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INTRODUCTION

In 1968 the M.I.T. Press accepted for publication the dissertation that had earned for Robin T. Lakoff a Doctorate in Philosophy from the University of Indiana; the book was entitled "Abstract Syntax and Latin Complementation". In outline, the aim of its authoress was as follows: she took as her model for research the analysis of the English complement—system produced by P.S. Rosenbaum in his work of 1967—"Grammar of English Predicate Complement Constructions"— together with the refinements later added by George Lakoff and John R. Ross (this composite system is hereafter referred to as R-I-R). The first part of Lakoff's book presents R-I-R's conclusions as illustrated by the English data; the following section is devoted to an attempt to shew that, contrary to traditional belief, the system of complementation in Latin bears very close resemblances to that described for English.

The specific claim advanced by Lakoff on the basis of her research that the systems employed by the two languages are very similar to each other will be seen to stand or fall firstly by one's acceptance of R-L-R's scheme for English, and secondly by one's belief that Lakoff is convincing when she argues that this same scheme is the one that best accounts for the Latin evidence. Thus, at this point, the reader finds himself faced with a number of choices:-

- a) he may agree both with R-L-R's approach and Lakoff's further application of it;
- b) he may agree with R-L-R but doubt the validity of Lakoff's arguments;
- c) he may disagree with R-L-R but be attracted by Lakoff's hypothesis;
- d) he may reject both R-L-R's analysis of English and Lakoff's analysis of Latin.

It should be pointed out that by opting for the fourth alternative one is not necessarily dismissing the possibility of a similarity existing between English and Latin in this respect; it need hardly be stated that the nature of any similarity that may appear will be a function of the new proposals put forward for consideration. If the scope of such new proposals can be shewn to extend beyond the two languages mentioned so far, then obviously it is pointless to give emphasis to something that superficially links English with Latin — after all, it is of the essence of a linguistic universal to be universally applicable to natural languages. But this is to anticipate the arguments of this paper.

The question now to be asked is: "In defence of which of the above options does the present writer intend to argue?" It should be apparent from the title of this thesis that it is in no way my concern to deal explicitly with the complement systems of English, or indeed of any languages other than Latin. However, the approach followed in the succeeding pages first suggested itself to me upon my reading the excellent article "Fact" by Paul and Carol Kiparky. Their research was conducted in order to discover if there are any discernible ways in which the different syntactic complement constructions of English can be predicted from the presence or absence of particular semantic features in the sentence. By attempting to use their methods for a re-interpretation of the Latin data, one is unavoidably making a certain presupposition about the validity of their conclusions in relation to English.

Of course, one does not embark upon a detailed scrutiny of another person's efforts unless one has good reason for supposing the original work to have been misguided. We shall hope presently to shew that Lakoff has paid but cursory attention to the facts of Latin grammar, which is a direct consequence of her apparently arbitrary decision to formulate for Latin a set of phrase-structure with transformational rules within the framework of R-L-R's schemata for English: the voice of Latin was, as it were, stifled from the beginning, since the terms in which the investigation into the Latin material was carried out rested upon preconceived notions about the way in which Lakoff felt that such material ought to respond to analysis.

In attempting a re-appraisal of the situation it has been impossible for me to cover as wide a variety of complement types as will be found discussed in Lakoff's book. My praview has necessarily been restricted by the length of time allowed for the completion of the course for the Cambridge Diploma In Linguistics. Here, then, is a summary of the methods I adopted: I have concentrated attention on two of the constructions dealt with by Lakoff - the quod-clause and the accusative + infinitive. Settling down for many hours with the computerized concordance to the works of the historian Livy (who lived from 59 B.C. to 17A.D. and whose life thus spanned the Golden Age of Latin literature), I sifted through the occurrences of the word "quod" noting examples of it in its guise as the complementizing morpheme. The verbs with which it occurred were then examined to see if there were any instances of their occurrence with the accusative + infinitive construction - there were, and this fact, incidentally, is not even mentioned as a possibility by Lakoff. When this material

had been collected, I again consulted the concordance to discover what syntactic construction accompanied the Latin equivalents of some other complement—taking verbs of English. My entire corpus of data was then analysed along the lines used for English by the Kiparskies, in an endeavour to shew that the presence or absence of a certain semantic feature may be relevant to the type of syntactic structure employed. And my findings are set out below, together with the conclusions which, I suggest, follow naturally from them.

A'caveat' must be entered at this juncture against those who anticipate a neat division manifesting itself between the quod-clause and the accusative + infinitive. In Latin there are two varieties of quod-clause, namely a) the one that appears with the indicative; b) that which appears with the subjunctive mood. Now, where the quod-clause is embedded in a sentence which itself occurs in "oratio obliqua", the subjunctive is to be expected as a regular feature of Latin grammar; it is only when we come across a subjunctive following "quod" in normal "oratio recta" that we have a problem on our hands. A special section is devoted to observations stemming from this construction.

If the ideas set forth in the body of this work should meet with the approval of those interested in developing a transformational approach to the study of Latin syntax, then perhaps someone else may feel inclined to extend my limited subject matter to a fuller appreciation of the complement—system of this language. A particularly exciting question requiring an answer is that concerning the reason why the reflexes of the construction with "quod", which in Classical Latin occurs in a more restricted set of environments than the accusative # infinitive, should have come to predominate in Vulgar Latin and consequently in Romance.

A possible reply to this question is that the later preference for "quod" is simply an aspect of the general move in the history of Latin and Romance from morphological to syntactic marking of constructions. However, any putative association with the decline of the free word order is unlikely, since Modern Greek, though retaining freeish word order and a case—system, has also generalized complementizers analogous to "quod" and dropped the "accusative and infinitive" construction. One may therefore tentatively suggest the existence of some kind of principle such that, where one of a set of syntactic constructions comes to supersede the other members of the set, the successful construction is normally the simplest of the set. So

"quod" is the only one of the various complementizers of Latin that has just one surface-marker. This hypothesized principle would, of course, be valid only up to the point where it encountered the well-established principle of the avoidance of ambiguity.

It remains for me to thank all those who have given so generously of their time in offering their varying assistance. I should like to mention the following for providing examples from languages outside my own field:— Mrs. K. Cole (Armenian); Miss H. Antonopoulos (Md. Greek); Fräulein R. Grässler and Mr. P. Hastings (German); Mr. J. Woodhouse and Mr. L. Harger (Spanish and French); Mr. H. Särka (Finnish). I thank Mr. A. Crompton for some stimulating comments. I do, of course, owe a particular debt of gratitude to Dr. A.H. Sommerstein, without whose advice, guidance and initial suggestion of this topic what follows would never have been penned.

It goes without saying that any faults contained herein result from my own lack of perspicuity or plain ingenuousness.

COMPLEMENT CONSTRUCTIONS AND AUTONOMOUS SYNTAX

In what follows it will be assumed that the reader has more than a passing acquaintance with the nature of recent developments in the study of linguistics, in particular that he is familiar with the structure of transformational generative grammar as conceived by Chomsky. It will thus be possible to avoid having to give lengthy descriptions of such basic notions as grammar, phrase-structure/ transformational rules, and the semantic, syntactic and phonological components. The one feature which it is necessary to stress involves the relationship between the syntactic and semantic components of the grammar. Until quite recently it was generally taken for granted that it was the function of the syntactic rules to determine a well-formed string and that all the semantic rules had to do was map such structures into semantic representations (vid. Seuren 1972 and Chomsky 1965). This clearly illustrates how the semantic component was thought to have no part to play in syntax - such is the meaning of autonomous syntax. It must be constantly borne in mind that it was within the framework of autonomous syntax that the analysis of complement constructions in English by R-L-R and in Latin by Lakoff was carried out.

What is meant exactly by the term 'complementation'? It has often been said, and it is surely one of the best known facts about languages, that whilst the number of elements out of which sentences are produced is finite, the number of possible sentences is potentially infinite.

One of the explanations of this phenomenon is the fact that one can always embed one sentence in another. Such a process is called 'recursion' and there are 3 types, namely: conjunction, relativization and complementation. We may therefore give a negative characterization to complementation by saying that it is that type of recursion which is neither conjunction nor relativization. Perhaps the best way to define it positively is to do so ostensively. In the following examples the complements are between parentheses:—

- a) It is conceivable (that Bill strangled the dog).
- b) I had a desire (for Bill to strangle the dog).
- c) I said (that Bill killed the dog).
- d) I wanted (Bill to kill the dog).
- e) I said (that if Bill killed the dog, I'd reward him).

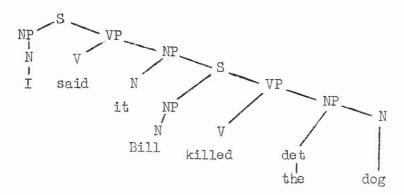
It should be obvious from a perusal of these sentences, and doubly so for anyone acquainted with the Latin root of the verb, that it is the job of the complement to 'complete' the meaning of some element in the sentence — in our first three cases an adjective, a noun and a verb respectively.

Now that we have seen what is meant by the term 'complement', we must turn our attention to the analysis of the material proposed by the early researchers. The complement is an expansion of some noun-phrase (NP), either subject or object. Thus the rules set up to generate the desired structures were these:-

1)
$$S \longrightarrow NP$$
 VP 2) $VP \longrightarrow V$ (NP)

3)
$$NP \longrightarrow N(S)$$

The perceptive reader may at this point be wondering how this description of the NP is reconciled with example (lc) above, where there is no head-noun preceding the sentential complement. The answer is that an abstract pronoun 'it' was assumed to be present in the deep structure and to be deleted later by an appropriate transformation, such that the tree-diagram for (lc) would be as follows:-



This string, as it stands, will not produce a grammatical English sentence. For that to be achieved two operations have to be applied:

a) introduction of complementizer, b) deletion of 'it'. Now, there is a wide variety of complement-constructions in English, of which three only appear in the far from exhaustive list of examples quoted above, but only one is possible in the sentence under consideration, i.e. 'that' (we neglect for the moment the minor alteration that gives: "I said Bill killed the dog".). Because this complementizer appears to have the least effect of all the complementizers on the structure of the embedded sentence, it was tentatively suggested that it should be considered basic.

With these fundamental assumptions established, we may proceed to sketch the transformational rules acting upon the D.S. configuration NS to give us the S.S. complements of English. There are eleven such rules:-

- Complementizer Placement
- Complementizer Change
- 3) Equi NP Deletion
- 4) It Substitu 5) Flip 6) Passiviaation It - Substitution

- 7) Extraposition
- 8) It Deletion
- 9) Preposition Deletion
- 10) That Deletion
- 11) For Deletion Poss.

The most significant feature in the model diagrammatically represented above is the decision to derive all surface-structure complementizers from one basic complementizer inserted by our first T-rule - in the case of English "that". In the next two paragraphs will be found a brief description of the workings of Rules (1) and (2). It will be seen that Rule (2) has to be supplemented in some way in order to solve the problem of the currect choice of complementizer; the proposed solution together with the postulation of one fundamental complement-construction from which the rest are divided represent the main points in Lakoff's method which we shall have to consider when we come to the Latin.

Beginning with Rule (1), we must say that the most important distinction to be made between this and the rest is that it is not subject to rule-government - i.e. wherever the structural description NS is met, this rule automatically applies, inserting by transformation the complementizer 'that'. For a number of verbs no further rules need apply, since, as we have seen, the construction with 'that' is the most common complementizer-type in English. Rule (1) may be symbolized like this:-

$$X_1 - it - \# - S - \# - X_2 - 1 - 2 - \emptyset - that + 4 - \emptyset - 6$$
1 2 3 4 5 6

However, we must take cognizance of the fact that other types do occur and explain how early Transf .- grammar was able to account for their derivation.

Rule (2), the Complementizer-change, takes four forms:-

a) For - to
$$X_1$$
 - that - NP - VP - X_2 - 1 - \emptyset - for + 3 - to + 4 - 5
1 2 3 4 5

This will give us a sentence like: "I like it for Tom to sing."

b) Possessive-ing
$$X_1$$
 - that - NP - VP - X_2 - 1 - \emptyset - Poss + 3 - ing + 4 - 5
1 2 3 4 5

This will produce: "I'm fond of John's playing the piano."

c) That - non-finite (a complementizer more or less confined to American and legal English)

$$X_1$$
 - that - NP - VP - X_2 - 1 - 2 - 3 - C+4 - 5 (where C is

regarded as an abstract complementizer producing the subjunctive mood).

This will give as its output: "I demand that he leave".

d) How - when - it etc.
$$X_1$$
 - that - NP-VP+ X_2 - 1 - how when $\frac{1}{2}$ - 3 - 4 - 5 if $\frac{1}{2}$ etc.

Here we obtain something like: "It amazes me how you manage it".

We are immediately impressed by the fact that the left-hand portion of these four T-rules is the same throughout, but that the end-product of the transformations is quite distinct. This means that the determining factor for the choice of complement-types lies somewhere other than in the mere structural description of the string on which the complementizer-change transformation operates. This leads us conveniently into a discussion of the concept of rule-government.

If certain lexical items are found in construction with one or more of the alternative to Rule (2), then we have to introduce some mechanism that will allow us to select which of the alternatives is/are possible for the word in which we are interested. The required mechanism is called the lexical redundancy rule and works along these lines. In a given class of words which one might expect to govern a particular construction, it is often the case that a proportion of the whole stand out as exceptions in so far as they govern a peculiar construction of their own. The means by which it is signalled which word is paired with which construction is as follows. Each lexical item has as part of its characterization in the lexicon a rule which states that that item is unmarked in a given instance if it is regular (i.e. if it takes the normal construction); it is marked if it is irregular as regards that construction (i.e. if it is one of the exceptions). Such is the lexical redundancy rule. Perhaps this rather abstract presentation may be clarified by an actual application quoted from Lalroff's book:- " - verbs expressing communication of information normally take 'that-finite' complementizers in English. This category includes, for example, say, tell, mention, suggest, declare and many others For this class, then, there is a redundancy rule in the lexicon specifying that if the verb in question is unmarked, it will not undergo any of the complementizer-changing rules The effect of this redundancy rule is to say that, if any of these verbs can undergo any of the complementizer-changing rules, the verb is marked for that rule. (On the contrary, for verbs of ordering, for example, where FOR-TO is regular, a verb of this class underoing FOR-TO complementizer-change is unmarked.) Now, ... the following is grammatical: I mentioned John's leaving the house. 'Mention', then, can occur with the POSS-ing complementizer. Since

It is one of the verbs of communicating, it must be marked for application of the POSS-ing complementizer-change. The verbs 'say' and 'mention' are represented in the lexicon, with respect to the complement rules, as follows:

SAY MENTION

V communication V communication

u for - to u for-to

u poss-ing m poss-ing

u that-C u that-C

u how-finite u how-finite

In this way, the two concepts of rule-government and markedness, used in conjunction can explain how it is that we find some exceptions to some of our rules, and yet not all the exceptions theoretically possible, and how it is that some rules never have exceptions at all."

The concept of markedness as employed in the redundancy rule system just quoted is something of an extension when compared with the first statement of the notion found in the 'magnum opus' of the leader of the Prague school of linguistics, Trubetzkoy (1970 p.77): "Les oppositions privatives sont celles dans lesquelles un des termes de l'opposition est caractérisé par l'existence d'une marque, l'autre par l'absence de cette marque: par ex. 'sonore - sourd', 'nasalisé - non-nasalisé'. 'arrondi non-arondi!. Le terme de l'opposition caractérisé par la presence de la marque s'appellera 'terme marqué' et celui qui est caracterise par l'absence de la marque 'terme non marqué'. " And so a typical example of this characterization of binary oppositions is that given in Lyons (1969 p. 79), where he contrasts some singular English nouns with their plural forms. The regular plural formant is - s, the presence of which feature makes the plural the marked term in the opposition. A development of the theory allowed for the ascription of 'marked' and 'unmarked' to members of a contrasting pair where these members are not distinguished by the presence or absence of a particular overt unit. This is the case with 'dog' and 'bitch', where the latter is marked for the semantic feature (+ feminine), whilst 'dog' is usually neutral with respect to sexual differentiation, and so it may be regarded as the unmarked term. Now, although Lakoff employs the system of marking, this system is essentially different from that outlined above, for it is not the binary opposition of the presence/absence of a specific feature in which Lakoff is interested, but the termry division in the marking of Rule (2), i.e. whether the rule applies obligatorily, optionally, or not at all. Thus for each rule, one alternative is unmarked, one marked, and one absolutely impossible.

I have deemed it necessary to go to such great lengths in this exegesis of the workings of lexical redundancy rules as it concludes our description of the most essential features in the model which Lakoff chooses to apply to Latin. In summary, then, here again are the salient points of that approach:— the fundamental complementizer of English is assumed to be 'that-finite', which is transformationally introduced into a string wherever the s.d. N.S. is met, and it is thus not subject to rule-government. Surface structures containing other complementizers are derived by transformations acting upon the basic complementizer. Choice of complementizer is 'triggered' by the mechanism of the lexical redundancy rules, incorporating an extension in the concept of 'markedness'.

We should now be in a position to advance from Lahoff's first chapter to the one where the model delineated above is brought into action in the analysis of Latin.

LAKOFF AND LATIN

Eager to establish an attractive parallelism between the relevant rules of English and Latin, Lakoff looks around for something to set up as the equivalent of the 'that-finite' complementizer. This she finds in the construction 'quod + indicative', regarding which she has the following remarks to make: "Since the indicative has always been assumed to be the basic form of the verb, if we are looking for a complementizer that is comparable to 'that-finite' in English, which we gave reasons for considering as basic, we shall try to find one in which the indicative endings are present. This is true in the following sentences, of which (b) is Vulgar Latin:

- a) Accidit quod Marcus Publium vidit = It happened that Marcus saw Publium.
- b) Dico quod Marcus bonus est = I say that Marcus is good.

 This complementizer, 'quod-finite', is found in Classical Latin only in subject-complements, and even there is not as frequent as other complementizers. The fact that it is relatively uncommon is, however, no reason why it should not be considered basic." (p.76). Now, there are two important points to be noted in this passage: in the first place, we should stress that the type of data here adduced is fairly typical of that used throughout the sections on Latin. In fact example (a) is not a strictly grammatical sentence at all; to make it acceptable there should be an adverb present in the main clause (cf. Bradley & 248 No. 2, and Woodcock

evidence from V.L., as for instance in example (b), when one is considering Classical Latin, for developments which subsequently occurred within the literary language were quite often already firmly established in V.L. We are here dealing with just such a case in point, for, as we saw in the 'Introduction', the tendency in Latin was to replace inflectional constructions by those in which the relationships between elements were manifested by purely syntatic constructions. With this preliminary caution concerning Lakoff's methodology we may pass on to our second comment on the above passage.

A Latinist might well wonder how the claim could possibly be made that 'quod' only appears in subject complements in C. Latin. Laboff, sensitive to the likely unease created by this statement, & added a lengthy footnote, which deserves to be given in full as we shall have reason to return to it later when criticism will be offered: "An apparent counter example to the claim that 'quod' occurs only with subject complements lies in the existence of sentences like the ones

following, in which, in the surface-structure, 'quod-indicative' seemingly occurs followed by a complement that is the direct object of the main verb:

- 1) Praetereo quod eam sibi domum sedemque delegit (ic. Cla. 188)
- = 'I pass over the fact that she chose that house and home for herself.'
- 2. Mitto quod possessa per vim (Cic. Flacc. 79)
- = 'I disregard the fact that they were seized by force '. In none of the sentences of this type, however, does 'quod-indicative' function as the complementizer governed by the main verb. Whenever it occurs in object-complements, the sentence is explicitly factive. (The difference between an explicit factive, in which the words, 'the fact! appear in English, and a presupposed factive, in which the factivity of the sentence is assumed - as, for example, in the complements of verbs such as 'regret, be self-evident, confess' - is discussed by P. & C. Kiparsky in their paper 'Fact' ... The difference between these Latin sentences and their English translations in this regard is simply that English expresses the word 'fact' overtly in the surface-structure, while in Latin it is the complementizer of the word meaning 'fact' - deleted transformationally - which appears. Since this word 'fact' is a nominalization of a verb (sic) 'it is a fact', which takes subject-complements, it is not surprising that its complementizer shall appear as 'quod-indicative' ... The point is that the appearance of 'quod-indicative' as the complementizer of a sentence superficially the object of a main verb, in examples like the ones given before, does not contradict the claim made here."

Lakoff could thus state Rule (1) in almost exactly the same terms as for English, with only the minor alteration of 'that' to 'quod':

$$X_1 - it - S - X_2 - 1 - 2 - quod + 3 - 4$$

The same problem raises its head here, as in the last chapter, that a number of ungrammatical strings are generated — the more so as 'quod-finite' is much less frequent than its English counterpart; we have, for instance, " dico quod ego sum consul". We must quickly advance to Rule (2), and this brings us onto a consideration of the 'accusative and infinitive' construction.

Lakoff sees the 'accusative and infinitive' as being in virtually one-to-one correspondence with the 'for-to' complementizer of English, the lexical item 'for' being carried by the inflexional accusative morpheme added to the feature-matrix of the subject-noun, and the item 'to' being marked by the morpheme — se (which is given in its pre-

rhotacized P.I.E. form. However, the form/se/ is well motivated as an underlying form for the infinitive-ending in Latin Rhotacism as a synchronic rule is necessary to account for oppositions like flos: floris; and in any case /re/ would not explain the infinitive form 'esse! = 'to be'.) added to the verb-stem. The form of Rule (2a) is as follows:

$$X_1 - \text{quod} - NP - VP - X_2 - 1 - \emptyset - 3 - C + 4 - 5$$

1 2 3 4 5 (*acc.) (C = ** - se + non-finite)

A third complementizer, 'ut + subjunctive', handled by Rule (2b), is then discussed, but as this does not concern us we shall refrain from going into details. Let it suffice to note that verbs of 'ordering' usually take 'ut + subjunctive', whilst 'iubeo' (I order) apparently falls together with verbs of 'saying' in governing the 'accusative and infinitive'.

Three redundancy rules are all that Laboff envisages as being necessary to account for the evidence, and one of these, which we omit, is only brought in to handle a development in V.L! For Classical Latin, then, we have:-

Redundancy Rule (A):

For verbs of 'saying': If a verb is unmarked for (2a) it obligatorily undergoes (2a); if marked for (2a), the verb does not undergo it.

And so, 'dico' = (I say) is entered in the lexicon thus:
u Rule (2a) u Rule (2b)

Redundancy Rule (C):

For verbs of 'ordering': If such a verb is unmarked for Rule (2a), it doesn't undergo it; if it is marked for (2a), it must undergo it. If it is unmarked for (2b), it must undergo it, if marked for (2b), it cannot undergo it.

Thus: impero = I order

u Rule (2a)

u Rule (2b)

iubeo = I order

m Rule (2a)

From this we gather that the 'accusative and infinitive' in company with verbs of 'saying' like 'dico' would be regarded as unmarked, whilst in company with 'iubeo' it would be said to be 'marked' - in a more conventional use of markedness the same description would apply to both cases, as we are dealing with the same construction (vid. Jakobson)

It would appear that Lakoff finds Latin an astonishingly easy language to describe so far as concerns its complement—types, for the above is all she has to say on the subject, the remainder of this

chapter being devoted to a discussion on the applicability to Latin of her Rules (3) - (11). Of course, once Lakoff made up her mind to posit a fundamental complementizer from which all others could be derived by appropriate transformations, it demanded no great ingenuity on her part to formulate rules which would accomplish that task. All that was required were a) a sufficient number of complementizer-change rules, and b) a rich enough set of lexical redundancy rules to pair off each verb with its correct complementizer(s). We may say at once that the state of affairs in Latin is not as straight-forward as might be imagined from a reading of Lakoff pp. 73 - 84 - for one thing, only verbs governing one construction are mentioned therein. In fact, as will presently be seen, there are verbs which take not only both the 'accusative and infinitive' and 'quod + indicative' but also the "forgotten" 'quod + subjunctive'. Let us now look at some actual Latin sentences (grammatically correct in each case!) and try to discover if there is not a better way to deal with complementation than that involving fundamental and derived complementizers.

SEMANTIC SYNTAX IN ENGLISH AND LATIN

In 1970 there was published a paper, which had originally appeared in 1968, by Paul and Carol Kiparsky entitled "Fact", in which it was their intention to prove that "the choice of complement-type can be predicted from a number of basic semantic factors. Among these Presupposition by the speaker that the sentence expresses a true proposition is especially considered." This article was particularly important in that it provided one of the first really serious challenges to the Chomsky n conception of Transformational Generative Grammar. We have seen that for Chomsky the strings underlying the well-formed sentences of the surface structure were to be determined on purely syntactic criteria, and that the function of the semantic component was merely to interpret these strings (i.e. assign them their semantic reading(s)). We have given a very general description of the lines along which attempts were made by Ross and others to handle English complement-constructions within the framework of this model; this was a necessary preliminary to our discussion and criticism of Lakoff's approach to Latin. Although it is not our purpose to offer an evaluative judgment on the acceptability of those proposals, we must point out that there were generally recognised inadequacies, and it was a direct consequence of these shortcomings that the Kiparskies set out to see if the problems could be solved by allowing semantic considerations to play a role in associating different syntactic constructions with different verbs. When the semantic component is no longer confined to interpretation but is allocated a function in the actual generation of syntactic structures, the nature of the model for grammatical analysis has undergone a fundamental alteration; no more is it possible to describe it as 'Autonomous Syntax', but rather we must talk in terms of 'Semantic Syntax' - or as it has come to be known today 'Generative Semantics'.

As illustrated in the quote in the preceding paragraph, presupposition is the semantic feature given special attention in the Kiparsky analysis. What is 'presupposition'? Let us look at the two sentences:-

- a) It is significant)
- b) It is likely ') that he has been found guilty.

It is clear that the status of the sentential 'that' clause is not the same in these sentences; in (a) the proposition of 'X's having been found guilty' is necessarily true and we have an assertion being made about that true proposition, whilst in (b) there is no assumption about the truth or falsity of the proposition — the speaker does not know whether X has been found guilty or not. We may therefore say that 'to be significant' and similar expressions govern a complement in which the

truth of the proposition of that complement is presupposed, whilst in the case of 'to be likely' & kindred expressions, presupposition about the truth or falsity of the proposition is an irrelevant consideration. For ease of reference we shall call type (a) complements 'factives', type (b) 'non-factives' - the latter being a somewhat heterogeneous group.

Given this distinction it can be shewn that certain syntactic phenomena are predictable depending on whether one is dealing with factives or non-factives. For factives acting as the subject of sentences we have the following range of possibilities (in English):-

- 1 a) The fact that the dog barked all night)
 - b) The fact of the dog's barking all night)
 - c) That the dog barked all night) is odd
 - d) The dog's barking all night
 - e) It is odd that the dog barked all night
 - f) The whiteness of the whale bothers us.

For subjective non-factives there is a more limited variety of constructions:

- 2 a) It is likely that he has been found guilty.
 - b) He is likely to have been found guilty.

Briefly we may sum up this situation by saying that only factivepredicates may be preceded by the head-noun 'fact' followed by a sentential complement 'that'-clause or a gerund to replace the 'that'.

Only factives allow the full range of gerundial constructions and
adjectival nominalizations in '-ness' to stand for the 'that' clause.

Subject-raising applies only to non-factives (2b as against 2a), and
whilst extraposition (placement of the complement at the end of the
sentence) is optional for factives (le as against 1c), it is obligatory
for non-factives (2a).

When we look at the situation for object-complement-clauses, we find that matters are not as straightforward. Only factives may have as their objects the roun 'fact' plus a gerund or 'that'-clause. Gerunds may be objects of factives, but not freely of non-factive predicates e.g.:-

- 3 a) Everyone ignored John's being completely drunk (** supposed)
 - b) I regret having agreed to the proposal (M believe)
 - c) I don't mind your saying so (* Maintain).

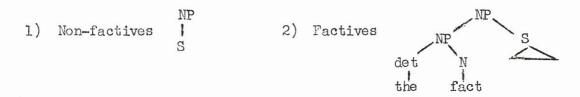
Such 'factive' nominal gerunds (Lees 1960) occur freely in both present and past tenses. They take direct accusative objects, all kinds of adverbs and occur without identity restriction on their subjects. Other non-factive, types of gerund are subject to one or more restrictions

such as those referring to actions (e.g. he avoided getting caught - ** having got caught). Gerunds may also serve as substitutes for infinitives after prepositions (e.g. - I plan to enter / on entering.) Such gerunds are not restricted to factives.

Only non-factives allow the accusative and infinitive (e.g. I believe John to have convinced Bill), though non-factives are occasionally excluded from this construction.

The FOR-TO complementizer is restricted to a special semi-class of verbs which the Kiparskies call 'Emotives' (vid. their article for the list of these verbs, and those belonging to the other categories). There are a number of exceptions to the classes of verbs which the Kiparskies set up, and in certain instances there are verbs which have no specification as to whether they take factive or non-factive complements — these predicates participate in both complement-paradigms (e.g. 'to remember').

Simply to state as a feature of the description of English that the complement—construction that a particular verb can be said to govern depends on whether that verb is marked or unmarked for the hypothesized semantic feature (Presupposition) does not help us to explain why this state of affairs should obtain. Therefore, the Kiparskies suggested that the underlying configurations for factives and non-factives are distinct in the following way:—



This differentiation permits us to account for the eventual surface-structure forms. Two of the T-rules that will be necessary for producing some of the required surface-structures are i) 'FACT-DELETION ii) SUBJECT-RAISING. Some of the facts concerning these two transformations will be of relevance to the Latin material, and we must therefore look at them more closely.

We have given examples to shew that subject-raising (i.e. the transference of the subject of the embedded S into the subject/object position of the matrix S) applies in the case of non-factives, but is apparently impossible for factives. Why should this be so? If the configurations set out above are correct, then there is a simple explanation for this phenomenon. In 'Constraints On Variables In

Syntax' Ross formulated what has come to be known as the 'complex-noun-phrase constraint'; which, to state it informally, forbids the removal of constituents from the S in the configuration NP NP NP S

the optional transformation, which deletes the head-noun 'fact', is ordered after the subject-raising transformation, our problem is solved as the transformation is free to operate on the configuration NP

(i.e. non factives), but the structural description for its operation will not be met in the case of factive clauses. It will be observed that when sub-raising has applied the verb in the complement-clause is left in the infinitive. Lakoff and company would find this hard to explain, but there is a simple expedient. Students of the classics would have no difficulty in regarding the infinitive as the basic form of the verb (such a view is part and parcel of 'traditional' grammar, in that it accounts a) for the use of the infinitive in place of an expected imperative, b) for its presence in the Virgilian sentence 'Mene incepto desistere victam?' = Aeneid 1.37, c) for the historical infinitive (Woodcock 1959 pp 14-15), and d) its appearance with the accusative which is probably the unmarked case (vid. Andrews 1971) - we refer, of course, when talking of its appearance with the accusative, to constructions like the accusative and infinitive complement-type or even the Virgilian sentence just quoted, in both of which the accusative acts as the verb's subject), and this is precisely the suggestion put forward by the Kiparskies - N.B. this is diametrically opposed to Lahoff, who talks about the indicative as being the basic verbal form. We may then say that the infinitive appears when concordial factors are not involved (i.e. to employ terminology usually reserved for inflecting languages like Latin and Greek, where there is no subject in the nominative case expressed or understood). This would be the case where the 'Nominative' subject is removed or put into an oblique case. The subject of an embedded S may be removed by subject-raising (where it will appear in the Nominative case if it eventually stands as the subject of the matrix S, or as the Accusative, if it becomes the object of the matrix S) or by Equi-NP-Deletion as in "I decided to go", which is derived from something like "I decide I go".

LATIN

What is the nature of the material that we discover when we turn our attention to Latin? In all 67 complement-governing verbs or verbal expressions involving the verb 'to be' (= esse) plus a noun/adjective complement (e.g. 'esse causa' = 'to be the cause' or 'satis esse' = 'to be sufficient') were examined in order to find out what syntactic construction(s) accompanied them. With a reminder that we are restricting ourselves to data abstracted from a single author, we may point out that preliminary observations indicate the presence of 3 constructions for the representation of complement-clauses in Latin: a) the accusative and infinitive; b) quod + indicative; c) quod + subjunctive. Some verbs are found with just one construction, some with two, some with all three. However, as was pointed out earlier, there are certain problems attaching to 'quod' + subjunctive, and all further comment about this type will be reserved for the following chapter.

It will be recalled that the Kiparskies classified the English complements according as they were factives or non-factives, and that these were then examined for any differences that might occur depending on whether the complement was subject or object to the main verb. Once the Latin material was analyzed along these lines, the following pattern manifested itself:-

A) Verbs taking the accusative and infinitive

FACTIVES - SUBJECT CLAUSE

my verse taking the accusative and initiative				
	1)	Indignum videri	4) M	irum esse
	2)	In Mentam venire	5) P	ude t
	3)	Mirabile videri	6) T	urpe esse
B Verbs taking 'quod' + indicative:-				
	1)	Accedere agree w.	13)	Momentum spei esse
	2)	Accendere inflame		Mora esse he impolement
	3)	Angere	15)	Movere
	4)	Argumento esse	16)	Nocere
	5)	Causa esse	17)	Obesse he prijudicial
	6)	Clariorem aliquem facere	18)	Obesse he pigudicial Parvum esse he migrificant
	7)	Coercere		Praebere
	8)	Curam acuete shapen saven	20)	Prodesse
	9)	Efficere	21)	Satis esse
	10)	Fides esse be an armane	22)	Trepidationis esse
	11)	Gloria esse	23)	Veri simile esse
	12)	Instare wge	24)	Vindicare away

FACTIVES - OBJECT CLAUSE:-

- A) Verbs taking the accusative and infinitive:-
 - 1) Gratulari

4) Queri

2) Laetari

5) Scire

- 3) Mirari
- B) Verbs taking 'quod' and indicative
 - 1) Arguere

- 4) Gratulari
- 2) Comperire disavo 5) Mirari
- 3) Gratias agere
- 6) Scire

NON-FACTIVES - SUBJECT CLAUSE:

- A) Verbs taking the accusative and infinitive:-

 - 1) Aequum esse be just 6) Existimatu facile esse
 - 2) Apparere

- 7) Oportet
- 3) Certum esse
- 8) Placere Seem good

4) Credi

- 9) Tradi
- 5) Credibile esse
- 10) Videri
- B) Verbs taking 'quod' + indicative

NIL

NON-FACTIVES - OBJECT CLAUSE:

- A) Verbs taking the accusative and infinitive:-
 - 1) Certum habere
- 4) Increpare

2) Credere

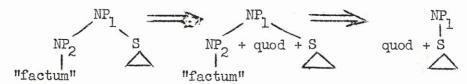
5) Negare

3) Existimare

- 6) Pro certo habere
- B) Verbs taking 'quod' + indicative:-

NIL

What immediately impresses the reader is that 'quod' + indicative is not found in non-factive complements. It might therefore not be too rash a conclusion to draw that there is some close band associating the 'quod' + indicative construction with factivity, particularly in the case of subject-complements. Now, if we import the configuration suggested by the Kiparskies for English factive-complements, we shall have this sequence of developments:-



(where we are using "factum" as the realization of the NP2, a use that reminds us of Lakoff's abstract verbs or McCawley's higher predicates; it is materially unimportant how we represent this carrier, since it was always deleted transformationally before the surface-structure was reached - occasionally a 'quod'-clause is found in apposition to 'res' e.g. 17-49-6). No attempt has been made to tie down the 'quod' to any particular node.

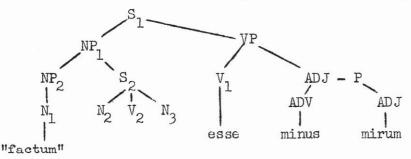
This analysis would be almost universally accepted if it were not for the uncomfortable fact that the accusative and infinitive is also a possible construction for subject-complement factives. This makes it impossible to have recourse to the 'complex-noun-phrase constraint', at least in the way that is open to us for English. If the transformation producing the accusative and infinitive (it is better not to call it subject-raising just at the moment) is ordered before the 'fact'-deletion transformation, then obviously no accusative and infinitive construction would ever appear for factive clauses. This is clearly not the case. Therefore, the FACT-DELETION has to apply before the 'quod'-complementizer is introduced, otherwise there would still be no opportunity for the accusative and infinitive to get a look in; this is most unsatisfactory, as the configurative distinction between factives and non-factives is thereby removed.

However, there is one expedient that is open to us, and that is to make the QUOD-INSERTION transformation a lexically governed rule applying only to some factives. Those to which it applies will end up with the 'quod' + indicative complementizer, after the normal operation of FACT-DELETION; those to which it does not apply will first undergo FACT-DELETION and then, because of the alteration in their configuration, they will meet the S.D. that introduces the accusative and infinitive complementizer.

Assuming that we can account for the 'quod' + indicative construction with the above analysis, we are still faced with a problem. Confining ourselves for the time being to subject-factives represented by the accusative and infinitive, how do we explain the presence of the accusative case? Recall that for English we had a rule of subject-raising, which caused the subject of the embedded S to appear as the nominative subject of the main verb in a sentence like: (a) 'He seems to have convinced Bill.' Comparing this example with (b) 'I believe him to have convinced Bill' we have no difficulty in explaining the opposition of nominative 'he' in (a) with accusative 'him' in (b) - in (a) the pronoun is subject of the main verb, in (b) the object. And it was as a result of the removal of the subject out of the embedded S into the matrix S that we explained the infinitive form of the verb in the embedded S. It should now be transparent where the obstacle lies in Latin. If we had the accusative and infinitive employed only for

object-complements, then we could go ahead and freely talk in terms of a rule of SUBJECT-RAISING, which would work exactly as it seems to in English, but the use of this construction in subject-complements, particularly the invariant accusative-marker for the subject-noun of the complement-clause, necessitates a two-fold revision of our rule - 1) the subject of the embedded S is not removed from that S to stand as subject of the main verb; 2) thus the infinitive form of the verb does not arise out of any disappearance of its subject - rather we must explain the infinitive first, and from this follows the appearance of its subject in the accusative case, since the nominative requires the concordial features of number and person to be realized in the verb.

Basically, the question now to be asked is: "What is it that enables the indicative to appear in the configuration NPS (dominated by an NP) but not in the configuration S (likewise dominated by an NP)?" The answer must surely turn upon the distinction between the forms of independent sentences (i.e. where there is an undominated S) and those which are subordinate to some other node - in this case an NP. Now, if the deep-structure contains an NP-node dominating one or more others, it is no good pretending that the NP does not exist - it is there for a purpose and must be marked in some way. (This principle concerning the recoverability of deleted items can be shewn to apply in Latin only to subjects and heads of complement constructions. Incidentally, this explains why the subject of an infinitive, unlike the subject of a finite verb, cannot delete; the latter leaves a trace in the concord-features of the verb, the former does not.) Let us look at the sentence: (Eo quoque) minus est mirum temptasse eum fortunam (quod ---) (31-38-7). The unbracketed core will have a deep structure something like this:-



(No lexical items are given for S_2 to avoid begging any questions) As we have no 'quod'-clause in surface-structure we must assume that the FACT-DEL transformation has applied to remove NP_2 along with N_1 . But we still need a substantival element to represent NP_1 in surface-structure for the Latin sentence " $^{\times}$ Is temptavit fortunam est minus mirum" is just as ungrammatical as its English translation. Such an independent

representation of S2 has to be adapted so as to produce a substantival element that fills the slot for NP_{l} and still conveys the meaning of S_{2} . If only we could find some verbal noun for \mathbf{V}_2 we could let this function as the carrier for NP1. Now, it will be recalled that the gerund (= the substantival form of the verb, defined by Fowler as existing in order "to supply the verb's infinitive or noun-form with cases") is a common complement-type in English. What then is the gerund of V2 going to be in Latin? NP, is the subject of the sentence, therefore we want the nominative case of the verbal noun, and it may come as no surprise to learn that the nominative case of the Latin gerund is indistinguishable from the present infinitive. In fact, it seems advisable to regard the nominative gerund not as a separate entity morphologically identical with the infinitive, but rather as a mere functional description of one of the uses to which the infinitive is put. Here, of course, we have the feature (+ PAST) being given morphological shape (-visse) whereas the gerund is usually thought of only as a label for some uses of the present infinitive. Having accounted for the presence of the infinitive, we may pass on to say that it follows from what was said above about the nominative case requiring concordial features to be shewn in its associated verb that the subject noun will have to appear in some case other than the nominative; the fact that the accusative is chosen is a further argument in support of the hypothesis that this is the unmarked case (cf. remarks on p. 14). Throughout this paragraph it has been virtually an implicit assumption that the infinitive in these complement-clauses has to be derived from some other form, usually taken to be the indicative, but it may well be more appropriate to regard the infinitive as the basic form of the verb (as suggested by the Kiparskies) and to derive the indicative etc. from it only when the syntactic configuration allows concordial features to be established between subject and verb. In this case the lexical representation, left indeterminate above, of S_2 will be: N_2 'eum', V_2 = temptavisse, N_3 = fortunam.

We have been mainly concerned here with the accusative and infinitive in subject complement-clauses and have talked about the Latin gerund in the nominative being simply a useful terminological description for one of the numerous functions of the infinitive. We must not forget the more frequent the use of the accusative and infinitive in object-complement-clauses. If the basic form of the verb is the infinitive, then we can easily account for its presence in these clauses also. If, however, we have to refer to the gerund, then there is no problem either, as the accusative of the gerund is the same form as the infinitive also, except where it stands after a preposition. The same reservations about

traditional terminology obtain here just as they did before, namely the infinitive may signal tense-distinctions, the gerund, in the accepted definition, may not. The only further comment that has to be made is that in the case of factives with a surface-structure 'quod'-clause the marker of NP $_1$ will be the 'quod' in exactly the same way as 'that' functions in the English sentence: 'That he came surprised me'. As the 'quod' can be regarded as the NP marker dominating S_2 , the verb of S_2 is free to enter into a concordial relationship with its subject.

We have shewn how one may derive the two Latin constructions by setting up a configurative distinction identical to that set up by the Kiparskies for English. All we have to do is order our rules in such a way that QUOD-INSERTION takes place before FACT-DELETION. A further disparity between our analysis of Latin and the Kiparskies' for English concerns their subject-raising rule. It would be possible to analyze Latin object-complement-clauses employing the accusative and infinitive in terms of subject-raising, but we have given sufficient evidence to prove that any attempt to do so for subject-complements using this construction would be infelicitous, to say the least. Perhaps it would be best to suppose that a single operation produces the accusative and infinitive construction whether it appears in subject-or object-complements, rather than to make a suspect distinction merely to retain a transformation that seems to work well enough in another language (i.e. English), which we have no reason to believe should in any way mirror rules that can be shewn to be applicable to Latin. What is this rule that replaces that of subject-raising? Expressed informally it is simply the basic, unmarked form of the verb remaining morphologically unchanged but functioning not as a verb but as a verbal noun or gerund - i.e. marking the fact that S is also an NP. Does the Latin evidence lend any support to the view that the infinitive is the unmarked verbal form and that the accusative and infinitive is the unmarked complement-construction? We have tabulated the four frames of reference for this analysis as:

Factive - Subject - Clause V. Non-factive - subject - clause
Factive - Object - Clause V. Non-factive - Object - Clause
The accusative and infinitive is found in all four slots, the 'quod' + indicative in only two. On the basis of this distribution there appears to be good reason to view the accusative and infinitive as unmarked and thus neutral with respect to the opposition factivity - non-factivity, and the 'quod' + indicative as definitely marked for factivity. We can shew that there was a tendency for the unmarked construction to predominate in Classical Latin. This conclusion is diametrically opposed

to that advanced by Lakoff, who, if she had inclined towards the normal conception of markedness, would have had no alternative to calling 'quod' + indicative the mmarked term in the opposition.

Until now we have had no cause to talk about lexical redundancy rules. Perhaps, however, we can find a useful function for them to play. A glance at the verbs governing the various constructions with which we are concerned shews: a) no verb with a factive subject-complement occurs with both constructions; b) some verbs with factive object-complements are restricted to one of the constructions; c) some of these verbs may take both constructions. The divisions that manifest themselves here may well be due to the circumscribed nature of the material studied (i.e. the extant works of Livy). A full survey of complementation in Latin could obviously turn up six permutations as regards possible constructions for subject-complements and object-complements:-

SUBJECT - COMPS.

OBJECT - COMPS.

- 1) All verbs can take both constructions :: 1) All verbs can take both
- 2) No verb can take both :: 2) (Already proven inapplicable)
- 3) Some verbs may take both :: 3) Some verbs may take both

For the sake of argument let us presume that certain verbs are restricted to one construction, whilst others are permitted to take both. Can we not introduce a mechanism that will explicate the reasons underlying such a situation? Given that all of these verbs are necessarily factive, we may take for granted that they are all positively specified for the presupposition of their predicates; this we may symbolize by the semantic feature (+ FACT). Now, already on p. 17 we have introduced a proposal that accounts for the fact that some subject-complement verbs take 'quod' + indicative, others the accusative and infinitive - this was that the QUOD-INSERTION transformation should be a lexically determined rule, and we can represent this syntactic feature (+ QUOD). What we now have to do is extend this last so that it applies across the board to both subject and object-complement taking verbs, and also to those verbs that take either of our two complement-constructions. Thus we need a lexical redundancy rule worded as follows: For verbs taking subject-/object factive complements (i.e. those marked (+ FACT)): a) Those verbs positively specified for QUOD-INSERTION, i.e. (+ QUOD), obligatorily undergo QUOD-INSERTION; b) Those verbs unmarked for this transformation, i.e. (-QUOD), optionally undergo QUOD-INSERTION. Although we mentioned the possibility that a full analysis of Latin might reveal that all factives can take both constructions, it must be admitted that such a possibility is most unlikely. Of course, if this were found to be the case, then it would entail a recasting of our lexical redundancy rule.

I should like now to return for a moment to the Lakoff footnote quoted earlier regarding her denial that 'quod' clauses ever function as object complements — we have tacitly ignored this way of looking at things in the foregoing discussion in the belief that such a view is mistaken; let us now prove it to be so.

It will be remembered that all apparent examples of objectcomplements with 'quod' were derived from a deep-structure verb (sic), "it is a fact", which naturally has a subject-complement. In the first place we must expand the form of her deep-structure; I suspect Lekoff was referring to a string like, "it's is a fact" rather thank "it is a fact that ... ", in which extraposition has occurred. Now, she seems to be hinting, correctly as it happened, that there is a link between 'quod'. clauses and factivity. Unfortunately, this was only because the deepstructure she set up enabled her to have a subject-complement, and her main article of faith was that there was an even closer link between subject-complements and 'quod'-clauses. This allowed her to say that 'quod'-clauses only ever arise out of deep-structure subject-complements. However, this theory provided her with no principled way of differentiating between the use of the accusative and infinitive and 'quod' + indicative in subject-clauses; as far as she was concerned it was all a rather fortuitous situation, the eventual outcome in surface-structure depending on whether a particular verb was marked or unmarked in its lexical redundancy rule for the operation of the COMPLEMENTIZER-CHANCE transformation. Now, supposing that she had seen that all 'quod'-clauses were factive, (and it appears from a reading of her Note that she almost blundered onto the right answer but was prevented from seeing it by her adherence to Autonomous Syntax), could she still have explained the presence of 'quod' + indicative on the basis of her deep-structure configuration? The answer is 'no', because that would have been to ignore the important distinction between presupposition and assertion. In the former case, as we have seen, the truth of the proposition is independent of any statement being made about it (e.g. if I say, "Shut the door" then I am presupposing that the door is open). However, if I say, "It's true that John is ill", although John may be ill, that fact is not presupposed in this sentence; rather an assertion is being made about John's state of health, but there is no presupposition involved, as John may very well be alright. Now, in a sentence of the form: "it's is a fact," there is no presupposition involved about the truth or falsity of the proposition S. Therefore, this type of sentence is identical to "It's true that John is ill". But we said many pages ago that the clauses that we have been

calling 'factives' are only those in which the truth of the proposition is presupposed. From this it follows that the string "it's is a fact" will not generate a 'factive' clause, in our sense of the term. A factive clause is one which comes from a deep-structure configuration NP S, where the NP is expanded as "the fact". As "the fact" is an NP and has nothing to do with a so-called 'verb', "to be a fact", as should have been obvious in the first place, there is no reason why that NP should not appear in object-position. Naturally, it does so appear, and we are perfectly entitled to talk about subject and object-complement-clauses.

Our analysis, then, has entailed the wholesale rejection of Lakoff's model. Complement-constructions are independently motivated and not derived one from the other (except in the trivial sense that the basic verb-form appears to be the infinitive taking an accusative-subject); we have changed the form of the lexical redundancy rules; the unmarked construction is the accusative and infinitive; and the fundamental dichotomy between constructions can in the main be accounted for when the semantic feature of (Presupposition), or as we have called it (FACT), is recognized, - some factive-verbs taking now the accusative and infinitive, now 'quod' + indicative, a choice determined by whether Quod-Insertion, optional for these verbs, has or has not applied before Fact-Deletion. Latin has thus proved to be a second language (in addition to English) where this semantic feature can be seen to account for syntactic differences. One may well wonder if other languages manifest a similar situation. Let us look at some evidence and see (with apologies beforehand for banal examples used for illustrative purposes!). In all of the following sentences no claim is being made that only the form quoted is the one that translates the equivalent sentence; we are merely saying that the languages in question do have at their disposal means for giving syntactic recognition to the semantic feature of presupposition. And this is all we are interested in.

A) German

In German it is possible to have the indicative convey factivity, the subjunctive non-factivity. The use of the subjunctive, however, is regarded by native speakers as being a "strictly grammatically correct" expression but one that they would never adopt in normal conversation, preference being given to the indicative.

- 1) Es überrascht mich, dass er gerne Fleisch isst. = It surprises me)
- 2) Er beklagt, dass er gerne Fleisch isst.

= He regrets

that he likes

- 3) Es scheint, dass er gerne Fleisch esse) = It seems) that he
- 4) Er behauptet, dass er gerne Fleisch esse) = He maintains likes meat Sentences (1) and (2) are factive and take the indicative (isst), (3) and (4) are non-factive and use the subjunctive (esse).

B) FRENCH

Once again we find the indicative used for factive subject and objectclauses as against the subjunctive elsewhere. It is interesting to
observe that the subjunctive also appears in sentences that seem to
require factives, but which contain verbs that the Kiparskies style
'Emotives' in English. In this connection we can call attention to the
fact that 'to regret' in German (beklagen) takes the indicative, whilst
in French (regretter) it governs the subjunctive.

- 1) Le fait qu') il vend la viande est signifiant = The fact that) he sells meat
 Qu')

 That) is significant
- 2) Il admet qu'il vend la viande = He admits (the fact) that he sells meat.
- 3) Il paraît (qu'il vende la viande = It seems that he sells meat) Subjunctive (vendre la viande = He seems to sell meat)
- 4) Il ne croyait pas que Jean aimât la viande = He didn't believe that John liked meat
- 5) Il est rare que tu sois là = It's odd that you are there.
- 6) Je regrette qu'on t'ait appelé = I regret that you've been called out
- 7) Il n'est pas probable que Jean soit arrivé = It's unlikely for John to have arrived.
- 8) Je prefere que tu ailles = I prefer you to go.

C. SPANISH

Our second and last example from Romance also provides us with a nice opposition between indicative and subjunctive - we have two clear cases for the relationship of the indicative and factivity. For the factive-subject-clause there is:-

- 1) Lo)

 El hecho) de que el come la carne es importante =
 and for factive-object-clauses

 The fact that he eats meat is important
 - 2) Admite que él come la carne = He admits that he eats meat.

 Other examples are the following, all with the subjunctive:-
 - 3) Parece que Juan coma la carne = It appears that John eats meat
- 4) Creía que Juan comiera la carne = He believed that John ate meat
- 5) Es raro que esté vd. aquí = That you should be here is odd
- 6) Siente lo de que el coma la carne = He regrets that he eats meat
- 7) Es probable que haya Llegado Juan = It's likely that John has come

SUBJUNCTIVE

Example 6) is a factive-object-clause, but the subjunctive is explained by reason of the introductory verb being what is commonly called by Spanish students "emotive" (cf. the Kiparskies). Certain of these sentences with subjunctives may have indicatives substituted with a consequent change of meaning - this modification is extremely enlightening. Take example (3) for instance; suppose that the speaker had assumed that John was a vegetarian, but one day found him tucking into a steak, then he could well say: "Parece que Juan come la carne", which meaning would be captured in English by saying: "So it seems that John does eat meat after all" - i.e. although the meaning of the main verb appears to require a non-factive complement, the context of utterance demands that the factivity of the predicate be emphasized. And this is achieved by using the indicative.

Now let us look at two languages where the distinction is brought out by the use of different complementizers.

D) MODERN GREEK

Generally speaking the factive-complementizer is 'pou', the non-factive 'pos'/oti'. In fact, 'pou' may be regarded as a substitute for full expression 'to gegonos oti' = 'the fact that', which may also be shortened to 'to oti'. A more detailed discussion on Mod. Greek complementizers will be found in Christidis (1972), for the present let us produce some actual Greek material to clarify these statements.

1) to gegonos oti) tou aresei to kreas einai semantiko = (The fact) that he to oti) likes meat is significant

(Apparently 'pou' is awkward when it comes to beginning a sentence)

- 2) mou phainetai oti) tou aresei to kreas = It seems to me that he likes meat pos)
- 3) lupatai pou tou aresei to kreas = He regrets that he likes meat
- 4) nomidze pos tou Gianne tou arese to kreas = He thought that John liked meat
- 5) Einai apithano pos erthe o Giannes = It's unlikely that John has come

E) ARMENIAN

Basically, the factive complementizer appears to be 'vor', the non-factive 'te':-

- 1) Isgabes garévor é vor ink miss que siré = The fact that he likes meat is important.
- 2) gérévi té ink miss gue siré = It appears that he likes meat
- 3) ourakh é vor JOHN miss gue siré = He's amazed that John likes meat
- 4) Ink gartzetz té JOHN miss sirétz = He believed that John liked meat
- 5) zarmanali é vor toun hos és = It's odd that you're here.
- 6) gue tzavim esélou vor toun miss gue sirés = I regret that you like meat

 (The English orthography is that given by my Armenian informant)

All of the languages examined thus far have been Indo-European. Finally, therefore, let us look at one genetically unrelated to this group.

F) FINNISH

Here we are back to a language where the distinction is signalled by the mood of the verb.

- 1) Se, että hän <u>pitää</u> lihasta, on merkittävää = The fact that he likes meat is significant (where the underlined verb is indicative)
- 2) Näyttää siltä, että hän (tulisi (conditional)) tänne = It seems that he (tulee (indicative)) likes meat.
- 3) Hän pahoittelee sitä, että hän pitää (indicative) lihasta = He regrets the fact that he likes meat
- 4) Hän luuli, että John (pitäisi (conditional)) lihasta = He believed that (piti (indicative)) John liked meat

In Finnish, then, the situation is somewhat reversed in that it is the conditional that definitely marks non-factivity, whilst the indicative can apply in either case. But, once again, our semantic feature does account for a certain divergence in syntactic form.

We have amassed, it would seem, a reasonable amount of evidence to support our basic hypothesis that semantic considerations play a part in shaping syntactic constructions, and, in particular, that there is a widespread tendency for languages to give syntactic recognition to the semantic opposition (+ FACT) v. (- FACT) in complement-clauses. It would be of great value if we could determine whether all of this material can be accounted for within the framework proposed for the English and Latin, but such a study would take us beyond the aims of this paper. We must settle for the more modest claim that there are good grounds for believing a close causative link to exist between presupposition and its syntactic realization in surface-structure. However, we have seen that infour of the languages used for illustration non-factivity is associated with the subjunctive mood of the verb (the conditional in Finnish); no explanation has yet been offered for why this should be so. Let us turn now, as promised, to a discussion of the subjunctive with reference to the 'quod' + subjunctive complement-construction of Latin.

'QUOD' + SUBJUNCTIVE IN LATIN

In this chapter that deals mainly with the 'quod' + subjunctive construction we shall touch upon a problem that we conveniently left unnoticed in the preceding section. On the whole, there is nothing that needs to be added to what we have already said regarding factive—subject complements (i.e. those taking 'quod' + indicative). However, if we look back to the list of verbs introducing 'quod' + indicative as their object—complement, we may well wonder if we are justified in describing them as complement—taking verbs at all. In particular, let us quote some of the examples for the three verbs 'gratias agere', 'gratulari', and 'mirari'.

- 1) Gratias agimus et ducibus et exercitibus vestris quod oculis magis quam auribus crediderunt (6-26-5)
- 2) nos -- legatos Saguntinus senatus -- misit simul gratulatum quod ita res per hos annos in Hispania --- gessistis ut -- (28-39-14)
- 3) Quod Romanos omnis, quod me, ad quem missus es, ignoras, minus miror cum —— (37-36-3).

The first two sentences may be translated in either of two ways, namely: 1) We offer thanks both to your generals and armies for the fact that/because they put greater trust in the evidence of their own eyes than in the reports of others.

- 2) The senate of Saguntum has sent us as envoys to congratulate you on the fact that/because you have so conducted affairs in Spain during these years that ——
- Only (3) does not permit the 'because' alternative:— 3) I am less surprised at the fact that you know nothing about the Romans as a people and about me as the individual to whom you have been sent, since ... What does this suggest? It would seem reasonable to draw the conclusion that there is a close connexion between factive-clauses and causal clauses, particularly those introduced by 'quod', the factive complementizer. Traditional grammatical analysis of Latin, which Latoff so disdains, had no trouble in explaining this state of affairs, and we shall return later to see just what that explanation was. But for the present, let us concentrate on the issue at hand.

There is a rule in Latin, with an exception to which we shall return, that states that whenever a subordinate clause appears in indirect speech the mood of the verb is the subjunctive. The usual explication of this is that the indicative is the mood of definiteness or absolute reality, whilst the subjunctive represents statements whose actuality is not so

certainly guaranteed - the three original uses of the subjunctive being taken to be a) jussive, b) optative and c) conditional, all of which convey that which has not actually happened. The only time that a subordinate clause in 'oratio obliqua' takes the indicative is when that clause represents something which was not part of the original words used, but which has been inserted by the author. This is especially frequent in the case of causal clauses introduced by 'quod'. We are now getting to the heart of the matter. If the author is prepared to vouch for the causal link between the 'quod'-clause and the main verb, then the verb in the subordinate clause is indicative; if he wishes simply to indicate that the 'quod'-clause represents the reason offered by the original speaker, then the subjunctive is used. Now, among the list of verbs occurring with 'quod' + subjunctive, many of the examples are in 'oratio obliqua'; it is impossible in such cases to decide if the subjunctive is normal or due to the fact of subordination within indirect speech. Here is the list:-

A) SUBJECT-CLAUSES

1) Causa esse

4) Neque - error esse

2) Culpa esse

5) Placere

- 3) Morari
- B) OBJECT-CLAUSES:
 - 1) Collaudare

9) Indignari

2) Excusare

10) Irasci

3) Exprobare

ll) Laetari

4) Fremere

12) Mirari

5) Gloriari

- 13) Miserari
- 6) Gratias agere
- 14) Obiurgare

7) Gratulari

15) Peccare

8) Increpare

16) Queri

To take 'causa esse', for example, we have a case of this expression governing 'quod' + indicative, and as our instance here is in 'oratio obliqua' we may reasonably attribute the presence of the subjunctive to this fact. However, let us pay closer attention to the occasions where our construction is found in direct speech.

- a) Prima eius oratio fuit excusantis quod tanto minoribus spe ttque opinione omnium copiis venisset (35-44-2).
- b) Audiebantur itaque propalam voces exprobantium multitudini quod defensores suos semper in praecipitem locum favore tollat, deinde in ipso discrimine periculi destituat. (6-17-1)
- c) Romanis indignantibus quod victoribus victi ultro inferrent arma,
 Poenis quod superbe avaraque crederent imperitatum victis esse (21-1-3)

- d) tribunorum obiurgantium multitudinem quod admiratione eorum quos odisset stupens, in aeterno se ipsa teneret servitio (26-20-1)
- e) collaudavit-que milites quod duabus tantis deinceps cladibus icti provinciam obtinuissent ——

No-one can doubt that the superficial form of these sentences is direct. But a careful examination of the verbs introducing the complement-clauses reveals that their meanings are such as to incorporate a verb of 'saying' - e.g. a) excusantis quod --- = 'of (him) making an excuse saying that --- '; b) exprobantium multitudini quod = 'of (them) berating the mob declaring that --- ', c) Romanis indignantibus quod = 'The Romans indignant because as they said --- ' These verbs are then really introducing what amounts to indirect speech.

This analysis is supported by the rather neat opposition found when both 'quod' + indicative and 'quod' + subjunctive are used with the same verbs (e.g. 'gratias agere' and 'gratulari' etc.). Consider:

- a) Gratias agimus et ducibus vestris et exercitibus quod oculis magis quam auribus crediderunt (6-26-5).
- b) Nos legatos Saguntinus senatus misit simul gratulatum quod ita res —— gessistis ut —— (28-39-14);
- c) gratulati primum senatui sunt quod P. Scipio prospere res in Africa gessisset; deinde gratias egerunt quod Masinissam non appellasset modo regem (30-17-7)

In (a) and (b) the introductory verbs are first person, and it cannot but be the case that the factual status of the causal clause is not open to question, whilst (c) is third person and the allegedness of the subordinate clause may be brought out in translation as follows:

"Having first congratulated the senate because, as they said, Scipio had been successful in Africa, they then offered their gratitude for the fact that (to put it in their own words) he had not only — " The point is that if the speaker/writer of such a sentence commits himself to the belief that what was "asserted etc.—— " is true, then the indicative is used, otherwise the subjunctive.

In short, then, the evidence would suggest that where the 'quod'-clause is unambiguously a noun-clause complement, a subjunctive will only be found when the sentence is in 'oratio obliqua' - this holds for verbs like:-

'causa esse: 4-49-10 'Morari' 21-5-12

'culpa esse' 21-5-12 'Placere' 27-26-14

Where the 'quod'-clause may be just as well (if not better) translated as a causal, and therefore adverbial, clause, the indicative will be employed if the link between subordinate and main clauses cannot but be definite, the subjunctive if the writer is unwilling to vouch for the definiteness of that link, or if he merely wishes to indicate that the reason given was that proffered by the original speaker (i.e...if the main verb implicitly introduces indirect speech) - this holds for verbs like:-

'Collaudare' 26-20-1 'gratias agere' 23-10-1 'Gloriari' 22-60-7 'gratulari' 37-3-9 'Mirari' 2-54-8

One may feel inclined to interpose the objection at this juncture that it is perverse to persist doggedly in describing what may best be called causal clauses as noun-clause complements. This is a thought that could well have occurred to some when they read at the beginning of this chapter the translation given for sentence (1) - the words 'the fact that ' had to be connected to the main verb by the insertion of 'for' This may have seemed to entail a definite change in the status of the 'quod' - clause - it no longer being strictly a noun-clause verbal complement. We must now look to the traditional derivation of 'quod' first as a complementizer and then as a causal conjunction so as to expose the groundlessness of this putative objection. We quote at length from Woodcock pp 196-7: " 'Quod' is firstly the neuter of the relative pronoun = 'that which'. Its use as a subordinating conjunction to introduce a) a noun-clause, when it means 'the fact that', and b) an adverbial clause, when it means 'because', arose out of its use in the accusative of the 'internal object'. Just as 'id gaudeo' means 'I rejoice (with) that rejoicing! or 'I feel that joy', so '(id) quod gaudeo! means 'the rejoicing (with) which I rejoice' or 'the joy which I feel'. This expression is a noun-equivalent and may stand as the subject or object of another verb, e.g. 'quod gaudeo nihil ad te attinet! = 'The joy which I feel has nothing to do with you', or 'adde quod gaudeo' = 'Add the joy which I feel'. But the necessity for translating the pronoun that is an 'internal' object by a noun in English obscures the fact that 'quod gaudeo' really means '(the fact) that I rejoice'. In this particular example 'quod', though performing the function of a subordinating conjunction, is still a pronoun. But if for 'gaudeo' there is substituted a verb or expression which would not normally have an internal or cognate object, then 'quod' has no further function than that of a conjunction e.g. 'adde quod caecus erat' = 'Add the fact that he was blind'. This was the probable order of development.

"The 'quod'-clause itself came to be used also adverbially in the same way that a number of neuter pronouns or adjectives, originally 'accusatives of the internal object', became adverbs: eg. 'multum' = 'much', 'parum' = 'little', 'nihil' = 'not at all', 'in no respect', and even'id', 'hoc', 'illud', 'quid' etc. 'in that respect' etc. So 'id gaudeo' came to mean 'I rejoice on that account' or 'with respect to that'. Similarly 'quod' came to mean 'with reference to the fact that', the main clause containing no verb to which its antecedent could stand as internal object: Ter. Hec. 368 'Laetae exclamant 'Venit', id quod me repent@ aspexerant. · 'They joyfully exclaimed "He has come", with reference to the fact that they'd suddenly caught sight of me'. Thus the 'quod'-clause has become explanatory, and 'quod' may be translated 'because'.

"It is sometimes difficult to decide whether a 'quod'-clause is a noun-clause or an adverbial clause, eg. after verbs expressing emotion: 'miror', 'laetor', 'gaudeo', 'doleo', 'frascor etc. quod venisti". = I am surprised, rejoice, grieve, am angry etc. that you've come". Here it is difficult to know whether 'quod venisti' is a noun-clause standing as internal object to these verbs, or whether 'quod' means 'because'."

It should now be obvious why we are justified in regarding these 'quod'-clauses as noun-clause complements, even if we have to add that they are of the internal, limiting kind. The link that we have now seen to exist between complementation and causal clauses, together with the role that the subjunctive manifestly plays in such clauses, may provide a clue as to why in Spanish and French the subjunctive is the "strictly correct" representation for non-factive complements. When the 'quod'clause came to replace the accusative and infinitive in the subsequent development of the Latin language that we mentioned in the 'Introduction', what were the means available for preserving the surface-structure distinction between factives and non-factives? Remembering the force of the subjunctive in those causal clauses in which it stands (ie. the alleged nature of the cause expressed) and the borderline status of those clauses between pure causals and complements, we should perhaps not be surprised to find it standing as the non-factive marker in opposition to the factive indicative now that both types of complements were introduced by 'quod'. The original identity between the complementizing 'quod' and the causal 'quod' would have eased the transition in the use of the subjunctive from the one clause to the other.

And so, for Classical Latin we shall have a rule that turns the mood of a sentential complement into the subjunctive when that clause appears in 'oratio obliqua'. This rule includes, by implication, internal

accusative/adverbial complement-clauses where the author is not prepared to guarantee the truth of the cause suggested, for, as we have seen, such clauses are virtually in 'oratio obliqua'. (For an example of an implicationally determined rule in Greek, vid Sommerstein 1972).

What this study has achieved is the statement, in terms of a recent grammatical theory, of facts that were well enough known to Latin grammarians working within the framework of traditional grammar - facts that were twisted by Lajoff. As Goethe aptly said:

"Alles Gescheidte ist schon gedacht worden, man muss nur versuchen es noch einmal zu denken."

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