

INCORPORATION AND THE IRISH SYNTHETIC VERB FORMS

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0. Introduction.

In many languages of the world, the verbal inflection contains an element, commonly labelled "agreement", typically reflecting the person and number categories of the subject of the sentence. Three typical examples are given in (1) below, with the relevant inflections underlined:

(1) Spanish (Indo-European, Romance):
Yo hablo. 'I speak.'

Navajo (Athabaskan):
Shí yásh̄ti'. 'I speak.'

Miskitu (Macro-Chibchan):
Yang aisiḡḡa. 'I speak.'

In these examples, the agreement is "construed with" an overt subject -- in this instance, with the independent first person singular pronominal subject *yo*, *shí*, *yang* 'I'. But depending upon the "richness" of the subject agreement inflection in a given language, the syntactic subject may be non-overt instead. This is an option in the three languages just illustrated. Thus, besides (1), we also find (2) below:

(2) Spanish:
Hablo. 'I speak.'

Navajo:
Yásh̄ti'. 'I speak.'

Miskitu:
Aisiḡḡa. 'I speak.'

This alternative is sometimes referred to as "null-anaphora", and a language which utilizes it is sometimes referred to as a "pro-drop" or "null subject" language. We do not, as yet, fully understand the nature of the "richness" condition on the use of null-subjects, but it is quite generally the case that languages whose subject agreement is in fact rich enough to license subject pro-drop use this as an *option*, grammatically speaking, not as a necessity. That is to say, it is normally the case that overt subjects may cooccur with subject agreement inflection in the verb word.

Modern Irish is an exception to this (Cf. McCloskey and Hale, 1984). In that language, as is well known, verbal inflection for

(6) Yiztaʔ.

'He kicked him.'

Both the subject and the object are "dropped" here. And both are represented in the verbal morphology (though, of course, third person is phonologically zero within the subject person-number paradigm, as is commonly the case among languages of the world).

While null-anaphora in object position is optional in Navajo, there are languages in which it is obligatory -- just as it is obligatory for subjects in Irish. Such a language is Dogrib, a Northern Athabaskan relative of Navajo. In that language, the following pattern is to be observed (from Saxon, 1986:59):

(7) (a) Cheko kwik'i nà-ì-zhì.
(boy gun ADV-PERF-break)
'The kid broke the gun.'

(b) Cheko nà-yì-ì-zhì.
(boy ADV-3o-PERF-break)
'The kid broke it.'

(c) *Cheko kwik'i nà-yì-ì-zhì.
(boy gun ADV-3o-PERF-break)

Here, the presence of object agreement is in complementary distribution with the presence of an overt NP argument in object position. Accordingly, (7c) is ill-formed and (7b) shows obligatory null-anaphora.

Of course, Irish does not have object agreement in its verbal system, but it does have a system of so-called "pronominal prepositions." These are simply prepositions inflected for agreement with their objects. Here again, Irish requires null-anaphora -- object agreement may not cooccur with overt expression of the object with which it is construed. Hence the ill-formedness of (8c) below:

(8) (a) le Máire
'with Mary'

(b) léi
(with:3fs)
'with her'

(c) *léi Máire

categories are inflected for person and number of the mentioned arguments, and the notation "obl" stands for "obligatory" null-anaphora:

(11)	<i>Subject</i>	<i>Object of V</i>	<i>Object of P</i>
Dogrib	non-obl	obl	obl
Irish	obl	---	obl
Navajo	non-obl	non-obl	non-obl

Of these languages, only Irish shows obligatory null-anaphora in the subject function. Navajo and Irish are perfect opposites along the null-anaphora parameter (though, of course, Irish does not inflect its verbs for object agreement), while Dogrib represents a mixed system, opposing subject and non-subject. Irish represents a minority in one respect, in that it requires null-anaphora of the subject. While the sample presented here is small, it is in fact representative of languages of the world, since obligatory null-anaphora of the subject function is relatively rare.

We have two primary purposes: (1) to give an elementary characterization of the distinction between obligatory and non-obligatory null-anaphora, and (2) to attempt to explain why Irish permits null-anaphora of subjects, while the other languages do not. To address the first of these purposes, we must develop an elementary theory of agreement.

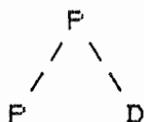
Let us consider the adposition first, since this category inflects for person and number in all three of the languages. The basic structure of the Irish prepositional phrase can be represented as in (12a) below, while that of the two Athabaskan languages is as depicted in (12b):



The two structures differ only according to the position of the "head" of the construction. Irish is a "head-initial" language consistently, while Athabaskan is consistently "head-final". In all other respects, the structures are identical in the three languages. In particular, in all three, the adposition (P, for preposition or postposition) governs an argument which, in tradition parlance, belongs to the category NP, subsuming not only "noun phrases" proper, but also phrases headed by pronouns and other determiners. In more recent work on the structure of argument expressions, they are held to have two "heads", one a

compound formed by adjoining the pronominal element -- which belongs to the category D, by hypothesis -- to the adposition P, yielding a word of the form given in (16a) or (16b), depending upon the linear ordering of the two elements entering into the compound:

(16) (a)



(b)

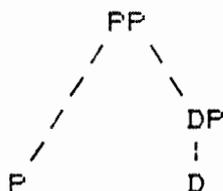


The Irish inflected preposition takes the form (16a), while the Navajo inflected postposition takes the form (16b). The inflection of other categories (e.g., the verb) would, according to this view, proceed along the same lines.

We now have an elementary theory of the morphology of person-number inflection -- i.e., we have a proposal concerning the manner in which an inflected word is formed. We must now concern ourselves with the question of how the languages we are considering come to differ in respect to null-anaphora. Why is it obligatory in some, optional in others?

Let us consider first the behavior of adpositions in Irish and Dogrib. In both of these languages, an inflected adposition is incompatible with overt expression of the object in canonical object position. This would follow automatically if the inflection itself were the argument. And this in turn would follow automatically if the incorporation process were *syntactic* -- i.e., if it applied to a syntactic structure of the form given in (17), incorporating the pronoun -- i.e., the D -- into the verb (leaving a trace, presumably, in conformity with the general structure preservation requirement on movement rules):

(17)



Incorporation would be effected by the general transformational rule "Move-Alpha" (cf. Chomsky, 1981), in its "head-movement" variant (cf. Baker, 1987). This would adjoin the pronoun (i.e., D) to its governor, the preposition (P), yielding (18) below:

The foregoing constitutes an elementary theory of person-number agreement and of the observed typological variation within the system. It is appropriate now to turn to the final problem -- namely, an account of subject agreement and the contrast there between Irish and Athabaskan.

2. Subject agreement.

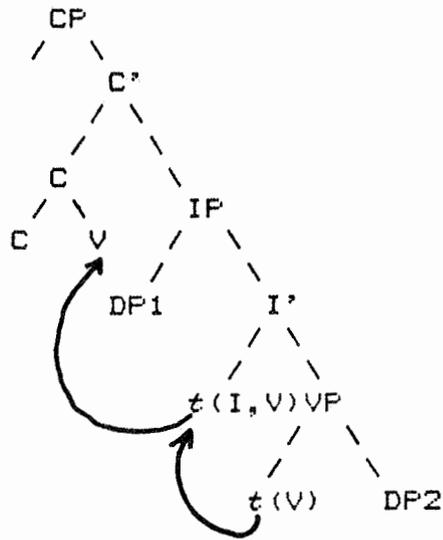
The two Athabaskan languages agree with respect to the use of null-anaphora for subjects -- it is non-obligatory in both languages. Assuming that the account given in the preceding section is plausible, then it is reasonable to assume that subject agreement is by *lexical* incorporation, not syntactic incorporation, in those languages. By contrast, since null-anaphora is obligatory in Irish, i.e., since subject agreement precludes overt expression of the syntactic subject, it is reasonable to assume that subject agreement is effected by *syntactic* incorporation in that language.

Let us suppose that this is the correct account of the difference between Athabaskan and Irish. While this is descriptively adequate, it is not altogether satisfactory, since it fails to reflect the fact that the Irish phenomenon is somewhat rare, while the Athabaskan situation could not be more common. One wonders, therefore, whether the Irish behavior might not be tied to some other feature of the language. Does the linguistic type to which Irish belongs have anything to do with the fact that it requires null-anaphora in the presence of subject person-number inflection?

We can put the question another way. Would it be possible for an Athabaskan language, of the type represented by Navajo and Dogrib, to exhibit the Irish behavior in regard to null-anaphora of subjects? Let us speculate that it would not be possible. Why might this be?

It is well known that there is an asymmetry between the subject, say, and the object. The asymmetry derives from the fact that the subject is not *properly* governed -- in particular, it is not *lexically* governed. If the subject is not properly governed in the Athabaskan languages, then the typological position of these languages in regard to null-anaphora of subjects would follow instantly from the theory of movement. Incorporation of a pronoun (D) into the verb would leave an ungoverned trace -- violating a general condition to the effect that all traces must be properly governed (cf. Chomsky, 1981). Therefore, these languages could not use *syntactic* incorporation to effect subject person-number agreement. Only *lexical* incorporation will do. From this it follows that Athabaskan does not require null-anaphora in subject position; it *could* not require it.

(20)



In its derived position, the verb properly governs the subject. This follows partly because the category IP (i.e., the sentence, S in traditional notation, is never a barrier to government) and partly from the fact that V is not categorially distinct now from IP, due to the fact that it passed through the head of IP (i.e., through I) in its leftward journey to C), as indicated by the arrows.

Given these assumptions, a pronoun occupying DP1 position could incorporate into V at the syntactic level of representation. This would yield the desired results. Null-anaphora would be obligatory, by virtue of the syntactic movement. Hence the observed difference between Irish and the Athabaskan languages.