

***THAT*-CLAUSES**

IN NOUN PHRASE STRUCTURE

—'

JUAN CARLOS ACUÑA FARIÑA
UNIVERSIDAD DE SANTIAGO DE COMPOSTELA

1. INTRODUCTION

The aim of this paper is to discuss aspects of the grammar of non-relative *that*-clauses following head nouns.¹ Specifically, two aspects will be discussed here. The first has to do with the different types of expansions of head nouns which can appear under the form of non-relative *that*-clauses. The second, actually a ramification of the first, concerns the nature of the evidence for positing distinct types of *that*-clauses. In essence, this paper will focus on the complement/modifier divide, as this applies to *that*-clauses inside NP. Matthews (1981: 231 ff.) and Meyer (1992: 51 ff.), on the one hand, and Grimshaw (1990: 45 ff.), on the other, will be used as background for this discussion. Central to the discussion will be an attempt to sustain the thesis that *that*-clause complements of nouns do not exist.

2. *THAT*-COMPLEMENTS AND *THAT*-MODIFIERS

In principle, the grammatical tradition recognizes two types of *that*-clauses occurring after nouns. These two types are represented by the sequences in italics in (1)-(2) and (3)-(4) below:

- (1) His suggestion *that she should come* caused some concern.
- (2) The belief *that war will soon come to an end* is unjustified.

- (3) Have you been told the ending, *that she got the divorce after all*?
- (4) But you don't know her postscript, *that she is resigning in June*, do you?

Let us restrict ourselves to (1) and (3), to start with. The *that*-clause in (1) is usually considered to be a *complement* of the head noun *suggestion* (Huddleston 1971: 106 ff. & 1984: 263-4; Brown and Miller 1982: 134 ff.; Burton-Roberts 1986: 176-8; Radford 1988: 193-4, 218-9). By contrast, the *that*-clause in (3) is not a complement but an appositive modifier of the head noun *ending* (Matthews 1981: 231 ff.). The distinction between these two types of *that*-clause expansions hinges on the different argument-taking properties of nouns. *Suggestion* is an argument-taking noun (a *complex noun*, adopting the terminology of Grimshaw 1990: 45 ff.), that is, a noun whose lexical specification determines the existence of an argument structure, which in its turn must be satisfied by the presence of lexically-specified complements of the right kind.² In short, the case for the complement status of the *that*-clauses appearing after such nouns as *suggestion* and *belief* rests on evidence of *valency* or *subcategorization*. In order to prove the adequacy of this kind of lexical evidence, it is customary to show the parallelism existing between these nouns and the corresponding morphologically-related verbs. In (5)-(7) below, for instance, the complement-taking properties of the verb predicates seem to be consistently preserved in nominalizations. This fact is assumed to prove that complements of nouns are essentially the same as complements of verbs:

- (5a) They *announced that the President would be here to host the ceremony*.
- (5b) *The announcement that the President would be here to host the ceremony* had been a mistake.
- (6a) I *wish that you would stop arguing*.
- (6b) *The wish that you would stop arguing* is shared by most people here.
- (7a) I *request that she stay at my office longer*.
- (7b) *My request that she stay at my office longer* is because I am extremely busy right now.

In contrast with the pattern represented by such nouns as *suggestion*, the relationship between *ending* and its *that*-clause in (3) is not one of lexical subcategorization, but, rather, one of *predication*. This second type of *that*-clause is not an argument of the head noun *ending*, simply because this noun does not have an argument structure from which complements can be projected.³ A consequence of this is that the *that*-clause must appear separated from the head-noun by strong intonation breaks in the same way as a non-restrictive, or appositive, modifier. Note that this non-restrictive, loose attachment to the head is obligatory for these nouns:

- (3b) *Have you been told *the ending that she got the divorce after all*.
- (4b) *But you don't know *her postscript that she is resigning in June*, do you?

Insofar as the lexical specification of argument-taking nouns has so perceptible a reflection as the restrictive or close attachment of their expansions—as opposed to the non-restrictive or loose type of attachment of non-argument-taking nouns—the sharp distinction between *that*-complements and *that*-modifiers appears to be quite justified. However, this clearcut distinction is challenged by Matthews (1981: 231 ff.) and Meyer (1992: 51 ff.), who point out that there are NPs whose *that*-clauses are subcategorized and yet non-restrictive. (8b) and (9b) below would be cases of this "mixed" class of NPs:

- (8a) *The suggestion that Bill should leave* disturbed everyone.
- (8b) Have you heard *her latest suggestion, that Bill should leave?*
- (9a) We all had *the feeling that it would not happen*.
- (9b) *Her only feeling, that it wouldn't happen*, was more influential than what was actually going on.

In view of the apparent clash of defining features exhibited by (8a)-(9a), on the one hand, and (8b)-(9b) on the other, Matthews concludes that the distinction between complements and appositive modifiers is sometimes blurred. Meyer goes further and argues that the *that*-clauses in (8b) and (9b) cannot be complements since "No other noun-complements . . . permit the restrictive and non-restrictive opposition illustrated" in them (1992: 51). These *that*-clauses must therefore be appositive modifiers, despite subcategorization.⁴ Note that the point made by these two linguists receives some support from the fact that the subcategorized structures of (8b) and (9b) can even admit so-called appositive markers (Quirk et al. 1985: 1262),⁵ just like the

postmodifying *that*-clause of the non-argument-taking noun *ending* quoted as (3) above:

- (8c) Have you heard *her latest suggestion, namely, that Bill should leave*?
 (9c) *Her only feeling, namely, that it wouldn't happen*, was more influential than what was actually going on.
 (3c) Have you been told *the ending, namely, that she got the divorce after all*?

In view of the observation made by Matthews and Meyer, then, the traditional sharp distinction between complement *that*-clauses (as in (1)-(2) above) and appositive *that*-clauses (as in (3)-(4) above) would not appear to be well-founded.

A slight correction of the nature of the doubts which Matthews and Meyer express about the status of the clauses under consideration constitutes the first point to be made here. It is important to realise that the evidence these two linguists raise for calling into question the traditional distinction between *that*-complements and *that*-modifiers is one of a lexical nature. It follows from their accounts that for some argument-taking nouns, but not for others, the distinction between a non-restrictive expansion and a restrictive one is entirely arbitrary (Matthews 1981: 232). In reality, however, this is far from being the case. Note from (8d) and (9d) below that the non-restrictive examples they mention become ungrammatical as soon as they are made restrictive, that is, as soon as the intonation boundaries disappear:

- (8d) *Have you heard *her latest suggestion that Bill should leave*?
 (9d) */?Her only feeling *that it wouldn't happen* was more influential than what was actually going on.

This proves that the choice of either a restrictive frame or a non-restrictive one is by no means arbitrary. Now, if the choice of expansion frame is not arbitrary, then it is not lexically-governed, and, if it is not lexically-governed, it must be syntactically so. This implies that general principles of the grammar of the noun phrase must be held accountable for that choice. In other words, general principles of the grammar of the noun phrase must explain why, in instances like (8b) and (9b) above, the non-restrictive type of expansion is obligatory *despite subcategorization*. It so happens that one such principle is indeed at work in these instances. As may have been guessed, this has to do with the modification processes which are licensed by

the structure of the NP as a response to its need to code reference. Note that the examples with obligatory non-restrictive *that*-clauses exhibit premodification by adjectives (Quirk et al. 1985: 1262). As soon as the premodification is left out, these phrases become acceptable:

- (8e) Have you heard *her suggestion that Bill should leave*?
 (9e) *Her feeling that it wouldn't happen* was more influential than what was actually going on.

What appears to be going on here, then, is that once the referential potential of the nominal constituent of the NP is *saturated* (that is, once it can identify a referent in the extralinguistic world), further expansions of the nominal must occur necessarily marked off from the rest. The grammatical effects of referential saturation are not only visible in the grammar of *that*-clauses, but in the grammar of the NP in general. In (10) and (13) below, for instance, the addition of certain constituents to the head nouns (*friend* and *doctor*, respectively) brings about the ill-formed strings (11) and (14). By contrast, when those additions appear after clear demarcative boundaries (as in (12) and (15)), the NPs become acceptable:

- (10) My friend Mary was here yesterday.
 (11) *My friend Mary's father was here yesterday.
 (meaning 'my friend the father of Mary')
 (12) My friend, Mary's father, was here yesterday.
 (13) The doctor saved her life.
 (14) *The doctor an author of some reputation saved her life.
 (15) The doctor, an author of some reputation, saved her life.⁶

In fact, the exact point at which a head noun acquires a capacity for expressing full reference through the mediation of different kinds of expansions is a matter of some complexity. The restrictive/non-restrictive nature of the expanding constituents, together with their syntactic weight, are probably the most relevant factors in determining the cut-off point where further expansions to the head must appear in a detached fashion (after intonation breaks in speech, or commas in writing). Be that as it may, what is interesting here is that, as is evident from (8d)-(9d), subcategorized *that*-clauses are sensitive to the conditions that determine the referential build-up of the NP. I shall later have occasion to comment on the significance of this fact.

In sum, then, the fact that the non-restrictive frame is sometimes present after such argument-taking nouns as *suggestion* and *feeling* has nothing to do

with these nouns allowing either complements or modifiers as arbitrary syntactic realisations of their arguments, as Matthews appears to believe. Rather, it means that the non-restrictive type of expansion is obligatory (i.e. it is not arbitrary) in accordance with rules of NP structure which are sensitive to the coding of reference. The result of these rules may very well be a kind of neutralization of the habitual distinction between *that*-complements and *that*-modifiers (although I will soon refute this view). Their origin, however, is not lexical idiosyncrasy, but syntactic structure, particularly, the syntactic structure of the noun phrase.

This slight correction of the point brought up by Matthews and Meyer leaves us, provisionally, with a three-way distinction as regards *that*-clauses:

1. First, there are restrictive *that*-clauses which are subcategorized by noun predicates and hence are seen by the grammatical tradition as endowed with complement status:

- (1) *His suggestion that she should come* caused some concern
- (5b) *The announcement that the President would be here to host the ceremony* had been a mistake.

2. Secondly, there are *that*-clauses which occur after non-argument-taking nouns and are necessarily non-restrictive. They thus function like any other kind of appositive, or non-restrictive, modifier:

- (3) Have you been told *the ending, that she got the divorce after all*?
- (16) Have you read *the postscript, that your mother is also coming*?
(Matthews 1981: 231.)

3. And thirdly, there are *that*-clauses which are lexically specified by their argument-taking nouns and yet non-restrictively attached to them. Apparently, the status of this latter group of *that*-clauses is indeterminate between complementation (by virtue of the lexical specification) and appositive post-modification (by virtue of the non-restrictive type of attachment to the head). The origin of this indeterminacy is related to ordinary syntactic processes which affect the structure of the NP:

- (8b) Have you heard *her latest suggestion, that Bill should leave*?
- (9b) *Her only feeling, that it wouldn't happen*, was more influential than what was actually going on.

3. THE STATUS OF *THAT*-CLAUSE COMPLEMENTS REVISITED

Having thus provisionally established the three-way taxonomy of *that*-clauses in NP structure as outlined above, I would now like to suggest that the indeterminacy of the third kind of *that*-clause just mentioned can be resolved if one abandons the traditional distinction between complements and modifiers altogether, as applied to nominal *that*-clauses, and posits that every *that*-clause in NP structure is a modifier, including type 1 above.

Grimshaw (1990: 74 ff.) takes up the case for the non-existence of *that*-clause complements of nouns. In her account she mentions as essential for the distinction between complements and modifiers aspects such as the obligatoriness of true complements, the possibility of using nominals with non-complements predicatively (i.e. across a copula), differences in meaning and in the choice of determiners, the possibility of "event control,"⁷ and their compatibility with various aspectual modifiers (like *constant* or *frequent*). I cannot hope to go into Grimshaw's account now, but the important point to make here is that, by giving due consideration to the facts adduced by Matthews, one may add to Grimshaw's arguments yet another important piece of evidence that *that*-clause complements of nouns indeed do not exist. Consider (8a)-(8c) again, repeated below as (17)-(19):

- (17) *Her suggestion that Bill should leave* disturbed everyone.
- (18) Have you heard *her latest suggestion, that Bill should leave*?
- (19) *Have you heard *her latest suggestion that Bill should leave*?

As remarked before, and as (19) shows, the non-restrictiveness of (18) is obligatory. It has been argued that, as a result of this obligatoriness, the *that*-clause complement in (17) becomes in (18) a constituent of a somewhat unclear status. This change in the relation between the clause and its head noun is caused by the addition of the premodifying adjective *latest*, presumably because the mere addition of this premodifier to the head exhausts the referential capacity of the nominal constituent of the NP (which is now able to activate a reference extralinguistically). Now, the question one must ask oneself is the following: how is it possible that the introduction of a modifier (a dispensable element by definition) can cause a complement to be relegated

to an external position in the overall structure of the noun phrase, thus yielding a configuration in which the premodifier has a closer bond with the head than the complement itself? Indeed, it makes very little sense to contend that the modification processes at work in NP structure can come prior to (and impose conditions on) the complementation processes, because, unlike the former, the latter are a direct reflection of the argument-taking properties of head nouns. Since any constructional hierarchy one may wish to establish must give priority to complements over all other dependents, and since the evidence of (19) above is unquestionable, we are led to conclude that the *that*-clause in (17) cannot be a complement either, but is simply a postmodifier. This conclusion is corroborated by at least the following three facts:

1. In the first place, there is no parallelism in VP structure to what happens in (17)-(19) above. That is, no VP adjunct can bring about the obligatory separation of a *that*-clause complement from its verbal head:

- (20) I say that you must go.
- (21) I say *now* that you must go.
- (22) I say *now* *, that you must go. (with obligatory pause)
- (23) He told me *the other day when we met at the bar* that Liz is determined to kill the man.
- (24) He told me *the other day when we met at the bar* *, that Liz is determined to kill the man. (with obligatory pause)

2. In the second place, and perhaps more relevantly, other constituents in NP structure which do appear to behave like true complements can coexist perfectly well with premodifiers, as (25) below shows:

- (25) The latest expression *of her feelings* was shocking to the audience.
(Compare with *she expressed her feelings*)

Note that *expression* in (25) is a complex noun and, as such, it requires the presence of complements of the right kind as projections of its argument structure. Its complement appears in (25) in the form of the PP *of her feelings*, and, in the adequate interpretation of *expression*,⁸ the absence of this complement brings about ungrammaticality (e.g. *the frequent expression *(of offensive feelings) by players*). When the PP complement is present, however, no compatibility problems of the sort seen in (19) (**her latest suggestion that Bill should leave*) arise.⁹

3. In the third place, the looseness of the bond existing between argument-taking nouns and their *that*-clauses is evidenced by the fact that some of these clauses can even undergo *extraposition*. As (29) below shows, extraposition is not possible with relative clauses, even though relatives are modifying structures and therefore, in principle, less intimately attached to their heads than complements:¹⁰

- (26) *The belief that she was going to resign* became quite widespread.
- (27) *The belief* became quite widespread *that she was going to resign*.
- (28) *The belief which she shared with us* became quite widespread later.
- (29) **The belief* became quite widespread *later which she shared with us*.

So once again, (26)-(29) make it clear that *that*-clauses are not only tenuously connected with their argument-taking nouns, but in some respects even more tenuously connected than other typical modifiers.

4. EPILOGUE: PRIORITIES IN NP STRUCTURE

To sum up, then, the evidence that can be derived from the three noun phrases in (17)-(19) alone is enough in itself, if interpreted adequately, to reject the existence of nominal *that*-clause complements. And this in a way which follows from the general principles of NP structure. What is interesting about the initially indeterminate type of *that*-clause brought up by Matthews and Meyer is that it forces one to re-consider the criteria which have usually been invoked as evidence for the distinction between *that*-complements and *that*-modifiers. The standard view is simply that lexical subcategorization provides a direct, clear-cut pathway between the meaning of lexical items and the syntactic behaviour of their lexically-specified arguments. If a lexical item (a noun or a verb) subcategorizes an argument, then that argument must manifest itself syntactically as a complement (as opposed to non-arguments, which surface as modifiers). This view implies an intimate syntactic connection between the subcategorizing head and the subcategorized complement. Now this is true (with some complications) of VP structure. Indeed, simplifying a little, the structure of the verb phrase emerges largely out of the confluence of two independent axes: on the one hand, there is the need for the VP to give syntactic expression to the head/argument relationship (which is relevant here); on the other, there is also the need for the VP to code tempo-

ral, aspectual and modal meanings. These two axes are in total harmony in the VP, in the sense that the satisfaction of either one does not interfere with the satisfaction of the other. Since the two axes are given equal weight in the VP, the head/argument relationship is not affected by the coding of time, aspect and modality, which means that there is no impediment to arguments surfacing as true complements. The direct pathway between lexical meaning and complement structure, via argument structure, is therefore unobstructed.

But the structure of the noun phrase presents a different scenario. In this, one of the axes continues to be the head/argument relationship, but the other is now, in broad terms, the coding of reference. The fundamental difference between the NP and VP structures is that, in the former, one of the axes (the coding of reference) *does* affect the other (the head/argument relationship). As has been seen, this is evident from the fact that, in order to encode reference, via modification, the lexically-specified arguments of head nouns often surface, not as complements, as in VP structure, but as "second-rate" (i.e. detached) modifiers (that is, not even as ordinary modifiers: e.g. **her LATEST suggestion that she couldn't come* / *her LATEST suggestion, that she couldn't come*, where the modifier *latest* imposes conditions on the putative complement *that she couldn't come*, and not the other way round). The reference axis is thus given priority over the head/argument relationship. The pathway between lexical meaning and complement structure, via argument structure, is therefore blocked this time. There is then a fundamental distinction in the way in which argument-taking lexical items have their logico-semantic specification mapped on to syntactic structure. While verbs always have their arguments surface as complements, such is not always the case with nouns. In particular, *that*-clause arguments never do so. This is not, of course, a novel claim, but the order of the priorities in NP structure which have been documented here do more, I believe, than merely favour this interpretation. Indeed, these priorities can hardly admit of any other interpretation.^a

NOTES

1. I wish to thank Teresa Fanego, Elena Seoane, M. José López and Belén Méndez for their helpful comments on an early draft.

2. The class of argument-taking nouns tends to coincide with those nominal predicates which denote mental processes (although nouns such as *fact* or *idea* do not easily fit in this description).

3. The distinction between argument-taking (or complex) and non-argument-taking (or simple) nouns accords with the traditional distinction between process and result nouns. Result nouns designate the output or result of a process, whereas process nouns code the process itself.

4. As a matter of fact, both Matthews and Meyer treat all these structures in their separate discussions of the nebulous notion of apposition. This fact should not affect the present discussion because: 1. there is no syntactic parallelism between NPs with detached *that*-clauses and canonical cases of apposition (e.g. *London, the capital of Great Britain*), which means that apposition, strictly speaking, is out of the question (see N. Burton-Roberts 1975); and 2. Meyer himself conceives of apposition as a gradable relationship ("Appositions can be either coordinative or subordinative. . . . Those that are subordinative will be considered peripheral appositions and on gradients between central apposition and coordination, peripheral elements (Matthews 1981: 123 ff.), modification and complementation", Meyer 1992: 41). This means that when he analyses "the gradient between apposition and complementation", the term *apposition* designates, as he uses it, what most linguists would loosely refer to as appositive postmodification, or simply, postmodification. For a review of Meyer's work, see Acuña (1994).

5. Note that true complements, like those in VP structure, cannot take appositive markers:

- a. Peter felt *that life was becoming senseless for him*.
- b. *Peter felt, *namely, that life was becoming senseless for him*.

6. For an account of the ungrammaticality of these constructions, see especially Burton-Roberts (1975: 395 ff).

7. Drawing on H. Lasnik (1988: 1-17) and E. Williams (1985: 297-315), Grimshaw contends that complex (*i.e.* argument-taking) nominals allow control into an infinitival purpose clause, and that the controller in such cases is the event denoted by the nominal (1990: 57-8):

- a. The translation of the book (in order) to make it available to a wider readership.
- b. *The exam (in order) to make it available to a wider readership.

But nominals containing *that*-clauses behave like non-argument-taking nominals (like *exam*) in that they do not allow control because they do not have "an internal semantic analysis of the event provided by the event structures" (1990: 59). Therefore the purpose clauses occurring after them are associated only with the lower clause. Note that the purpose clauses occurring in VP structure can be associated with either clause (1990: 76-7):

- c. Their statement that the president intends to retire in order to mislead the public was absurd.

d. They stated that the president intends to retire in order to mislead the public.

8. There is another interpretation of *expression* which reveals that this noun may be both a complex noun, as in (25), and a simple one, as in *he had such a sad expression (i.e. look) on his face*. For ways of disambiguating between the complex and the simple readings of various nominals, see Grimshaw (1990: 45 ff.).

9. According to the subcomponent of Government and Binding theory known as *case theory*, NPs cannot assign structural case, which means that they require prepositions intervening between the head (*expression* here) and the NP complement (*her feelings*) in order for case to be assigned to the latter. The different acceptability of PPs and *that*-clauses in the noun phrase domain (compare (8d) with (25)) may therefore be related to the fact that *that*-clauses are not assigned case. However, Grimshaw (1990: 70 ff.) argues that it is not case but theta-marking that causes the observed differences. On *of*-insertion and case, see Chomsky (1986: 194) and Haegeman (1991: 162 ff.).

10. Note also that in VP structure, the extraposition of the complement tends to result in the appearance of a syntactic *place holder* which guarantees that the close liaison existing between the verbal predicate and its complement is preserved (e.g. *I took it for granted that she was going to resign*).

WORKS CITED

- ACUÑA, J. C. 1994. Review of *Apposition in Contemporary English*. By Ch. F. Meyer. *Atlantis* 16: 321-26.
- BURTON-ROBERTS, N. 1975. "Nominal Apposition." *Foundations of Language* 13: 391-419.
- - -. 1986. *Analysing Sentences*. London: Longman.
- BROWN, E. K., and J. E. MILLER. 1982. *Syntax: Generative Grammar*. London: Methuen.
- CHOMSKY, N. 1986. *Knowledge of Language, its Nature, Origin, and Use*. New York: Praeger.
- GRIMSHAW, J. 1990. *Argument Structure*. Linguistic Inquiry Monograph Eighteen. Cambridge (MA): MIT Press.
- HAEGEMAN, L. 1991. *Introduction to Government and Binding Theory*. Oxford: Blackwell.
- HUDDLESTON, R. 1971. *The Sentence in Written English: A Syntactic Study Based on an Analysis of Scientific Texts*. Cambridge: Cambridge UP.
- - -. 1984. *Introduction to the Grammar of English*. Cambridge: Cambridge UP.
- LASNIK, H. 1988. "Subjects and the Theta-Criterion." *Natural Language and Linguistic Theory* 6: 1-17.

- MATTHEWS, P. H. 1981. *Syntax*. Cambridge: Cambridge UP.
- MEYER, Ch. F. 1992. *Apposition in Contemporary English*. Cambridge: Cambridge UP.
- QUIRK, R., S. GREENBAUM, G. LEECH, and J. SVARTVIK, 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- RADFORD, A. 1988. *Transformational Grammar*. Cambridge: Cambridge University Press.
- WILLIAMS, E. 1985. "PRO and Subject NP." *Natural Language and Linguistic Theory* 3: 297-315.