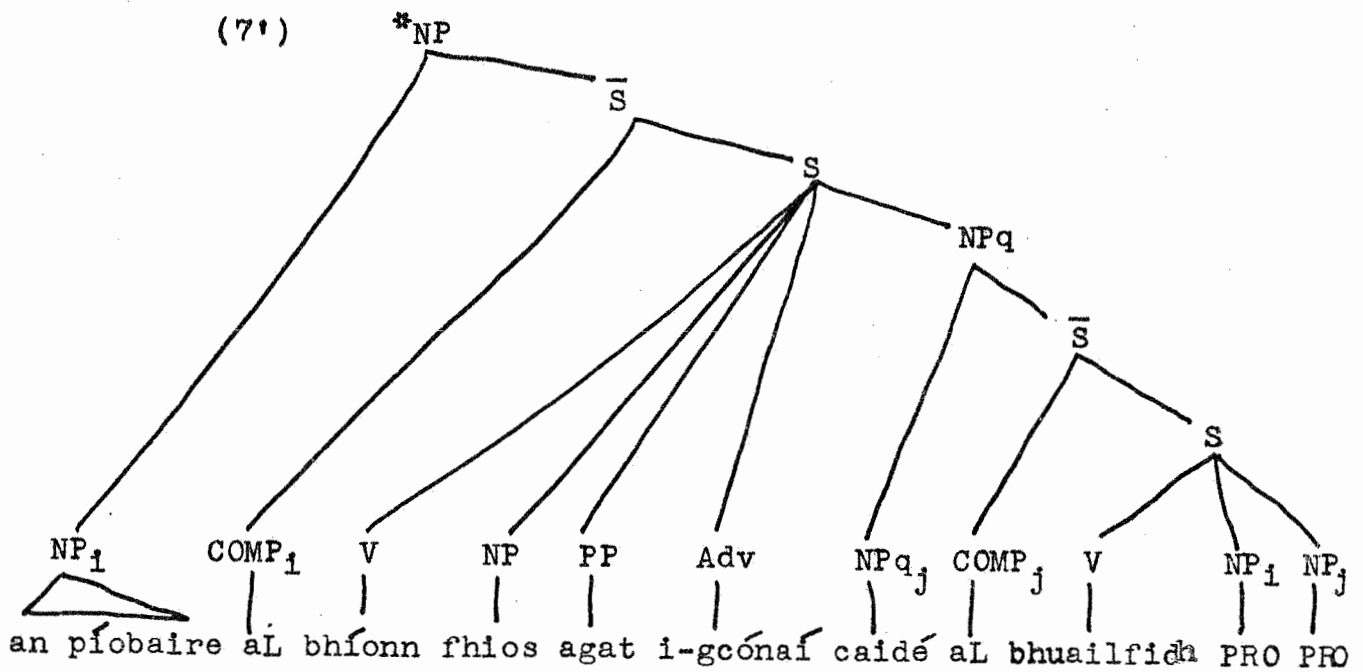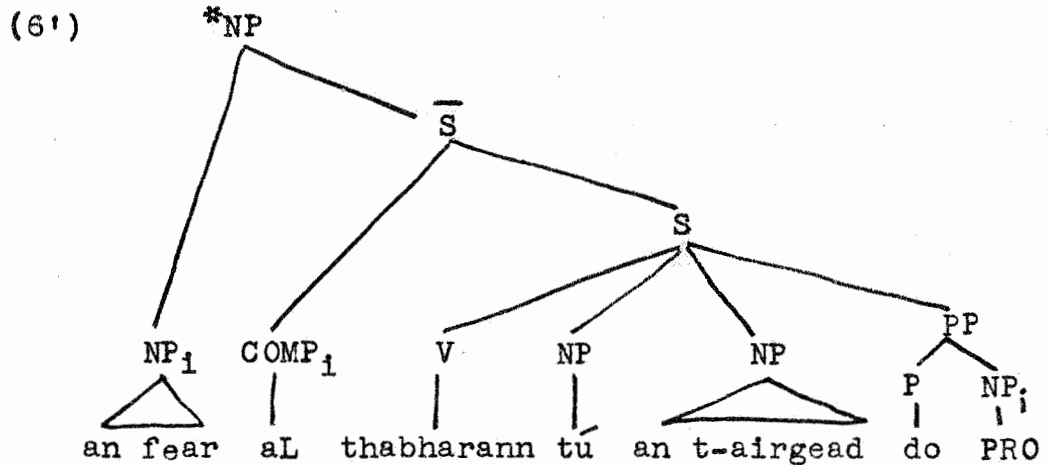
With some hesitation, I point out another fact which can be
related rather simply to the scheme developed here -- namely, the
morphology of the complementizer. McCloskey points out that there
is a partial correlation between the morphology of the complementizer
and the use of direct or indirect relativization. In the nonpast
tenses, affirmative, the leniting complementizer (aL) is used in
direct relatives, and the nasalizing complementizer (aN) is used in
indirect relatives. (For the details of the past tense and the
negative, see McCloskey's discussion.) This distribution of comple-

mentizer allomorphs is amply illustrated in the examples already cited in this paper. McCloskey observes, however, that the correlation is not complete for some speakers since, for them, in a long-distance indirect relative the leniting complementizer aL is used down to, but not including, the right-most COMP commanding the relative argument. Thus, for example, the following (from McCloskey, p. 23):

(12)   ... an doras$_i$ aL$_i$ deir siad aL$_i$ mheasann sibh aN$_i$ bhfuil an eochair ann$_i$

(... the door$_i$ COMP$_i$ say they COMP$_i$ think you-pl COMP$_i$ is the key in-it$_i$)

'... the door that they say you (pl.) think the key is in'

(The surface failure of phonetic lenition in deir is due to an irregularity; that the complementizer is aL and not aN is clear, however, since the nasalizing complementizer would mutate the initial, giving ndeir [N'er]. In general, the mutating effects 'lenition' and 'nasalization' must be understood abstractly. It is virtually always possible, however, to distinguish the two forms in terms of some morphophonological effect or other. The form ann in sentence (12) is an amalgam of the preposition i 'in' and the third person singular pronoun (masculine); these amalgamated forms are known traditionally as 'prepositional pronouns'. The form dó in sentence (6) above is also a prepositional pronoun.)

In the framework developed here, the distribution of these relative complementizers can be characterized in the following terms:

(13)   Morphology of the Relative Complementizers

(a)   the 'direct' form (e.g., aL) is used when the COMP is bound to a head and binds an anaphoric pronoun or COMP;

(b)   the 'indirect' form (e.g., aN) is used when the COMP is bound to a head but does not bind an anaphoric pronoun or COMP.

This covers the simplest possible case, represented by (1) and (2) above, as well as the complex situation involved in (12). It is well to be hesitant, however, in view of McCloskey's cautionary

remarks (e.g., in Chapter 7, et passim) to the effect that speakers'

judgments are insecure regarding relatives of the form represented

by (12), although these are reasonably abundant in written Irish and in

grammars.

In addition to the direct and indirect relative complementizers,

there is a third form, used to introduce sentential complements like

that in (14) below:

(14)  Mheas mé gurL thuig mé an t-úrscéal.

(thought I COMP understood I the novel)

'I thought that I understood the novel.'

(With nonpast affirmative subordinate verbs, the form of this com-

plementizer is goN, but with past verbs, it is gurL.)

I will assume that this is the form which a complementizer takes

when it is neither bound nor binding. It follows, then, that this

form will not appear as the first complementizer in a relative

clause (at least, not in the dialect primarily represented in

McCloskey's work). It may appear in a relative clause, however,

but only in an indirect relative clause in which the relative

argument, necessarily nonanaphoric, is in a sentential complement.

Thus, consider the following pair of relative clauses (from

McCloskey, p. 207):

(15)  ... an t-úrscéal$_i$ aL$_i$ mheas mé aL$_i$ thuig mé PRO$_i$

(... the novel$_i$ COMP$_i$ thought I COMP$_i$ understood I PRO$_i$)

(16)  ... an t-úrscéal$_i$ arL$_i$ mheas mé gurL$_j$ thuig mé é$_i$

(... the novel$_i$ COMP$_i$ thought I COMP$_j$ understood I it$_i$)

'... the novel that I thought I understood'

(The indirect relative complementizer appears as arL with a past
affirmative subordinate verb.)

The forms of the complementizers here are perfectly consistent with the assumptions I have made. The existence of alternative forms like (15, 16) is in fact predicted, given only those assumptions, as is the third alternative represented by the more problematic (12). The pattern observed in (16) is evidently thoroughly acceptable -- McCloskey terms the dialects which use this pattern the 'sensible' dialects, as opposed to the 'perverse' dialects which exhibit the pattern of (12). *The perverse dialect can be excluded by deleting 'or COMP' from (13a-b) above* All dialects, of course, accept the straightforward direct relative pattern represented by (10) and (15).

We are prepared now to consider the problem of major interest in this paper. The data we have examined so far would imply that if the relative argument is syntactically bound, the direct and indirect relative are equally possible. This is not the case, however. As McCloskey points out (p. 6-7), while the choice is free where a bound relative argument is a direct object, as in (1-2) and (15-6), it is not free where a bound relative argument is a subject. In that case, the indirect relative is impossible; only the direct relative may be used (cf. McCloskey, pp. 6-7):

*but how, if it bound? anaphoric*

(17)   ... an fear$_i$ aL$_i$ dhíol PRO$_i$ an domhan

      (... the man$_i$ COMP$_i$ sold PRO$_i$ the world)

      '... the man who sold the world'

(18) *... an fear$_i$ arL$_i$ dhíol sé$_i$ an domhan

      (... the man$_i$ COMP$_i$ sold he$_i$ the world)

McCloskey accounts for this within his deletion analysis first by means of a condition to the effect that Relative Deletion is obligatory, *for subjects* and, later, by means of a filter outlawing overt subject pronouns coindexed to a head NP.

I think that McCloskey is correct in his assumption that a

filtering mechanism of some sort is involved here. The question I
would like to raise, however, is whether the mechanism is technically
a filter -- in, say, the sense of Perlmutter (1971) or Chomsky and
Lasnik (1977) -- or rather some more general principle having the
desired filtering effect. It is the latter possibility which I
would like to explore.

Clearly, the problem has to do with the grammatical relation
subject. Among the conditions relating specifically to subjects
is the Nominative Island Condition (NIC) of Chomsky (1978, e.g.,
p. 17):

> (19)   A nominative anaphor in S cannot be free in $\bar{S}$
>         containing S.

Reference to the subject relation here is via the (abstract) nomina-
tive case, assumed to be assigned to the subject in a tensed clause.
The NIC gives certain correct results in Irish. It identifies as
ungrammatical simple sentences like (20), in which a PRO appears
in subject position --

> (20)   *Dhíol PRO$_i$ an domhan.
>        (sold PRO$_i$ the world)

-- and, assuming that the term 'free' can be understood to mean
'not syntactically bound' in the sense of (8), it rules out a
relative clause like (7')   in which the subjacency condition
makes impossible the binding of an anaphoric subject. Under the
interpretation of 'free' just suggested, it is probable that the
NIC as stated in (19) is a subcase of the Condition on Anaphoric
Pronouns, (9) above.

As stated, of course, the NIC says nothing about the problem
in which we are interested. The NIC is concerned with the situation
in which a subject pronoun cannot be free, while our problem, illus-

trated the ungrammatical relative clause (18) above, concerns the
situation in which a subject pronoun <u>must</u> be free -- that is, it
must be 'anti-bound', so to speak. Suppose we reformulate the NIC
as an alpha-rule defined, in part, on the features [anaphoric] and
[bound], interpreting the latter feature strictly in terms of
the definition of syntactic binding given in (8) above:

(21) A nominative [$\alpha$anaphoric] pronoun is [$\alpha$bound].

This will achieve the correct result. Given that all NPs are in-
dexed, and given the definition of binding in (8), an overt
pronoun (i.e., [-anaphoric]) in subject position subjacent to a
COMP bound to a head NP will, by virtue of (21), be anti-bound to
the head -- that is, it will bear an index distinct from that
assigned to the head and, therefore, will presumably not be treated as the relative
argument by the semantic translation rules responsible for the
interpretation of relative clauses. This accounts for the ill-
formedness of (18); correctly, however, it does not rule out
(7), even though the relative argument there is a nonanaphoric
subject.[2] The relative clause (18) is ill-formed because (21)
precludes associating the subject with the head, and there is no
other NP in the clause (i.e., $\bar{S}$) which can be associated with it
-- recall that the well-formedness of a relative clause requires
that the head be coindexed with a pronoun somewhere in the $\bar{S}$ which
it commands. On the other hand, (7) is well-formed because the
nonanaphoric subject coindexed with the head is not bound (in the
sense of (8)) and, therefore, conforms to (21).

I would like to suggest now that the NIC as reformulated
in (21) is, in fact, an instance of <u>obviation</u>. In the usage which
is relevant here, obviation refers to stipulated coreference or

non-coreference between specified arguments in a syntactic structure.
The non-coreference relation is referred to by the term 'obviative'
(originating in Algonquian linguistics), and the coreference re-
lation is termed 'proximate' (also an Algonquianist term, but more
recently coined). According to Grimes (1967), Charles Hockett is
responsible for the application of this terminology to stipulated
coreference and non-coreference, also called 'switch reference' in
an important paper on the topic by Jacobsen (1967).

The extent to which obviation operates as a readily observable
principle of grammar is quite variable from language to language.
The reflexive is an extremely widespread manifestation of it --
e.g., 'John$_i$ expects (himself$_i$) to win', representing the proximate
case (cf. Helke 1971 for a treatment of the reflexive as bound
anaphora), beside 'John$_i$ expects him$_j$ to win', representing the
obviative case. But in some languages, obviation is a pervasive
principle of grammar. The Uto-Aztecan language Hopi is an excellent
example (Voegelin and Voegelin 1975, Jeanne 1978). In Hopi, each
phrasal category (S, NP, VP, PP, ...) can be marked for obviation
to indicate that its 'principal argument' (subject, possessor,
object, ...) either is or is not coreferential with the subject of
the immediately superordinate clause. In her recent grammar of
Hopi, Jeanne (1978) expresses this as an alpha-rule, defined on the
X-bar system of Hopi. It is the head (i.e., X) which is marked for
obviation in Hopi. Jeanne uses the feature $\lceil$prox$\rceil$ to designate the
opposition. The Hopi rule is stated as follows (cf. Jeanne, p. 331):

> (22)  The principal argument of an [αprox] X' structure
> is [αcoref] with the subject of the immediately
> superordinate S".

The value [-prox] corresponds to the obviative (or non-coreference) case, while [+prox] corresponds to the proximate (or coreference) case. The 'principal argument' in X' is the left-most NP in X', and the 'subject' of S" is the principal argument of S' contained by S". Thus, if the head (V) of a verb phrase (V") is marked reflexive, the V' structure is [+prox], and in conformity with (22) its principal argument (the object NP) is stipulated as coreferential with the subject of the sentence. But if V is non-reflexive, the V' structure is [-prox], and its object is stipulated as not coreferential with the subject. Similarly, if the auxiliary of an embedded clause is marked proximate, the subject of the embedded clause is coreferential with the subject of the matrix clause; but if the auxiliary is marked obviative, then the two subjects are non-coreferential. And so on.

I suspect that the [$\alpha$coref] relation of the Hopi rule (22) is indistinguishable from the [$\alpha$bound] relation of the reformulated NIC (21). That is, I suspect that stipulated coreference and non-coreference are the same as the relations 'bound' and 'anti-bound' holding between a noun phrase B and another noun phrase A, B subjacent to A (and 'binding' is the relation defined in (8)). And I suspect further that the commanding NP in 'headed' structures (which many languages use as relative clause expressions, content questions, topic-comment structures) functions as the constant term in obviation -- i.e., as the NP to which another NP (the variable term) is related, as bound or not bound, by means of the obviation principle. And, in the case of the headed structure, the variable term in obviation is the subject of the sentence whose COMP is bound to the head NP.

If obviation is in fact at work in Irish, and if (21) should
accordingly be translated into an  obviation schema, comparable to
the Hopi rule expressed in (22), then we must determine how the
values for the feature $[prox]$ are to be assigned in the Irish situa-
tion.

Languages differ in the way in which obviation is marked, if
at all.  In Hopi, and in a great many other languages, the head
of the phrase to which the variable term belongs is marked, and the
variable term itself may or may not reflect obviation in its form.
In Hopi, for example, pronominal subjects in embedded clauses show
no differences corresponding to the $[+prox]$ or $[-prox]$ marking of
the auxiliary.  But in structures below the clause level, there is
a difference in the variable term -- in the $[+prox]$ case, the principal
argument is non-overt, while in the $[-prox]$ case, it is overt (see
Jeanne, 1978, Chapter Four, for details).  In both cases, however,
obviation is clearly marked in the head of the phrase to which the
variable term belongs.   Many languages contrast with the Hopi-type
system of obviation marking in that the distinction is marked solely
in the variable term itself.  Such languages often have special
reflexive pronouns, for example.   The Irish case with which we are con-
cerned belongs to this type, since the obviation of an embedded sentence
is reflected only in the form of its subject -- if the latter
is PRO, the clause is $[+prox]$, otherwise it is $[-prox]$.  ~~This will~~
~~allow us to replace the expression [αanaphoric] in (21) with [αprox],~~
~~giving a closer approximation to the obviation rule of Hopi.  And if~~
~~the expression [αcoref] of the latter is replaced with [αbound], as~~
~~suggested above, the approximation is closer yet.~~

I propose in (23) below a general formulation of the obviation principle, replacing both the NIC as reformulated in (21) and the Hopi rule embodied in (22):

> (23)   The principal argument of an $[\alpha \text{prox}]$ structure $\Sigma$ is $[\alpha \text{bound}]$ to the principal argument of the structure containing $\Sigma$.

A key relation in this formulation is 'containment'. In the simplest case, structure A contains structure B if B is immediately subjacent to A. But there is also a more complicated case. Here, A contains B if the complementizer of A binds that of B. This applies to sentences only, of course, and the intended effect is to permit the obviation principle -- in the successive-binding situation -- to overlook intermediate clauses and treat a deeply embedded clause (containing the variable term) as if it were, in fact, immediately subjacent to the clause containing the constant term. To achieve this effect, however, we must require that (23) relate the principal argument of $\Sigma$ to the principal argument of the <u>maximal</u> structure containing $\Sigma$. I will assume that to be the proper interpretation of (23) in the long-distance cases.

Another key term in (23) is the 'principal argument'. While the principal argument can be defined in a completely general and straightforward way in Hopi, it is not clear that it can in Irish.[3] I will assume, however, that there is ultimately a coherent definition in Irish and that it will designate the commanding NP in a headed structure and the subject of a sentence as principal arguments.

I will illustrate the operation of (23) first with the simple case represented by (17), whose structural description is as follows:

(24)
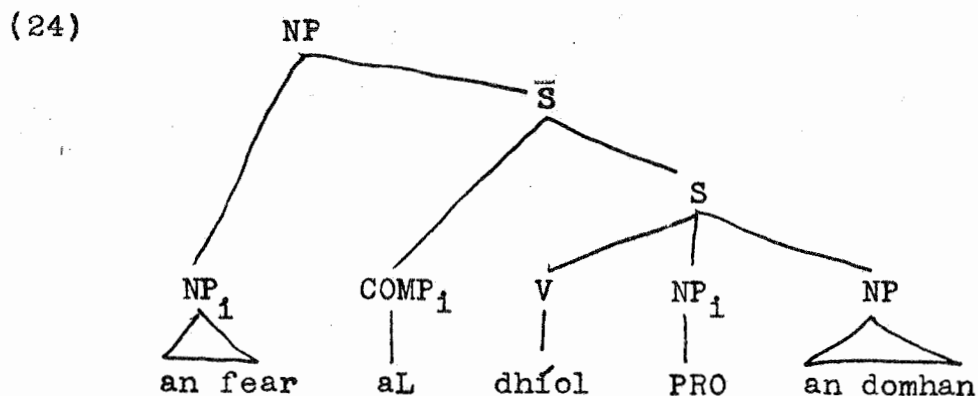


The S̄ structure here is contained by the superordinate NP. The
principal argument (subject) of S̄ is anaphoric, so S̄ is a +prox
structure. Accordingly, (23) stipulates that the subject in S̄ is
bound to the head NP **an fear**. This corresponds to the indexing, so
(24) is well-formed. By contrast, the structure corresponding to
the ungrammatical (18) would have a nonanaphoric subject in S̄. This
subject would, by (23), be stipulated as 'anti-bound' to the head
NP, as indicated by the indexing in (25) below:

(25)   *... an fear$_i$ arL$_i$ dhíol sé$_j$ an domhan

This does not, by itself rule (25) ungrammatical, since it is possible
for a nonanaphoric NP to appear in subject position. The structure
is ungrammatical because the head is not coindexed with a pronoun
in the S̄ which it commands -- that is to say, the structure fails the
well-formedness condition on relative clauses.

Now consider a long-distance case:

(26)
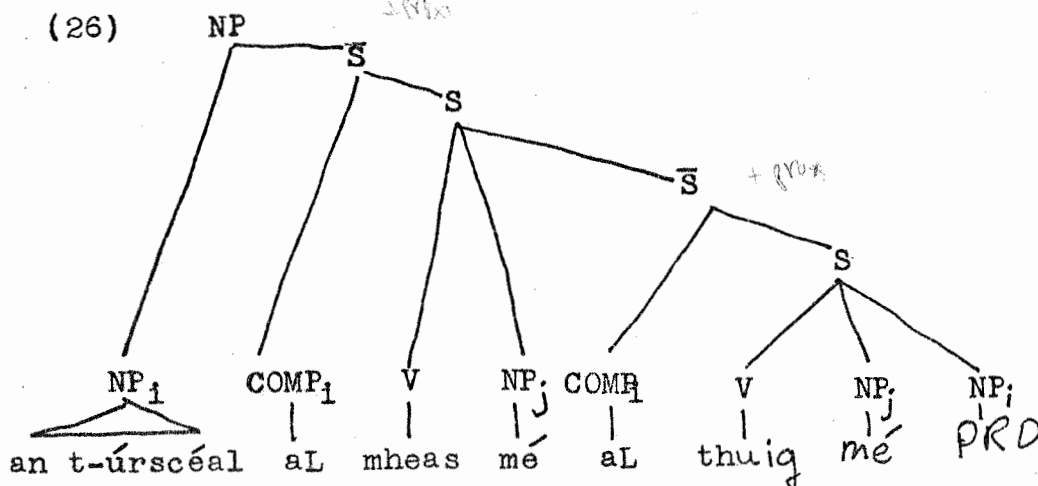
According to the definition of containment, both $\bar{S}$ structures are contained in the NP headed by an t-ursceal. Since the subjects of both structures are nonanaphoric, they are stipulated as anti-bound to the head. Neither subject is a relative argument in (26) therefore. The structure is well-formed, however, since the head is coindexed with the object NP in the lowest clause; the direct relative is possible here because the relative argument is bound to the head.

If the final clause in (26) had been (27) below, its subject, being anaphoric, would have been stipulated as bound to the head:

(27) ... $aL_i$ thit $PRO_i$ ar an talamh

(... $COMP_i$ fell $PRO_i$ on the ground)

The overt pronoun sé in place of PRO here would render the structure ungrammatical, since (23) would prevent the pronoun from being bound to the head.[4]

The success of the scheme being developed here will depend upon the results of the remaining task of tying up loose ends in the analysis, not only in relation to the obviation principle itself, but also in relation to the notion 'syntactic binding' defined in (8). It is clear, for instance, that binding must be blocked by certain opacity conditions (tense1-S and possibly specified subject), unless the binding relation between A and B is via COMP (or successively subjacent COMPs). This is necessary, for example, to prevent syntactic binding from relating the two subjects in (26) -- or in sentence (14) from which (26) is constructed -- as well as in many similar cases which can be easily brought to mind. In this way, syntactic binding behaves like a rule of grammar. This is undoubtedly true of obviation, too, as Jeanne suggests in her grammar of Hopi.

*To be continued. Relationship to 'control', 'equi', etc.*

(ADDENDUM to <u>Obviation in Modern Irish</u>, K. Hale, MIT, Sept., 1978)

I would like to propose the following general well-formedness condition on the indexing of the COMP node in syntactic structures:

(27)  COMP is neither bound nor binding.

For Irish, this will of course require that all COMPs are of the form goN, gurL, etc. This is not true, of course. I will assume that exceptions to (27) are allowed by virtue of another general principle, akin to Kiparsky's Elsewhere Condition (Kiparsky, 1973), according to which a more specific binding rule is allowed to override a more general one. Thus, (27) is the 'elsewhere case' in relation to (a) the rule which specifically states that the head of a relative clause must be bound to the immediately subjacent COMP and (b) the provision whereby an NP can be bound to a head NP via COMP. (And if control is to be viewed as a special case of binding, whereby a subject or object in a matrix clause binds the COMP and subject of an immediately subjacent clause, this would also be allowed to override (27).) If COMP is unbound, or if it is bound only to a head, its clause constitutes a 'propositional island' in relation to all other binding relationships. It is presumably the Propositional Island Condition (Chomsky,      ), therefore, which prevents syntactic binding from relating the two subjects in (14) and, correspondingly, rules out a sentence like the following

(28)  *Mheas sé$_i$ gurL$_j$ thuig PRO$_i$ an t-úrscéal.

(thought he$_i$ COMP$_j$ understood PRO$_i$ the novel)

The general condition (27) itself rules out

(29)  *Mheas sé$_i$ aL$_i$ thuig PRO$_i$ an t-úrscéal.

(thought he$_i$ COMP$_i$ understood PRO$_i$ the novel)

At least one other binding configuration must be ruled out. That is the case where a COMP is bound to an anaphor which, in turn, is bound to a head NP, as in

(30) $*$... an fear$_i$ aL$_i$ mheas PRO$_i$ aL$_i$ thuig PRO$_i$ an t-úrscéal

(... the man$_i$ COMP$_i$ thought PRO$_i$ COMP$_i$ understood PRO$_i$ the novel)

to which compare

(31) Mheas sé$_i$ gurL$_j$ thuig sé$_i$ an t-úrscéal.

(thought he$_i$ COMP$_j$ understood he$_i$ the novel)

'He thought that he understood the novel.'

and

(32) ... an fear$_i$ aL$_i$ mheas PRO$_i$ gurL$_j$ thuig sé$_i$ an t-úrscéal

(... the man$_i$ COMP$_i$ thought PRO$_i$ COMP$_j$ understood he$_i$ the novel)

'... the man who thought that he understood the novel'

So far as I can see, (27), unaided, does not block the ill-formed relative clause in (30). The best I can suggest at the moment is the following principle of closure for successive binding relationships:

(33) Closure of the transitive (syntactic) binding relation ((8) above) must be taken at the earliest opportunity (the first available NP).

Thus, a binding chain must be as short as it can be. In (30) it exceeds the length permitted by (33), but in (32) the chain conforms to (33), so the structure is well-formed.

(next, simplification of (23))