CAUSATION AND STATIVE VERBS IN ENGLISH

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Abstract

The purpose of this paper is to examine some stative verbs, i.e. verbs which do not normally take progressive aspect, from a syntactic and a philosophical point of view. An examination of the concept of causation and its relation to transitivity is also undertaken in order to try and show that stative verbs are "resultatives." Formulation of the argument leads to the positing of a linguistic model that is an extension though in some ways a fundamental alteration of Fillmore's case model. This model allows room for the philosophic insights of Austin & Urmson.
INTRODUCTION

This dissertation owes its origin, in part, to an interest in
the fact that linguists and philosophers were sometimes particularly
concerned in analysing the same lexical items for different reasons.
Verbs such as 'know,' 'think,' 'promise,' 'order' etc. are obviously
of interest to the philosopher. However, these verbs were, also,
often included among the list of verbs that linguists noted were
incapable of taking, or at least reluctant to take, progressive aspect,
under certain conditions. Moreover, in some fairly recent works the
above syntactic fact has actually been used by linguistic philosophers
as a way of delimiting a class of verbs that they wished to submit to
conceptual analysis. Similarly linguists and grammarians, after noting
various syntactic facts about these verbs, have almost invariably tried
to group them semantically, and to give what can only be called
philosophic reasons as to why these verbs cannot take progressive aspect.
A good opportunity seemed to present itself, therefore, for a comparison
of the way in which the same body of data was treated by two different
but related disciplines.

Furthermore, as a person involved in teaching English to people
of many different nationalities, it is difficult not to become involved
in trying to solve one of the most intractable problems for teachers
and foreign learners of English: when progressive aspect can be used,
and, perhaps even more importantly, when it cannot be used.

A third stimulus for the writing of this paper came from the
discovery of the fact that the concepts of cause and change were being
used by linguists, not only to explain certain syntactic phenomena, but also to relate what had appeared, hitherto, to be completely unrelated verbs, such as 'give' and 'have,' 'show' and see, etc.

This has led to an attempt to incorporate the concepts of cause and change into a linguistic theory, and to relate the syntactic fact of stativity and the insights of some philosophers to that theory.
PART 1

STATIVITY AND PROGRESSIVE ASPECT
CHAPTER 1

Lakoff on stative verbs and adjectives

Evidence

A thought provoking recent work on the group of verbs in English that are resistant to expansion with be + ing is the above mentioned work by Lakoff.

Stative verbs differ from non-stative verbs in that they not only appear in such constructions as

1) He is knowing the answer

of 2) He is learning irregular verbs. But that they also cannot appear in other constructions where non-stative verbs are typically found. Examples of these constructions are:

a) true imperatives

3) Know the answer

of 4) Learn irregular verbs

b) with "do something" pro-forms

5) What I did was know the answer

of 6) What I did was learn irregular verbs

c) with "do so" pro-forms

7) I knew the answer and John did so too

of 8) I learnt irregular verbs and John did so too.

d) nor can they appear in embedded sentences after such verbs as remind tell ask etc.

9) I asked him to know the answer

10) I asked him to learn irregular verbs.

He also points out that some adjectives are unusual in that they can appear in similar constructions to 2) 4) 6) and 10) above (though not 8)) in association with the progressive form of the copula.

11) He is being honest

12) Be honest
Conclusions.

Lakoff draws two conclusions from his analysis, one syntactic, and one semantic. The syntactic conclusion is that the concept of markedness/non-markedness be introduced into transformational theory to reflect the fact that while most adjectives are stative and most verbs non-stative, certain marked members of each class will be non-stative and stative respectively. The progressive - transformation, imperative transformation can then be allowed to operate only on unmarked verbs and marked adjectives. He maintains also that this implies that the stative/non-stative distinction is logically prior to the distinction between verbs and adjectives and that an ultimate identity between verb and adjective must be posited in deep structure.

The semantic conclusion is that the grammatical distinction "partially reflects a semantic distinction. In an overwhelming number of cases stative verbs and adjectives have the semantic property non-activity and non-stative verbs and adjectives the semantic property activity." (pp.11-12). He admits however that non-stative adjectives seem to be interpretable as either active or non-active as in the following sentences

15.) John is being foolish (active)
16.) John is foolish (non-active).

Moreover, there are cases of verbs that are semantically non-active and syntactically non-stative such as "remain, stay, keep, sit, stand, huddle, squat" (p.13). He states categorically, however, that there are no verbs that are semantically active and syntactically stative.
Implicit in Lakoff's presentation is the close connection between non-stative verbs and adjectives and implied questions with the "pro-verb" 'do'. Lyons (1966) makes essentially the same point.

"Unlike most 'verbs' (which we will call 'verbs of action') stative verbs such as 'know' 'believe' 'exist' etc. cannot normally be used in answer to questions containing 'do' as the 'predicator' (e.g. what did he do?). It is important to distinguish two different functions of 'do' both exemplified in this sentence. The 'do' which carries tense under certain transformations is not restricted to verbs of action." (pp. 222-223).

This close relationship between the typical unmarked non-stative verb and the pro-verb 'do' seems to lie behind Lakoff's semantic proposal. To say that typical verbs "have the semantic property activity" is very similar to the traditional definition of a verb as a "doing word" and both definitions presumably owe their existence to the fact that most verbs can be used in answer to such questions as

17.) What are you doing?

and in association with 'do' in sentences similar to 6) and 8) above.

What was not traditionally recognised, however, was that certain adjectives could be used in answer to questions such as 17) and in association with 'do' in sentences similar to 13) and 14).

**Criticism.**

1) I propose restricting the term stative verb to those verbs that are not normally expandable with be + ing. (We shall henceforth say verbs that do not take progressive aspect for the sake of brevity and familiarity). This restriction is necessary in view of the fact that the class of verbs that does not take progressive aspect does not coincide with the class of verbs that does not commute with the pro-verb 'do', though there is a distinct and significant overlap. Put more
accurately the class of stative verbs is a subset of the class of 
(- do) verbs, or alternatively some (- do) verbs can take progressive 
aspect.

Seuren (1969 pp. 80-82) uses arguments similar to those outlined 
above "to adduce grammatical evidence that most verbs have a common 
semantic feature 'do'." Among the counter-examples he considers, 
however, are verbs such as receive and suffer. But, while these verbs, 
as Seuren points out, do not commute with 'do', i.e. 18) and 19) are 
amceptable.

18)* What he did was receive blows to the head.
19)* What they did was suffer a defeat

they are clearly not stative, i.e. 20) and 21) are acceptable.

20) He is receiving blows to the head.
21) Our team is suffering a defeat.

Jacobs and Rosenbaum (1968) are clearly aware of the same problem. 
In their analysis of the constituents of a sentence they say (pp. 71-72):

"The notion:"doer of an action" of being an agent is not generally 
explained by the notion deep subject of a sentence ------------- For example, 
in the sentence.

John underwent surgery at the hands of Dr. Jones
it is clear that the doer of the action is not John but Dr. Jones."

This point can be alternatively expressed in terms of the above 
argument by saying that 22) is unacceptable.

22)* What John did was undergo surgery at the hands of 
Dr. Jones.

Though here again 23) is acceptable.

23) John is undergoing surgery at the hands of Dr. Jones.

Thus, although it must be admitted that (- do) non-stative verbs 
are rare (indeed it is difficult to add to the above mentioned three) 
their existence means that we cannot assume that the class of stative
verbs and the class of (- do) verbs are co-extensive.

2) Lakoff suggests that individual verbs and adjectives should be marked as + stative and - stative respectively, i.e. where they are exceptional in their class. He points out, however, (footnote p.12) that "adjectives like careful, fair, foolish, polite, nasty, etc. seem to be interpretable as both ACTIVE and NON-ACTIVE. Compare

John is being foolish
and
John is foolish."

Though he merely notes this and admits that he "not claim to understand it," it is clearly a fact in need of explanation, especially as essentially the same situation holds for verbs. Compare

24) a) I am thinking that Sidney is a liar
but b) I think that Sidney is a liar
and c) I am thinking about Sidney

Compare also

25) a) He is weighing 60 kilos
but b) He weighs 60 kilos
and c) He is weighing his daughter.

3) It is, moreover, doubtful whether the copula and non-stative adjectives answer questions with the pro-form 'do' as fully as non-stative verbs. Consider the situation where in answer to A's question,

26) What did John do?
B gave the answer

27) He was foolish.
Or in answer to the question,

28) What is John doing?
he gave the answer

29) He is being foolish.
In both instances B is likely to feel cheated of the full answer to
which his question entitled him. In both cases B has characterised John's behaviour rather than reported on John's activity or activities, and in normal circumstances A might very well follow up B's answer with a further question, e.g.

Yes but how? I mean what is he doing foolishly.

4) Finally, though Lakoff's account of imperatives seems essentially correct there are occasions in which stative verbs can be used in imperative constructions, e.g.

Believe that I'm trying to help you.

Imagine that he's your friend.

Rejoice that my son has returned

The fact that the relationship between subject and object can sometimes be characterised as a doing relationship and sometimes not leads us to two conclusions

a) that the notion subject of a sentence is not a simple one. There are at least two notions of a subject of a sentence. As Seuren says (op cit p.32) "an approximate semantic characterisation of the relational constituent subject -- would consist in the specification of who or what is or does."

b) That this relationship is dependent upon the semantic characteristics of the verb. The relationship of receive to the subject is the same irrespective of gender deixis index, etc. in the sentences

John
Mary
He received a present.
She
I

etc.
Although these facts seem obvious enough they are worth stating because of what Fillmore (1968) terms the "neglect of the nominative in studies of case-uses." However, as he goes on to point out (p. 6)

"There is in principle no reason why the traditional studies of case-uses fail to contain such classifications as 'nominative of personal agent', 'nominative of patient', 'nominative of beneficiary', 'nominative of affected person', and 'nominative of interested person' (or, possibly, 'ethical nominative') for such sentences as [the following] respectively:

He hit the ball.
He received a blow.
He received a gift.
He loves her.
He has black hair."
CHAPTER 2
Stativity in the Works of Leech and Lyons

An adjectival form of the noun 'state' has been widely used by linguists in their treatment of verbs that are reluctant to take progressive aspect. As we have seen Lakoff (1966) talks of stative verbs and adjectives, as does Lyons (1966) and (1968). Joos (1964) calls them 'status verbs', while Akira Ota (1963) refers to them as 'statal verbs'. Palmer (1965) calls some of them 'state verbs' while Leech (1969) makes use of the expression 'state predications'.

However, terms such as stative can be misleading and in this section we will devote attention to two writers who seem to have been misled by the term.

1) Lyons

Lyons, like Lakoff, accepts the identity of the verb and adjective in deep structure for broadly similar reasons as the above quotation from his work (p. 7 ) in part illustrates. However, when discussing the reluctance of stative verbs to take progressive aspect, he has this to say (1968 p.316).

"Since the most common function of the progressive is to indicate duration, one might say that it is only natural for stative verbs not to combine with the progressive: the implication of duration is already contained in these words."

This argument seems wrong in at least three ways. Firstly because it simply does not meet linguistic fact. Redundancy and ungrammaticality are to be distinguished in language, in that the former is not excluded by a grammatical rule.

1) He is chewing with his teeth
or 2) He kicked the ball with his foot
are certainly inelegant sentences, but they are not ungrammatical. Again, although 'here' may be unnecessary or redundant in the sentence,

3) He is coming here,

its inclusion or exclusion has no bearing on the grammaticality of the sentence.

Secondly there is the group of verbs that Lakoff calls semantically non-active and syntactically non-stative (see p. 6 above). Not only do these verbs take progressive aspect freely, there is also a marked tendency among some of them to favour it especially in association with perfective aspect. To me at least

4) a) I have been living in London for 6 years.

and b) She has been waiting for 45 minutes.

are more common than

5) a) I have lived in London for 6 years.

and b) She has waited for 45 minutes,

when I am still living in London and she is still waiting. While it is interesting to note in this connection that the verb lie (in the sense of lie down) has almost completely lost its past-participle form in the modern language: the perfect progressive form being almost always used.

Compare

6)(?)She has lain down

with 7) She has been lying down.

Thirdly, it is by no means agreed among linguists that the progressive indicates duration. The term "limited duration" would meet with much more general agreement. See in this connection, e.g. Twaddell (1960 p.8), Joos (op cit p.113), Palmer (op cit p.93). If this is the case and it is the case that duration is "already contained" in stative verbs, it is by no means clear why progressive aspect should
not be used to limit the duration of the stative verbs, as it appears
to do in the case of a verb like 'live'.

Compare

8) He lives in London
and 9) He is living in London.

2) Leech

Leech follows Robert Allen (1962) and Weinreich (1961) in looking
for a parallel in verbs or the verb phrase for the [² Count] distinction
in nouns. Weinreich states (p.161):-

"Perhaps all languages distinguish between 'divided' and
'undivided' reference --, that is between nouns which are quantified in
the form 'some x, a little x, much x' and those that are quantified in
the form 'an x, one x, many x'. -- The distinction also occurs among
non-nouns, for example, divided reference of verbs by means of punctual
and iterative aspects."

Czech will serve as an example of a language where countability
is grammatically marked in the verb, as can be seen from the following
sentences where the verb (a verb of motion) is in the imperfective
aspect:

10) a) Karla jde do Prahy      Karla is going to Prague.
b) Karla chodí do Prahy    Karla goes to Prague
   regularly.
c) Karla chodíva do Prahy      Karla occasionally goes
to Prague.

These tenses (or aspects), which only apply to verbs of motion in the
imperfective aspect, are called the durative iterative and
frequentative respectively.

Robert Allen (op cit pp.192 ff), to summarise very briefly,
distinguishes between 1) bounded predications (which are analogous to
count nouns) that may be either unique (like a pen), or repeated (like many pens, 2 pens, etc.), and 2) non-bounded predications (cf. non-count nouns), which may be public or private. He calls these latter suffusive predications by analogy with non-count nouns like 'gas' or 'cheese', which, no matter how much you divide them, still remain gas or cheese. Count nouns are not suffusive, for example a pencil divided up will not give one smaller bits of pencil but lead or wood. As non-count nouns pervade the space they occupy, so suffusive predications pervade time. Bounded predications may take progressive aspect under certain circumstances, but non-bounded predications do not. Most, but not all, stative verbs are suffusive or non-bounded.

Leech draws on Allen quite heavily in his analysis of tense and aspect in Chapter 7 of "Towards a Semantic Description of English." He says (p.134): - "Not only noun meanings but verb meanings can include the factor 'countability.' The contrast between 'countable' and 'mass' as applied to verbal meanings is to be identified with the commonly drawn distinction between "event" verbs and "state" verbs (or rather senses of verbs)."

It is apparent, however, that his use of the term state is unusual as he says on the next page that "verbs are not grammatically marked for uncountability as nouns are by their ability or lack of ability to be inflected for plural."

However, the "commonly drawn distinction between event verbs and state verbs" is prompted by the ability of the former and the inability of the latter to take progressive aspect, at least in the works of the authors quoted at the beginning of this chapter.

A little later, moreover, he abandons the terms event verbs and state verbs in favour of "the much more valuable concept of event predications and state predications," and illustrates what he means by
16. the introduction of the concept of semantic concord. He says (p.137)

"Semantic concord is analogous to syntactic concord in that it consists in the distribution of matching properties amongst different elements of a structure."

The interpretation of the verb as countable or uncountable [+ Count] and plural or non-plural [+ Plur] can, for example, depend on the interpretation to be placed on the object. For example, in the sentences:

a) Jane writes.

b) Jane writes books.

c) Jane writes a book.

the lack of an object in the first sentence leads us to interpret the whole predication as [- Cou], whereas in the other two cases the fact that the object is in the plural and singular respectively leads to the interpretation that the whole predications are [+ Plur], [- Plur].

Leech then goes on to analyse the present tense in terms of [+ Cou] and [+ Plur]. Corresponding to [- Cou] we have the
unrestrictive present state predication, which (p.138) "denotes a state of affairs of indefinite duration continuing through the present moment and is unrestrictive in the sense that no initial or terminal point is given." Examples of [- Cou] predictions are:

12) Enough is as good as a feast.
14) I like roses.
15) She is tall.

The other two uses of the present involve a) [+ Cou - Plur], where the present tense is interpreted as referring "to an event psychologically perceived as taking place in its entirety at the moment of speech." Examples of this the instantaneous present are:

16) He scores a goal.
17) I name this ship Victor (p.139).
b) [ + Cou + Flur ] "which describes a general state of affairs continuing through the present moment and consisting of repeated events".

Examples are:

18) He goes to bed at 10 o'clock.
19) He digs his own garden.
20) He scores plenty of goals (p. 140).

He calls this the habitual present.

Leech later discusses progressive aspect (pp. 148-152) what he calls the ascription feature [ + Sit ]. He states that it has a different semantic impact according to the type of predication to which it is applied. It has the effect of psychologically "stretching the time span of the instantaneous present" (p. 151). Compare

21) He scores a goal.
22) He is scoring a goal.

With regard to the habitual present he says that it has two possible effects either "every individual member of a set of repeated events is construed as having duration as in,

23) Every time I pass, he is mowing the lawn."

or "the set of events itself is construed as a state of affairs having limited duration," as in,

24) I am buying my shirts at Harrods (these days).

Of these it should be noted that, it seems to me, the latter is by far the most common. Indeed the other example given by Leech of the first type of effect, viz

25)(?) On Sundays he is resting

strikes me, and others I have consulted, as simply ungrammatical.

It is, however, with [ - Cou ] predications that Leech makes his most serious error. He says that progressive aspect has the effect of "psychologically shrinking the time-span of the unrestrictive present," i.e. state predications. This mistake seems to be due to:
a) the fact that he considers 'live' to be an example of a state verb on p.150 where he is considering progressive aspect,

b) his seeming unawareness of the fact that linguists have introduced the term state stative, etc. to refer to verbs that do not take progressive aspect,

c) the fact that he has forgotten his list of examples of the unrestrictive present on page 138 (see above sentences 12)-15).

Thus while it may be true to say that "I live in Highgate and I am living in Highgate differ precisely in the suggestion that in the second case the residence is temporary," progressive aspect simply cannot be applied to the sentences that he uses as examples of the unrestrictive present initially. Compare sentences 12)-15) above and their ungrammatical counterparts:

26)* Enough is being as good as a feast.

27)* Water is containing hydrogen.

28)* I am liking roses.

29)* She is being tall.
CHAPTER 3

The Copula, Copula-like Verbs, and Manner Adverbial-type Adjectives

Despite Leech's obvious errors in relation to [- Cou] predications, there is certainly some point in trying to ascribe countability to the verb phrase in English, while his account of the instantaneous present and the habitual present and the effect of progressive aspect on each seems to be correct in essentials.

The fact is that [- Cou] is a bad way of characterising such sentences as 12) - 15) in the previous chapter. One of the markers of countability is adverbs of frequency and they can be applied without grammatical unacceptability in each of the above sentences, although, of course, in two cases the resulting sentences are factually incorrect or absurd i.e:

- e.g. Water sometimes contains hydrogen.
- She is usually tall.

It is probably better to revert to Leech's initial terminology of event predications and state predications.

'Event' I take to be a term used to refer to what it is that is described when an individual is involved in describing. Allen (op cit pp 95 - 97) introduces the terms entity and event. Entity is the term he uses to characterise what it is that a noun refers to. He points out that an entity may be temporally oriented (e.g. a kindness), but is more normally spatially oriented (e.g. a cup).

"An Event, however, involves both an Entity and a Predication. - 'A barking dog', for example, is an Entity not an Event: it is oriented only with reference to space. But when the same Entity is "placed" in time as in 'A dog is barking' the result is the expression of an Event - that is an assertion." (pp 196-7).
It is wrong to assume, however, that all assertions describe or refer to events. Put alternately, it is wrong to assume that a speaker can have no other aim in view when making assertions other than that of describing. Another common aim is classification i.e. not describing but relating individuals and classes to each other. Classification is related to time in an entirely different way from description. Descriptions refer to events and events necessarily occur in time and have duration. Classification does not refer to events.

The copula is the most typical means used in English when a speaker wishes to classify. As Lyons (1968 pp 388 - 389) points out in addition to the existential use of the word 'be' that does not concern us here there are three 'predicative' uses that are of importance;

"a) the identification of one entity with another
   a = b: e.g. That man is John);

b) class membership (b C e.g. John is a Catholic, 'John is a member of the class of persons characterized as Catholic'); and

c) class inclusion (C C D Catholics are Christians, 'The members of the class of persons characterized as Catholic are included among the members of the class of persons characterized as Christians')."

(P.389)

Moreover, following Strawson (1959) he distinguishes between "(i) sortal universals which serve to group individuals into classes - and (ii) characterising universals which refer to qualities states actions etc. Typical sortal universals are the common nouns of traditional grammar; typical characterising universals are 'abstract' nouns verbs adjectives and adverbs." (op cit pp 337 - 338)

Although it is clear that in the sentences

1) John is a Catholic
2) Catholics are Christians
an individual is being related to a class and a class to a wider class respectively, the situation is not so immediately apparent in the sentences

3) The apple is green
4) Swans are white

However 3) is an example of class membership like 1) and 4) an example of class inclusion like 2)

In traditional terms when 'green' is used in a sentence like 3) above, we are said to be ascribing a general quality to a particular object. However, although in this particular instance there is no superordinate term corresponding to the class to which green belongs (as 'coloured' has other more specialized meanings) - nevertheless 'green' has many co-hyponyms (Lyons op cit pp 453 - 455) 'red' 'yellow' 'blue' etc. To say that the apple is green is not only to relate the word explicitly to a particular apple, but also implicitly to the other members of the class of which 'green' is a member and to distinguish 'green' from these co-hyponyms.

Strawson (1952) puts it more elegantly thus:-

"When we apply a predicate to something we implicitly exclude from application to that thing the predicates that lie outside the boundaries of the predicate we apply but in the same compatibility range" (P.6).

In addition to the ways of classification outlined above, Lyons also refers to its use in locative expressions such as:

5) The book is on the table.
and 6) There is a book on the table.

'Be' is by no means the only verb in English that can be used for the purpose of classification. Many of the so-called stative verbs in English can be paraphrased with the verb 'be' e.g.

The tea contains sugar = There is sugar in the tea
It doesn't matter = It is not important
Water consists of hydrogen and oxygen in water, etc.

Some of the grammatical characteristics that distinguish the copula from standard verbs are the following:

a) it can be followed by an adjective but not by an adverb.

b) it cannot be operated upon by the passive transformation.

c) apart from such instances as

He is being stupid etc.

which we will examine below it does not take progressive aspect.

The first point to be noted is that not all verbs that have characteristic a) and consequently b) are copula-like. Svartvik (1966 pp 93 - 94) distinguishes between the 'mutative' and 'non-mutative' sub-classes of 'lexically' marked auxiliaries i.e. auxiliaries other than be. Examples of the mutative sub-class are: 'become' as in He is becoming lazy. 'get' as in He is getting fat. 'go' as in He is going mad. 'grow' as in He is growing old. etc.

These are not copula-like both because they do not have characteristic c) above and also because the idea of development of coming to be rather than being is present.

Non-mutative verbs, on the other hand are much more resistant to progressive aspect. Among them the following classes can be distinguished.

A) **Copula-like verbs of sensation**

Palmer (1965 P.96) has pointed out that verbs of sensation can be divided into three classes.

(i) verbs which have the general class meaning "having the sensation," as in:

7 a) I (can) see my brother.

b) I (can) hear the music.
(ii) verbs which have the class meaning "having the quality to produce the sensation," as in:

8) a) My brother looks ill.
   b) The music sounds lovely.

(iii) verbs with the class meaning "to act to achieve the sensation," as in:

9) a) He is looking at my brother.
   b) He is listening to the music.

He says that the situation is obscured because with regard to the three other verbs of sensation i.e. 'smell', 'taste' and 'feel' the same lexical item is used in each sense. Thus corresponding to 7) we have:

10) a) I (can) smell the fish.
    b) I (can) taste the fish.
    c) I (can) feel the key.

and corresponding to 8) we have:

11) a) The fish smells nice.
    b) The fish tastes nice.
    c) The key feels hard.

and corresponding to 9)

12) a) I am smelling the fish.
    b) I am tasting the fish.
    c) I am feeling the key.

Although the 'verbs' in both (i) and (ii) classes are stative it is only the verbs in class (ii) that are copula-like.

However, although they are copula-like 'sound' 'look' etc. are not copula-equivalent. The difference of meaning between them and the copula comes out most clearly in value judgements. Compare:

13) a) The apples look good.
    b) The engine sounds O.K.
which are much more guarded statements than:

14) a) The apples are good.

b) The engine is O.K.

13 a) can be expressed in terms of 14 a) as roughly

The apples are good, as far as the sense of sight is concerned only.

While 14 b) would be more appropriate coming from a garage mechanic after an investigation of the engine and 14 a) from the average car owner after listening to it.

B) The verbs 'seem' and 'appear'

These are also copula-like verbs in so far as they too share the characteristics of the copula listed above. They have a semantic role somewhat similar to the verbs of sensation as compared to the copula.

Compare

15) He seems/appears intelligent (to me) and

16) He is intelligent

In 15) the speaker would be qualifying his judgement, hedging his bets, in a way that he would not be doing in 16)

C) Middle verbs

This is a term introduced by Lees (1960 P.8) and further utilized by Chomsky (1965 pp 103 - 104). Lees includes under this heading 'have' 'cost' 'weigh' 'resemble' 'mean'. Chomsky adds 'fit' and 'marry.' These verbs are supposedly distinguished from all others in that they do not take manner adverbials freely and do not take the passive transformation. Chomsky relates these two syntactic characteristics in a rule whereby (roughly) the passive transformation is one of the realisations of the manner adverbal component.

These are two of the characteristics that we have seen distinguish the copula and copula-like verbs from others. Moreover, it is noticeable that middle verbs are also reluctant to take progressive aspect. They
differ from the verbs we have so far considered as being copula-like, in that they are followed by nouns rather than adjectives.

It is extremely doubtful whether 'marry' should be included among middle verbs, as it is a verb that takes manner adverbials freely and can also take progressive aspect. However verbs such as 'cost' 'weigh' 'fit' and others such as 'measure' 'match' 'equal' etc are stative and copula-like.

Compare the sentences:

   b) The book weighs 6 pounds.
   c) The pitch measures 100 yards.

The above sentences can be paraphrased with the copula thus:

18) a) The book is £1. (in price)
   b) The book is 6 pounds. (in weight)
   c) The pitch is 100 yards. (in length)

In sentences like 17) and 18) we are relating individual things to systems of money, value, weight, measurement etc that are operative in society and, furthermore, relating an individual thing to a numerical value on that scale i.e. classifying, not describing, the book and the pitch.

A similar type of classification is at work in the following sentences

19) a) The shirt matches your tie
    b) The shirt fits you
    c) The shirt suits you

These are, in fact, value judgements, relating the shirt to a tie or person in terms of a scale of aesthetic values more specifically concerning colour in the first instance, relative size and shape in the second instance and more generally in the third instance.

Verbs in groups A) - C) can then be seen to be essentially copula-like not only in their syntactic characteristics as outlined above, (p. 22 but also semantically in so far as their primary purpose is to classify i.e.
to relate an individual to a class or a class to a wider class. In the case of groups A) and B) their function is to modify the commitment of the speaker to the judgement in some way, in the case of group C) the class in terms of which the 'complement' noun is related to the subject noun is so to speak anticipated by the use of the copula-like verb or, to speak more figuratively, the copula is clothed and thereby disguised by this class.

My suggestion is, therefore, that certain verbs be given a dictionary entry of copula-like to reflect the above mentioned syntactic and semantic characteristics that these verbs have in common. This means, of course, that such verbs as weigh cost measure etc would have two lexical entries to account for such sentences as

a) weighing

20 b) They are costing the wood

c) measuring

Another verb included among the middle verbs by Chomsky and Lees is the verb 'have,' in the sense of possession. Lyons (1968 pp 391 - 395) suggests that

21) John has a book

may be derived from an underlying

22)* A book is John's

by a compulsory transformation.

He also points out parallels between locative and possessive constructions in English which suggest that John in the above sentence may be regarded as a sort of human locative; viz:-

23)* A book is at/near/with John

The manner in which the idea of possession is expressed in other languages is as Lyons points out valuable corroborating evidence. Russian, early Latin and Welsh, for example, all express possession in a way similar to 23) above.
There is also the verb 'belong' in English which when the subject is definite could be considered a substitute for the copula. 'Have' is like the copula and the copula type verbs in that it, too, is not used to describe an event but to relate a thing and a person. However, we shall have more to say about 'have' and have-type verbs below.

Non-stative adjectives

We have seen that classification like description is countable but that the addition of adverbs of frequency is factually odd under certain circumstances, e.g. in sentences such as:

27) A) John is often tall.
   B) John is occasionally dark.

However, let us now compare the following pairs of sentences:

28) A) It is often wet in England.
   B) The tide is often high at this point.

29) A) John is often stupid.
   B) John is sometimes clever.

30) A) John is tall.
    B) John is dark.

The classes to which John is related in 30) above, i.e. those of relative height and complexion are not changeable like the height of the tide, the state of the weather or John's behaviour. This appears to be the reason why adverbs of frequency cannot be applied and why consequently 27) are unacceptable.

However, although 28) and 29) can take adverbs of frequency, only 29) can take progressive aspect, i.e. 31) are ungrammatical.
31) A) It is being wet in England today.
   B) The tide is being high at this point now.

Changeability and the consequent possibility of an iterative interpretation is a necessary but not a sufficient condition for an adjective to be classified as non-stative.

The further condition is that these adjectives should be the adjectival forms of adverbs of manner answering the implied question "How does X behave?"

There is a paraphrase relationship, at least, between such sentences as:

32 A) John is behaving stupidly
    and B) John is being stupid.

33 A) John is behaving cleverly
    and B) John is being clever.

34 A) John is behaving reasonably
    and B) John is being reasonable.

This relationship can be checked by reference to Lakoff's list of non-stative adjectives given at the end of this chapter.

There appears to be a case here of what we might call 'category shifting', i.e. what in Jespersen's terminology is a category of the third degree (see Lyons 1968 pp 327 - 329) appearing with the surface structure characteristics of a category of the second degree. In view of this 'shift' the verb 'be' now loses its characteristics as a classificatory device and takes on some of the characteristics of a verb like 'behave' i.e. volition is ascribed to the subject. This comes out clearly, for example, in sentences like,

The weather is being aggravating again today.
where the construction attributes volition to something that is not normally thought of as having volition.

How the above should be formally incorporated into a grammatical framework is by no means clear: although some use might be made of the suggestion, for example, that there is a transformational relationship between A) and B) in 32) - 34) above.

However, there is no doubt that interpreting non-stative adjectives as in some sense "ultimately" manner adverbials enables us to understand how they can be used freely with progressive aspect. Although various authors have noted that adverbials do not colligate freely with stative verbs. (of Lakoff op cit footnote p.1 - 10 and Chomsky and Lees above p. 2%), there has to my knowledge been no evidence noted of any restriction holding between manner adverbials and non-stative verbs. It is to be expected, therefore that non-stative adjectives, "category shifted adjectival adverbials" will also appear quite freely with progressive aspect.
Appendix to Part 1

Lakoff's list of non-stative adjectives

careful
cautious
noisy
useful
fair
unfair
asinine
foolish
polite
impolite
obnoxious
reasonable
rough
silly
tactful
pleasant
unpleasant
nasty
offensive
rude
insistent
frank
discreet
reckless
persistent
officious
realistic
troublesome
These can be added to by 'despondent' and 'intelligent' which he appears to have wrongly included under the heading of 'stative adjectives'.
PART 2

STATIVE VERBS AND LINGUISTIC PHILOSOPHY
CHAPTER 4

The Treatment of Stativity in Books
Teaching English as a Foreign Language.

Of the writers listed in the bibliography Joos comes closest to regarding stative verbs as copula like or classificatory, i.e. as indicating a relationship between an individual and a class, or a class and a wider class.

He initially divides stative verbs (he calls them status verbs) into

"two main groups 1) psychic state including the specific perceptions (SEE, HEAR, etc.) and the intellectual and emotional attitudes (BELIEVE, UNDERSTAND, HATE, LIKE, REGARD, etc.) 2) relation, such as the relations of representing depending excluding and so on" (op cit p.118).

He concludes, however, "that the sorting-out of status verbs into relation verbs and psychic state verbs is perhaps an expository convenience but not a logical necessity," (p.119) and that both can be subsumed under the general heading of relational.

His account, however, is unfortunately somewhat cryptic and not argued out in any detail.

Joos' treatment of status verbs includes a lengthy quotation from W. Stannard Allen's "Living English Structure", an account which is fairly typical of the way in which stative verbs have been treated by many of those who have tried to explain their reluctance to take progressive aspect to foreign learners of English.

To Allen stative verbs are "mainly verbs of condition or behaviour not strictly under human control, consequently they go on whether we like it or not." (p.78). He then goes on to examine the difference between the verbs in the sentences

I see a man.

He is looking at me.
in these terms.

Pit Corder (1960) gives a similar explanation viz: - "the actions they describe cannot be stopped or started at will" (p. 76).

Hornby (1953) puts it slightly differently: - "These verbs denote various mental perceptions states of mind or feelings. -- They denote a state or feeling that is assumed to have no end" (p. 116).

Four presuppositions seem to underly one or all of these explanations:

1) that progressive aspect is not used when an "action" is not under control or

2) when an action is "assumed to have no end,"

3) that verbs describe actions,

4) that verbs denote.

I shall argue that all four presuppositions are wrong.

With reference to 1) it is clear that in some cases we can and in other cases we must use progressive aspect to refer to what is not under our control as for example in the sentences

I'm feeling sick

which is quite as grammatical as

I feel sick

or in cases such as

I am crying

where progressive aspect is obligatory

Re 2) an action which is assumed to have no end is characteristically expressed in English by a construction with progressive aspect. Leech points this out (op cit p. 151) "the continuous is characteristically found with verbs denoting some kind of inexorable process." In addition to the examples quoted by him we could also cite such examples as:

Pollution is becoming more and more of a problem for mankind.

The rat population is growing bigger every day.
Re 3) we have already seen that a characteristic feature of stative verbs is that they cannot occur in association with the pro-verb 'do' and cannot be said to describe actions.

Finally, and most importantly, there is the presupposition explicit in the case of Hornby above but implicit in many other writers that all verbs 'denote' something. The word 'denote' is not always used. For example, talks of verbs "indicating perception or mental and psychological state" (op cit p. 85.) and of private verbs that refer to mental activities or refer to sensations (op cit p. 95) and verbs of state that "refer not to an activity but to a state or condition" (p. 97).

Underlying all these remarks are assumptions about how words mean, and even when writers, unlike Pit Corder, realise that stative verbs do not describe activities, there is still the assumption that it is the job of all verbs to 'describe', 'indicate', 'denote' or 'refer to' something, if not to activities then to 'states', 'mental perceptions', 'feelings' etc.

However, it should not necessarily be assumed that a word necessarily 'refers' to anything at all. To make this clear was one of the great contributions of Wittgenstein and his followers to thinking about language, and in the next section reference will be made to some writers in this tradition, who are of importance to our general theme.
CHAPTER 5
Linguistic Philosophy

As Quinton says in "Contemporary British Philosophy" (reprinted in Wittgenstein edited by George Pitcher p.11).

"The fundamental point of Wittgenstein's new theory of meaning [i.e. Philosophical Investigations 1953] is that the meaning of a word is not any sort of object for which the word stands." The unconscious assumption is often made when attempting to analyse meaning that all attempts at analysis should be ultimately reducible to the name-thing model. This indeed was the position taken by the early Wittgenstein in the Tractatus Logico-Philosophicus (1922) where elementary propositions envisaged as an arrangement of names picture the state of affairs, i.e. the real world as an arrangement of objects. "Sentences that do not express elementary pictorial assertions are either collections, overt or concealed, of elementary propositions, or they express no propositions at all and are devoid of meaning." (op cit p.5).

However, as Nowell-Smith (1954) points out, in the spirit of new Wittgenstein, names in fact do not mean at all (p.65). A foreigner confronted with a text on the British Constitution would be told if he asked the meaning of "Churchill" that actually Churchill "doesn't exactly mean anything; it is a man's name --. The word has a linguistic job to do but its job is one of meaning" (p.67).

Nor is it true to say that because the function of many words is to refer to people, things, actions, properties, etc. that this is the function of all words. Referring is only one of the many uses to which words or phrases or sentences may be put.

Implicit or explicit in the work of these philosophers is the fact that they believe a lot of confusion has been caused by philosophers
having a naive approach to the relationship between grammatical classes, such as noun, verb, adjective, etc. on the one hand, and such semantic concept as substance, activity and property on the other. As Flew comments (1956, pp.5-6, see also footnote 4 page 6).

"The Greek way of forming abstract noun substitutes from the neuter of the indefinite article and the adjective does something, though not of course very much, to explain the attraction for Plato of the Theory of Forms."

Nowell-Smith also argues that the doctrine that all adjectives stand for properties is responsible for Moore's conclusion that the word good is similar to yellow in standing for something simple and indefinable, though different from yellow in that while yellow is a natural property good is a non-natural property. It is only when we free ourselves from the name-thing model and ask what the words good and yellow are used to do that it becomes evident that while the latter is used to refer, the former is used for a variety of loosely resembling purposes such as the commendation of a course of action the giving of advice etc., etc. (op cit pp.64-65).

The relationship between syntactic classes and their meanings will be discussed later. However, having roughly established the general framework in which these philosophers operate, it is constructive to consider how two of them approach the fact that is central to this paper, namely that certain verbs in certain contexts do not normally take progressive aspect.
Urmson (1956) writes on so-called parenthetical verbs. He does not assume that these verbs describe or refer to activities, but nor also does he assume that these verbs denote or refer to states. Indeed, his approach is that in their primary use they do not refer to anything at all. Their function is quite different: it is "to prime the hearer to see the emotional significance, the logical relevance, and the reliability of our statements." (p.197).

The class is initially delimited on a linguistic rather than a conceptual basis. Parenthetical verbs can be inserted at the beginning of a sentence (with or without a following that) its middle or its end as in the following:-

1) I know (that) your son is a liar.
2) Your son is, I know, a liar.
3) Your son is a liar, I know.

When used parenthetically none of these verbs can be used with progressive aspect. This distinguishes the 'think' of

4) I am thinking about your son
from the 'think' of

5) I think that your son is a liar.

As the above quotation suggests Urmson wishes to divide the parentheticals into three groups.

A) Firstly, there are verbs that give emotional orientation to the statement with which they are associated, the only two he mentions are 'regret' and 'rejoice' as in

6) I regret that your son is dead.
7) I rejoice that your son is at home again.

I shall call these emotional parentheticals.

B) The second group of verbs is used to signal "how the statement is to be taken as fitting logically into the discussion." (p.198). These verbs include 'admit', 'presume', 'presuppose', 'confess', etc.

C) The third group to which he devotes most attention is "used to indicate the evidential situation in which the statement is made (though not to describe that situation) and hence to signal what degree of reliability is claimed for and should be accorded to the statement to which they are conjoined." (p.199). The verbs mentioned in the class include 'know', 'believe' and 'suspect', but presumably 'hear', 'understand', 'think', 'imagine' and many more could be included. I shall call these intellectual parentheticals.

Urmson maintains that in standard circumstances the making of a statement presupposes that it is both true and reasonable, indeed the possibility of lying depends on this presupposition.

When parenthetical verbs are associated with statements the hearer is helped to understand to what extent the presupposed truth and reasonableness is affirmed or modified by the speaker, i.e. to what extent the statement is backed up by evidence.

Compare the sentences:

8) I know } 
9) I think } that your son is a liar 
10) I hear }

The evidence implied by the use of 'know' is (or should be, if one is not oneself a liar or deliberately misleading) overwhelming.
The use of 'think' does not imply such overwhelming evidence, though the evidence should be good, while 'hear' signals the fact that somebody has told us and that is all the evidence there is.
Urmson compares parenthetical verbs with sentence adverbs on syntactic grounds, i.e., their parenthetical nature. Sentence adverbs are distinct from ordinary adverbs in that the latter are not moveable within the sentence while the former are.

Compare

Your son plays football, unfortunately and its alternative versions:

Your son, unfortunately, plays football
Unfortunately, your son plays football

with, for example

Your son plays football intelligently.

Urmson says further that "provided it is not construed as a list of synonyms we can couple these adverbs with parenthetical verbs as follows: happily - I rejoice; unfortunately - I regret; consequently - I infer (deduce); presumably - I presume; admittedly - I admit; certainly - I know. It is not possible to say that every adverb has a verb corresponding to it which has more or less the same import or vice-versa. But it does seem that these adverbs play much the same role." (op cit pp.200-201).

It is interesting to note in this connection that Greenbaum (1969) in his study of English adverbial usage delimits a class of "attitudinal disjuncts" on formal grounds which correspond, quite closely, to Urmson's semantic groupings of the parenthetical verbs. As Greenbaum puts it:

"Semantically attitudinal disjuncts can be assigned to two major groupings

[ 1 ] those that convey an attitude towards the truth-value of what is being said, e.g., clearly, certainly outwardly,

[ 2 ] those that convey any other attitudes towards what is being said."
Urmson's group B) above to which such verbs as 'admit', 'infer', 'deduce', etc. belong to Greenbaum's first grouping. (see p.203). We will put forward arguments later, however, suggesting that this group although certainly parenthetical in Urmson's sense, should not be considered as belonging to the same general class of verbs as groups A) and C).

Parenthetical verbs are used not only to "prime the hearer" they can be used with other persons and in other tenses as well. Urmson considers the verb 'believe' in this connection (pp.202-203).

The sentence 'Jones believes that the trains are working' can mean at least two things

a) It can be a case of reported speech equivalent to Jones says that he believes that the trains are working.

b) It can also be a prediction on the basis of his behaviour, e.g. rushing for the train that he would say, "I believe that the trains are running," if the situation arose.

In these circumstances it could be argued that the verb is being used dispositionally. Urmson, however, denies the analysis evident in Ryle (1949 pp.43 ff) that because verbs such as 'believe' do not describe an occurrence, they must describe a tendency to occurrences.

In a) and b) above "he believes" is reducible to someone saying "I believe" and the argument that the first person present tense use is in some sense primary is given statistical backing by the work of Akira Oka. (op cit). Working from a considerable amount of material both written and spoken, he has worked out the percentage use of progressive aspect with a large number of verbs. As a result of his analysis verbs are divided into ranks from 1-5. Rank 1 verbs are those where the percentage use of progressive aspect with verbs is between 0 and 5. Rank 2 verbs are those where the percentage is between 5-10 etc.
Rank 1 verbs are then divided into

a) "verbs indicating a mental or psychological state" ...... they are called I verbs. (p. 2. )

b) verbs indicating relationship.

It is clear that in his analysis of the class meaning of I verbs, Ofca is using the name-thing or reference model rather than the use model of Urmson. However, he states that he calls group a) I verbs because they occur much more frequently with I/we as subject both in statement and question and you as subject (in question), than with you as subject (in statement) or a third person subject (both in statement and question." (p. 2-3). He gives statistical evidence to back up this assertion.

Finally, three points about the relationship between sentence and verbs and parentheticals.

Firstly, there seem to be many more sentence adverbials than parenthetical verbs to express attitudes of any kind, and this is especially true of what we wish to convey emotionally.

Secondly, it is noticeable and significant that Greenbaum is not tempted to say that attitudinal disjuncts name denote or refer to anything but that they "convey" something.

Thirdly, some sentence adverbs and intellectual parentheticals can also be roughly related to modal verbs. Compare the following sentences.

I know your son is in London.
Your son is, certainly, in London.
Your son must be in London.
I expect your son is in London.
Your son is, probably, in London.
Your son should be in London.
I believe Your son is in London.

Your son is (perhaps) in London.

Your son (might) be in London.

Your son (may) be in London.

Your son (can) be in London.

Your son (could) be in London.
CHAPTER 7
Austin and Performative Verbs

We will return to Urmson's views later in this paper. However, "Parenthetical Verbs" is an article that has not received a great deal of attention from linguists. In contrast, J. L. Austin's book "How to do Things with Words," which is the subject of the present chapter has recently been discussed by linguists such as Macaulay (1968), Boyd and Thorne (1969), Seuren (1969) and Ross (1970).

Austin begins the work by delimiting a class of performatory utterances. These utterances are characterised by the presence of a verb in the present tense, non-continuous, non-habitual 'aspect', together with the first person singular personal pronoun - I.

Examples are such sentences as:

1) I name this ship the Queen Elizabeth.
2) I bet you sixpence that it will rain tomorrow.
3) I promise you that I will arrive on time.

As Austin point out (P.6)

"In these examples it seems clear that to utter the sentence (in of course the appropriate circumstances) is not to describe my doing of what I should be said in so uttering to be doing, or to state that I am doing it: it is to do it."

The making of a performative utterance, or (to put it alternately) the use of a verb in a performative sense is "far from being usually, even if it is ever the sole thing necessary if the act is to be deemed to have been performed." (P.8). Indeed, "the action may be performed in ways other than by a performative utterance." (P.9). For example, we may bet by going to a betting shop filling in a slip and handing it over to the bookmaker without saying a word.

Performatives are not true or false like statements, what Austin calls constatives. However, they may be used inappropriately or insincerely.
(See particularly Lecture 2 pp 12 - 24). It would be inappropriate for the milkman to say "I pronounce you man and wife" or for a priest to say it in the presence of two cars. It would be insincere for me to say "I congratulate you on your appointment when I am not pleased or "I advise you to go" when I do not believe that course of action expedient for the person I am talking to.

Performative utterances in Austin's terms may be happy or unhappy as compared to constatives which may be true or false.

Later in the book Austin argues that the performative/constative distinction is a less useful distinction than that between illocutionary/locutionary aspects of the speech act, together with a further aspect the perlocutionary.

What Austin means by these distinctions can be exhibited by the consideration of a sentence such as:

4) There is a bull over there.

In certain circumstances this seemingly constative sentence can be uttered as a warning, and it is this aspect of the utterance that is abstracted and referred to as the "illocutionary force." In other words, 4) can be equivalent in meaning to

5) I hereby warn you that there is a bull over there.

Another aspect of the utterance that can be abstracted is the locutionary, that is open to verification in terms of "an oversimplified notion of correspondence with the facts." (P.145).

The perlocutionary aspect of the utterance is the effect brought about as a result of the utterance, e.g. that people do not go near the bull or close the gate as a result of the warning.

He gives examples of verbs which embody as far as possible "pure" locutions, illocutions and perlocutions on pp 101 - 102.

6)  
   a) "Locution. He said to me, 'Shoot her!'

   b) Illocution. He urged (or advised, ordered, etc.) me to shoot her.
6) c) Perlocution. He persuaded me to shoot her.

He got me to (or made me) shoot her.

Amongst other examples cited of "pure" illocutionary and perlocutionary verbs are 'argue' and 'convince' as in, for example,

7) a) Illocution. He argued that the world was round.

b) Perlocution. He convinced me that the world was round.

Austin, who is mainly interested in illocutionary force continues by arguing that saying and stating etc "seem to meet all the criteria we had for distinguishing the illocutionary act." (P.133). These criteria include the fact that the following sentence is unexceptional.

8) "In saying that it was raining I was not betting or arguing or warning: I was simply stating a fact." (P.133).

Also what appear to be constatives i.e. "pure" statements can be judged on the happiness/unhappiness dimension as well as the truth/falsity dimension.

Statements may be inappropriate or insincere. Somebody who says that the present King of France is bald is not saying something that is true or false but rather something inappropriate, cf. the priest "marrying" two cars above. Similarly, somebody who says there are 50 people in the next room, when he has absolutely no grounds for saying so, has (like the milkman performing the wedding ceremony) no right to say so. Insincerities also apply to statements i.e. the cat is on the mat "implies" that I believe that the cat is there, in a parallel way to which, I promise that I will be there "implies" that I intend to be there.

Just as statements may be inappropriate or sincere so do performatives have a truth/falsity dimension: an estimate of a number or the judgement that a man is guilty may be true or false, etc.

Austin, therefore, concludes that "in general and for all utterances that we have considered (except, perhaps for swearing) we have found
(1) Happiness/unhappiness dimension
(1a) An illocutionary force
(2) Truth/falseness dimension
(2a) A locutionary meaning (sense and reference)

Austin and linguistic theory

The broad distinction between the illocutionary and locutionary is reflected in the works of many modern linguists. Compare Fillmore (1968) and his division of sentences into Modality and Proposition; Seuren (1969) and his division into Operators and Nucleus and Halliday's (1970) distinction between an interpersonal and ideational function. In the case of Seuren some reference is made to Austin's theory (see P.139). In each case, however, the conclusion appears to have been arrived at independently.

In many places Austin seems close to formulating a distinction between deep and surface structure. For example on page 32 he draws a distinction between explicit and implicit performatives.

"It is of course both obvious and important that we can on occasion use the utterance 'go' to achieve practically the same as we achieve by the utterance 'I order you to go':"

Again (P.69) he says that the explicit performative utterance 'I promise that I shall be there' could take the form 'I shall be there.' Similarly (pp 61-62) he argues that a possible way of defining a performative utterance is saying that "any utterance which is in fact a performative should be reducible or expandible or analysable into a form with a verb in the first person singular present indicative active." For example, 'you are hereby warned' can be changed to 'I hereby warn you.'

Such remarks can easily be expressed in terms of a transformational generative grammar i.e. it can be argued that a performative element underlies all the sentences of a language and that a sentence such as:
I (hereby) order you to go.

may be reduced to

Go!

by an optional deletion transformation, or changed to

You are (hereby) ordered to go.

by the operation of the passive transformation. In both cases the transformations are meaning-preserving.

Such an approach has been made by Macaulay (1968) and Ross (1970) and reference will be made to their theories later together with an attempt to incorporate the ideas of Austin and Urmson into a general linguistic theory. We will, in so doing, try to relate performative verbs and the idea of "perlocution" to the concept of causation which is also of importance in current linguistic research. However, before examining causation in grammar, transitivity to which it is related must be examined.
PART 3

TRANSLITIVITY AND CAUSATION
CHAPTER 8

Transitivity

We have already seen that the traditional definition of a verb as a doing word is implicit in the works of Lakoff, Seuren, etc. (cf also Halliday (1970) p.153), in the sense that typical verbs can answer implicit or explicit questions with the pro-verb 'do'. We have, however, also seen that some verbs are not similarly associated with 'do' although, formally, they must still be considered as belonging to the class of verb. This can be alternatively expressed as follows: not all verbs are doing words but all doing words are verbs.

Lyons has treated the traditional definition of substantive as the name of a person or thing in a similar way in recent works (1966 and 1968). His argument is briefly the following. The criteria for membership of the grammatical class 'noun' are formal. From this standpoint 'boy', 'car', 'John', 'beauty', 'truth', 'electricity' all belong to the class. Of these some ('boy' for example) refer to people or things while others ('truth' for example) do not, so that it is obviously wrong to define a noun as the name of, or (in terms of linguistic philosophy) a word typically used to refer to, a person or thing.

However, as Lyons points out, there are two distinct questions to be answered here:

a) Do all nouns denote or refer to people or things ?

b) Do all the words that denote or refer to people or things belong to the class of nouns ?

While the answer to a) is no, the answer to b) is almost
definitely yes: or as Lyons puts it (1966 p.214),

"We will not expect to find that all members of the class X name things [are used to refer to or name things], but we may expect to find that all lexical items that do denote things [that are used to name or refer to things] fall within a syntactic class X." The alternative version in square brackets is mine to square Lyons' account with the conclusions of Ch.5 above.

It would indeed be surprising if there were absolutely no truth in traditional grammatical explanations and definitions, and I believe that arguments analogous to the above can be used to save the traditional definition of transitivity. The term transitivity derives, according to Robins from the Greek grammarian Apollonius who defines "the active verb as a word that designates an action 'passing over to something or someone else'" (Robins (1967) p.37). It is of course easy to ridicule the traditional definition as e.g. Robins (1964) does when with reference to the sentence 'John loves Mary' he asks, "who does what to whom?" However, in an analogous way to the above we can restate the traditional definition of transitivity in the following way i.e. not that all verbs that are grammatically transitive refer to the passing over of an action from subject to object, but that all actions of this type are referred to by means of a transitive construction.

Lyons (1968) distinguishes many types of verbs, which would all presumably have the dictionary entry - verb (transitive or intransitive).

For example, a verb may appear intransitive formally as well as transitive because of object-deletion, as in:

1) a) John reads books.
    or b) John reads.

Other verbs are implicitly reflexive e.g.

2) John never washes (himself) before lunch:
3) John never shaves before lunch
is ambiguous because John may or may not be a barber in that sentence.
(see Lyons op. cit. pp.360-363).

Lyons also notes the relation between causation and transitivity
i.e. that "some transitives are derivable from the one-place intransitive
construction by means of a causative operation which has the effect
of introducing an agentive subject" (op. cit p.359). The verbs in
question include 'move', 'open', 'change', 'stop', etc. and can be
illustrated in the sentences,

4) a) The stone moved,
    b) The door opened,
and their causative counterparts,

5) a) John moved the stone.
    b) John opened the door.

However, as Lyons goes on to point out, not all "transitive verbs
lend themselves very happily to analysis as realisations of verb + caus.
They may be called basically transitive verbs" (p.384). Examples
would be such verbs as 'hit', 'look at', 'read', 'study', etc.,
i.e. there are no constructions

6) a) the table hit,
    b) the picture looked at,
related to

7) a) John hit the table.
    b) John looked at the picture,
as sentences like 4) are related to sentences like 5).

We will now analyse the notion of causation and transitivity
in relation to the theories of Fillmore.
Fillmore (1968) does not seem to distinguish between Lyons' class of basically transitive verbs and causatives. In his theory transitive and intransitive constructions and the interpretation of certain nouns as subjects and other nouns as objects in transitive constructions, are the result of the operation of deep structive cases. Cases are semantic and syntactic primitives which specify the relationship of the verb to the nouns with which it is associated in a given construction. These relationships are tenseless and belong together with the verb and the noun or nouns with which it is related to the propositional constituent. The other constituent 'modality' covers "such modalities on the sentence as a whole as negation, tense, mood and aspect." (p.23). He does not, however, discuss this constituent further.

The first rule of his grammar is therefore:

\[
\text{Sentence} \rightarrow \text{Modality} + \text{Proposition}, \text{a rule which he assumes to be universal.}
\]

The expansion of the proposition takes the form of "a verb and one or more case-categories," which will later be given "the categorial realisation as N,P (except for one which may be an embedded S)." Certain cases will, moreover, have certain prepositions characteristically associated with them. (p.32).

As I intend to comment on them in some detail, I will now quote in full Fillmore's definitions of five of the cases, omitting the locative.
"The case notions comprise a set of universal presumably innate concepts". They include:

**Agentive (A)**, the case of the typically animate perceived instigator of the action identified by the verb.

**Instrumental (I)**, the case of the inanimate force or object causally involved in the action or state identified by the verb.

**Dative (D)**, the case of the animate being affected by the state or action identified by the verb.

**Factive (F)**, the case of the object or being resulting from the action or state identified by the verb or understood as part of the meaning of the verb.

**Objective (O)**, the semantically most neutral case, the case of anything representable by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself: conceivably the concept should be limited to things which are affected by the action or state identified by the verb. (pp.24-25).

While in English, cases are most typically manifested in surface structure by prepositions and word order, other languages 'inflect' the noun. However, none of these surface structure phenomena are to be taken as more than a guide to deep structure case.

The propositional constituent is expandable in the following manner:

Proposition $\rightarrow V + C_1 + \ldots + C_n$, where it is understood that $C_i, C_n$ etc. are cases typically manifested in English by the characteristic preposition associated with a given case $- K -$ and an N.F.

To conclude this highly abbreviated account of Fillmore's theory. Verbs can be inserted into a sentence if the "frame features"
which are associated with a particular verb in the lexis and
"which indicate the set of case frames into which a given verb
may be inserted," are consistent with "the particular array of cases,
the 'case-frame' provided by the sentence." (p. 27).
CHAPTER 10

Analysis of Fillmore's Cases

In Fillmore's system, nouns in the agentive and dative cases are compulsorily animate. (p.26 though see footnote 31 page 24), the difference being that while agentives are instigatory, datives are affected. Fillmore (p.31) equates the verbs that 'take' datives rather than agentives with Lakoff's class of stative verbs, so that the transformation that introduces progressive aspect, true imperatives, etc. cannot apply if the case-frame contains a D and no A. Halliday (1970) p.153 makes essentially the same point in his discussion of what he calls mental process clauses, where we cannot really talk of an actor or a goal, but where the "inherent roles are those of a human or at any rate animate being whose consciousness is impinged upon, and some phenomenon which impinges upon it."

The agentive differs from the instrumental in that the latter is necessarily inanimate while as we have seen the former is animate. They share, however, the characteristic that in Fillmore's system they are the cases that are in some sense "responsible" for the occurrence of the action identified by the verb. The agentive is said to be the case of the "instigator" of the action and the instrumental the case of the noun "causally involved." The agentive is the preferred or unmarked subject. In Fillmore's words:

"In general the unmarked subject choice seems to follow the following rule:

If there is an A, it becomes the subject; otherwise if there is an I, it becomes the subject; otherwise the subject is the O." (p.33).
Although Fillmore does not express himself in this way the preferred object choice would seem to be factitive or objective, depending on the nature of the verb. Fillmore says that the factitive can be the case of an object or being, though it is difficult to think of many instances where a being is the result of an action identified by the verb. He is presumably thinking of such sentences as:

1) He breeds horses.
2) God created man.
3) They produced a child.

The objective, should "conceivably" be limited to affected objects according to Fillmore and if this conceivable definition is accepted then the objective differs from the dative only in terms of animateness, and differs from the factitive in terms of the distinction mentioned earlier in his paper (p.4) between effected and affected objects. Fillmore amusingly illustrates this distinction with reference to such sentences as,

4) John paints nudes

which he points out is ambiguous, though it can be disambiguated because "the effected object does not permit interrogation of the verb with do to." (p.4). Thus

"What John does to nudes is paint them" is only capable of being interpreted with nudes as an affected object.

Accepting the "conceivable" definition of the objective case and ignoring such sentences as 1) - 3) above, i.e. restricting factitives to inanimate objects, we can achieve an idealised and, doubtless somewhat distorted, componential analysis of Fillmore's cases as follows:
Agentive + Animate + instigatory
Dative + Animate + affected
Factive - Animate + effected
Objective - Animate + affected
Instrumental - Animate + causative

The question now arises as to what Fillmore means by the terms 'agentive' and 'instigate'.

Linguists seem undecided as to how the term 'agentive' should be used. Leech (op. cit.) relates agency to causation. He says: "Agency I take to be a particular instance of the broad concept of causation: it is namely a limitation of that notion to human causes."
(p.205).

Fillmore is careful, however, not to mention causation with reference to the term agentive. However, in the idealised componential analysis above both effected and affected objects are the result of the activity identified by the verb, i.e., no matter which interpretation we give to 'nudes' in 4) above a state of affairs is in some way changed as a result of the activity of painting, and results have causes.

To make the situation clearer let us consider the following sentences from a notional point of view:

5) John studies literature.
6) Peter makes cakes.
7) Charles moves stones.

In notional terms the action of studying can hardly be said to effect or affect literature, in the way cakes are effected by the action of making, or stones affected by the action of moving.
What is common to 6) and 7), however, is the fact that some change is brought about as a result of the action referred to by the verb. The existence of the cakes and the movement of the stones are the result of the causal activity of Peter and Charles respectively.

Verbs like 'make' and 'move' should be distinguished from verbs like 'study' in that the former take agents in Leech's sense as subjects while the latter do not. John cannot be called agent in 5) above, and we will use the term 'actor' to characterise the subject of such verbs.

Thus, in a manner akin to Anderson (1970), I suggest a distinction between two-term causative verbs that 'take' an agent in subject position and two-term non-causative verbs that 'take' an actor in subject position. The causative verbs will then be subdivided into those that take an effected and those that take an affected object.

Two-term non-causative verbs share most of the syntactic characteristics of two-term causative verbs.

In some respects they have syntactic characteristics similar to causative verbs that take effected objects, e.g. while the following are all acceptable sentences.

8) What he does is  
   a) study literature  
   b) make cakes  
   c) move stones,

note the unacceptability of 9) a) and b).

9) a) What he does to literature is study it.  
   b) What he does to cakes is make them  
   and the acceptability of c).

   c) What he does to stones is move them.

In general, however, the most important syntactic differences between the classes are between causatives and non-causatives.
It is strange that Fillmore, himself, in a later work, draws attention to some of these differences, though not relating them to the same conceptual framework as the above.

Fillmore (1970) studies in detail the grammar of hitting and breaking. He notes that while there are what appear to be three "verbs" of breaking as in the sentences:

a) John broke the stock with a rock.
10) b) A rock broke the stick.
 c) The stick broke,
there appear to be only two "verbs" of hitting:

11) a) John hit the stick with a rock.
 b) A rock hit the stick.
That is, there is no construction with 'hit' comparable to 10) c) above, and

c) The stick hit
is an unacceptable sentence. In Lyons' terminology 'hit' is a basically transitive verb (see above p. 52).

He then points out that there are many verbs that behave syntactically like break, such as 'bend', 'fold', 'shatter' and 'crack', and many that behave syntactically like 'hit' such as 'slap', 'strike', 'bump' and 'stroke'. Since 'hit' and 'break' are members of classes of verbs, the question arises as to which "properties are associated in general with the verb classes to which they belong" and which are "more uniquely associated with the two words as individual lexical items." (1970 p. 125).

He calls the verbs of the class to which 'break' belongs "change of state" verbs because in each case the verb asserts "of an object a change in time from one 'state' to another," while verbs of the class to which 'hit' belongs are called surface-contact verbs because, while they assert the occurrence of some physical contact
between two objects, they do not "infer that the objects have undergone any essential change". (p.125). Fillmore compares the two sentences:

I hit the window with a hammer: it didn't faze the window but the hammer shattered.

*I broke the window with a hammer: it didn't faze the window but the hammer shattered.

"Faze", I am informed (by a reliable native informant) can be translated as affect, suggesting that change of state verbs and verbs that take "affected" objects should be identified, i.e. 'break' belongs to the same class as 'move', as, indeed, Fillmore indicates (p.130). 'Hit' on the other hand, has the same syntactic characteristics as 'study'.

* Literature studies is unacceptable, and the same semantic characteristics in so far as no change of state is asserted of the object.

A further important difference between what we may now call 'causative' and basically transitive verbs concerns the passive transformation and is brought out by Fillmore in the same article. Though Fillmore is only concerned with change of state verbs, i.e. verbs that take 'affected' objects, the same argument also holds for verbs that take factitive objects.

Sentences that appear to contain causative verbs in the passive are ambiguous. Consider Fillmore's examples:

\[
\begin{align*}
\text{broken} \\
\text{bent} \\
\text{shattered}
\end{align*}
\]

The table was

These sentences are ambiguous because they may be interpreted as
passive transforms of active sentences, i.e.

\[
\begin{align*}
\text{broke} \\
\text{bent} \\
\text{shattered}
\end{align*}
\]

Somebody \{the table.\}

or as sentences that contain 'stative' adjectives, i.e. adjectives that refer to a state that was in existence as a result of activity at a previous time.

Sentences containing basically transitive verbs are not similarly ambiguous, while the above argument to the effect that this syntactic fact held for all causatives can be seen from the analogous ambiguity of the following sentences:

The cake was made.
The bridge was built.
The letter was written.
<table>
<thead>
<tr>
<th>Basically transitive verbs</th>
<th>Change of state verbs, i.e. verbs that take Affected objects</th>
<th>Verbs that take Effected Objects</th>
</tr>
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<tr>
<td>study</td>
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<td>call</td>
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<td>fight</td>
<td>persuade</td>
<td>etc.</td>
</tr>
<tr>
<td>sit on</td>
<td>shorten</td>
<td>etc.</td>
</tr>
<tr>
<td>stand on</td>
<td>frighten</td>
<td>etc.</td>
</tr>
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etc. etc.
CHAPTER 11

Digression on the perfect in English

The above drawn distinction between causative verbs and basically transitive verbs also enables us to relate and find room for the varying interpretations given to the meaning of the perfective aspect in English.

Nowadays, the most favoured interpretation is probably that given by Tvedell (1960), namely, the perfect is used in situations where an action that occurred in the past is in some way relevant to the current speech situation. Palmer (1965) explains the meaning of the perfect in a similar way. By comparing the perfect with the past in sentences such as:

1) a) I have seen/saw John this morning.
   b) I have mended/mended it today.
   c) He has written/wrote the letter today,

he notes that "the periods of time indicated by the present perfect and the past overlap." Why then do we use one form rather than the other? He states that the perfect always indicates a period of time that includes the present and that in cases like the above when the perfect is used - "a period of time that includes the present is chosen precisely because there are features of the present that directly link it to past activity." (P.74).

However, other analysts have given different interpretations. Common among text-books of English as a foreign language is the so-called perfect of result. To Pit Corder the perfect is used "for action which took place in the past, the results of which we can feel or observe in the present." (op cit P.81). Hornby also talks of the perfect being "used to refer to the present result of an activity or experience in the past." (op cit P.95).
This interpretation has been criticised (wrongly in my view - see below) by Palmer (op cit P.73) as "misleading unless we interpret results to include 'nil' results as is shown by:

2) I've hit it twice, but it's still standing up.
3) I've written, but they haven't replied.

A third interpretation of the perfect is discussed in the work of Robert Allen (1966). He argues that "the opposition between past-verb forms and the so-called present perfect verb forms is primarily one of identified time/non-identified time." (P.157) He maintains, indeed, that a profitable comparison can be drawn between the use of the indefinite article and the perfect, and the definite article and the past (pp 152 - 158). For example the use of the past tense of the verb in

4) I saw him
implies either that the time or location is included in the context of situation or that the sentence is incomplete and should be expanded to

5) a) I saw him last week.
   b) I saw him in Greece.

On the other hand,

6) I have seen him
not only does not imply that the time is definite it positively implies that the time is indefinite as can be judged from the unacceptability of

7) #I have seen him at 2.30.

A distinction between causative verbs and all others, including basically transitive verbs enables us to find room for these varying interpretations. We can interpret the perfect as always contributing the meaning of current relevance, that it is used when we wish to relate an event that happened at some time in the past to the current speech situation. When a causative verb is used in the perfect, it is the result of that causal process that will be currently relevant.
Notice in this connection the transformational relationship noted by Lyons (1968 P.196) between

7) a) John has built the house.

and both

b) The house has been built.

and c) The house is built.

What Lyons did not point out was the fact that this relationship is one that holds for causative verbs only whether they take affected or effected objects, (cf the list of causative verbs given above for confirmation of this fact.) Indeed to say this, is only to reiterate, in terms of the present, the ambiguity, pointed out by Fillmore (1970), shown by causative verbs in passive constructions in the past; i.e. 7) c) above is also related to

7) d) Somebody builds the house (e.g. every year) which is a factually unlikely, but a grammatically possible and meaningful sentence.

Non-causative verbs do not have this option. For example take the 'stative' verb 'see' in the sentence

8) a) Mary is seen by John.

This sentence can only be considered as a transform of

8) b) John sees Mary (e.g. regularly)

and not of

8) c) John has seen Mary.

Similarly take the basically transitive verb 'study' in the sentence

9) a) Literature is studied by John.

While this sentence is transformationally related to

9) b) John studies literature.

it is not similarly related to

9) c) John has studied literature.
Thus to refer to the criticism of the result interpretation made by Palmer and exemplified in sentences 2) and 3) above: in 3) write is a verb that takes an effected object and is, therefore, a causative. The result of the action of writing is the letter and not a reply to it. In 2) 'hit' is not a causative, but what Fillmore called a surface contact verb, the class of which we have considered as forming a subset of the class of basically transitive verbs. Had the verb 'break' been used instead of 'hit' in a sentence like 2) e.g.:

10) I have broken it, but it's still standing up.

some other result i.e. the fact that it is broken would have been evident, despite the fact that it is still standing up.

It is equally noticeable that when non-causative verbs are used in the perfect as 8) c) or 9) c) above, although the current relevance interpretation is still present, there is also the strong suggestion that the event took place in the indefinite as opposed to the definite past, an interpretation which is strong because of the absence of any causal 'overtones.'

Finally, it should be noted that cause and result exist in language independently of causative verbs, and that a sentence which contains a non-causative verb may take on a causative interpretation because of what may be termed the facts of the situation. This is often expressed linguistically by use of what Leech calls 'the causative conjunction because' (op cit P.208), and can be illustrated by the following question and answer sequences:

A. Why is she crying?
B. Because she has fallen down.
A. Why is he so well read?
B. Because he has studied literature.
A. Why are you so sure?
B. Because I have seen the film.
However, in these instances it is the sentences in which the verb appears that are causative, and not the non-causative verb. Thus, the sentence can be embedded before the causative verb 'make' in each instance:

- It's having fallen down that is making her cry.
- It's having studied literature that makes her so well read.
- It's having seen the film that makes me so sure.

Thus, while a non-causative verb in the perfect can take on a resultative interpretation as part of a causative sentence, a causative verb must have this interpretation, in the perfect, even if some further result which was intended was not achieved as in 3) above.
I propose now an amendment of the ‘idealised’ componential analysis of Fillmore’s cases (above p. 58) in the following terms:

Active (Act) + Actor - Causative
Causative (C) + Actor + Causative
Dative (D) + Affected + Animate
Factitive (F) + Affected - Animate
Affective (Af) + Affected - Animate
Objective (O) - Actor - Resultative

Various points need to be made about this revised componential analysis.

Firstly, Fillmore’s agentive case has been divided into two cases, one causative and the other not, and neither is specified for animacy; the reason for which will become clear presently.

Secondly, of the four other cases three are related to causation in some way. The semantic specifications Affected and Effected are of course types of results of previous causal activity. The other case ‘objective’ is minimally specified and has no relation to causation but is related to the Active case. The above, of course, illustrates what Fillmore calls “dependency relations - among cases (see Fillmore (1968) p. 87).

Thirdly, if we could be sure that there were only two types of result there would be no need for both terms affected and effected.

Fourthly, and most importantly, we have omitted the Instrumental case from the above componential analysis. This is because the situation is not as clear as Fillmore suggests.
With a verb such as 'open' it is clear that in the sentences

1) John opened the door with a key.

or

2) The key opened the door,

'the key' is an instrument in both cases, used by a human agent. The situation differs, however, in that while the agent is mentioned in 1) it is only 'understood' in 2), assuming that 2) does not occur in a fairy story. In Halliday's terms (1970 pp 150 - 152), the verb 'open' is always associated with three 'inherent roles' as is the verb 'pelt', that he considers in this connection, in such sentences as

3) "Roderick pelted the crocodile with stones."

4) "The crocodile got pelted."

As Halliday points out: "The verb pelt - is always associated with three participant roles: a pelter, a pelted and something to pelt with" (P.150). "So

5) Roderick pelted the crocodile

is (inherently) instrumental, and although no instrument is mentioned the receiver interprets the message as having an instrumental role associated with it." (pp 150 - 151)

Similarly,

6) Stones pelted the crocodile.

or 2) above are inherently agentive, i.e. the receiver will interpret the process as having an agentive role associated.

However, not all non-agentive instrumentals can be regarded as, what we may term, "upgraded instrumentals." Earlier in the same article (P.148), Halliday considers the sentence

7) It was singed by the fire.

saying that some might consider (and Fillmore is mentioned explicitly) "by the fire" instrument, rather than actor, on the grounds that fire is inanimate.
Fillmore (1968 P.32) postulates that the "rules for English prepositions may look something like this: the A preposition is 'by'; the I preposition is 'by' if there is no A, otherwise it is 'with';"

However, the I preposition may be 'with' even when there is no A, i.e.

6) The door was opened by the key.

or 9) The door was opened with the key.

are both possible.

The point is, as Halliday points out (op cit P.148) that "with is not normally used where the action is unintentional," so that

10) It was singed with the fire is unacceptable.

Halliday suggests that "we need here a further distinction between instrument and natural force," and there seems to be two possible ways of changing Fillmore's theory to conform to this proposal. We could produce a new case or embody the suggestion implied in the componential analysis, abandoning the rule that all causative subjects are either animate agentives or inanimate instrumentals and subcategorise the causative verbs in the lexis as taking animate subjects, inanimate subjects, or both by context-feature rules in a manner similar to Chomsky (1965). Fillmore has, it seems, made the mistake of elevating the typical instance, the statistical probability, into a grammatical rule, i.e. because most verbs take animate subjects he says (with reservations) that all must. However, once the distinction between basic transitive verbs and causative verbs has been made, it becomes clear that as far as causative verbs are concerned, animate agents, inanimate forces and "upgraded instrumentals," are not the only possible subjects.
Leech in his discussion of causation has this to say: (op cit P.208)

"The element preceding ⟷ CAU is completely unspecified: it may be a cluster specifying a human agency, or a non-human even inanimate cause. It is also possible for the preceding element as well as the following to be a rank-shifted predication in which case ⟷ CAU is generally expressed by because or some other causative conjunction." In Leech's theory rank shifted predication is "limited to the case of a predication which is a constituent of another predication," (P.26) and "may be likened to the embedding principle of the phrase structure component of a transformational grammar." (pp 25 - 26).

Sentence embedding is accounted for in Fillmore (1968) by the proposal that S is always embedded under the 0 case, so that, for example, before the subject copying transformation, the underlying representation for, "It is true that John likes Mary," is (1968 P.41).

```
S
   ├── Mod
   │    └── V
   │         └── O
   │             └── S
   └── Prop
        └── true
             └── that John likes Mary
```

However, Leech's proposal to the effect that embedding can occur on either side of the causative verb is not considered by Fillmore, but it seems to explain satisfactorily the following sentences 1) - 3) below,
containing the verb 'make'.

1) John made a cake
will have the following underlying representation in our amended version of Fillmore's case system and with the K nodes omitted.

A.

```
S
   |  Mad  |  Prop  |
   /   |       |
past |       |
     | V     | C     |
     |       |       |
     | make  | John  |
     |       |       |
     |       | F     |
     |       |       |
     |       | NP    |
     |       |     |     |
     |     | DUT  |     |
     |     |     |     |
     |     |     | N    |
     |     |     |       |
     |     |     |       |
     |     |     | cake  |
```

However, as Lyons points out (1968 P.439) 'make' is not only the minimally specified 'existential causative' taking an object of result, (the factitive case in the above representation), but also a causative auxiliary as in the following sentence

2) John made Mary eat a cake.

The most natural underlying representation for 2) would appear to be:
This analysis is supported by Anderson (1970) who also treats 'make' "as an effective sub-type of 'causative'." He points out that "such a treatment would explain why it is that 'make' occurs as one of the minimally specified causative verbs that take a sentential objective — as in 'I made John leave.' Otherwise it is difficult to show a systematic relationship between the occurrence of 'make' with an object of result and its appearance as a superordinate causative." (op cit P.102).

It should be noted, however that make does not take a "sentential objective," but rather a "propositional objective." The sentential element is devoid of tense aspect and modality as can be seen e.g. from the unacceptability of the following sentences

```
# John made Mary ate a cake
can eat a cake
is eating a cake.
```

As Leech's proposal implies, sentence, or propositional embedding can also take place under the causative node. Thus
3) The singing of the choir made the audience happy.

can be given the following representation:

\[
\begin{array}{c}
\text{S} \\
/ \text{Mod} \quad \text{Prep} \\
\text{V} \quad \text{C} \\
\text{past} \quad \text{make} \quad \text{the choir sing} \\
\text{F} \\
\text{the audience happy}
\end{array}
\]

Such an approach obviously changes Fillmore's case system fairly radically, however, and poses the question as to whether the term 'case' should still be used. Case as a grammatical category has traditionally been associated with the noun and its inflectional possibilities. Derivations such as B.) and C.) above can probably be best expressed by regarding such 'semantic primitives' as cause and factitive, as semantic slots capable of taking at least two types of syntactic filler, i.e. a N.P. and a proposition - a type of semantic/syntactic tagmemes.
CHAPTER 14

Cause, Change and Result

In this chapter, where the analysis owes a great deal to Lyons (1968 especially pp.397 – 399), the concept of change and its relation to grammatical theory will be examined more closely. This concept has already been utilised in the description of two classes of verbs, namely the class that Svartvik calls 'mutative verbs' (see above p.22) and the class that Fillmore calls 'change of state verbs.'

The two classes of verbs appear to be related in the following manner. In sentences where mutative verbs are used, e.g.

1 a) John is becoming upset.
   b) The chair is getting broken.
   c) The goose is getting fat.

change (in progress in the above examples) is indicated, but the cause of the change is unspecified: while in sentences where their causative change of state equivalents are used namely:

2 a) Charles is upsetting John.
   b) Charles is breaking the chair.
   c) Charles is fattening the goose.

the cause of the change is specified in addition to the change itself.

Change of state verbs, therefore, i.e. verbs, that in our grammatical framework, can be inserted into the C — Af frame, are also mutative verbs, differing from them only in that they can take causes as subjects.

Thus, change or mutation can be considered as the class meaning of large numbers of verbs, though again it is evident that the basic transitives that are inserted into the A — 0 frame do not share this meaning, i.e. there is no change in progress indicated in the following sentences, though there is activity in progress:
3) a) He is hitting the ball.
   b) He is studying literature.
   c) He is reading a book, etc.

The class meaning of the verbs that can be inserted into the C — F frame is intuitively clear, and may be expressed as production or creation: though, whether this can be related to the concept of change, and if so, in what sense, is problematical. For the purposes of this study, we will assume that the class meaning of these two types of verbs cannot be so related.

When the process of change is at an end, and a result thereby attained, this may be expressed in many ways. Firstly, the cause of the result may be specifically mentioned, and the resultative interpretation, attaching to all causative verbs when used in the perfect, relied upon to ensure that we are referring to a state that is in existence at the present, e.g.

4) a) Charles has upset John.
   b) Charles has broken the chair.
   c) Charles has fattened the goose.

Secondly, it may be particularly indicated that the process of change is at an end, by the use of the perfect with a mutative verb as in:

5) a) John has become upset.
   b) The chair has got broken.
   c) The goose has got fat.

Thirdly, the resultative state may be stressed by the use of a stative adjective in association with the copula. In this instance the causative agency responsible for the resultative state will be more or less implied according to context, e.g.
6) a) John is upset.
   b) The chair is broken.
   c) The goose is fat.

Before continuing, there are two points to be made with reference to the above:

A) it can now be seen that it is the 'change' meaning, that is contained in causative verbs, that is responsible for the resultative interpretation they get when used in the perfect. i.e. 5) implies 6) as much as 4) implies 6).

B) there are, of course, other possibilities for expressing the idea of result, some of which have been already mentioned, e.g.

The goose is/has been fattened.

The chair has been broken.

Consideration of such sentences would, however, complicate the issue, and 4) - 6) will suffice for our present purposes.

Mutative verbs and change of state verbs refer to what might be called changes of quality or condition. Change may be of a different nature, however; there is also change of location expressed by the verbs of motion, for example.

Corresponding to sentences like 1) above, there are sentences like 7) below, which signify that change is in progress, but where the cause of the change is unspecified.

7) a) John is going to Ulster.
   b) Mary is coming to London.

Then corresponding to 2) above, there are sentences like 8) which not only signify that change is in progress, but also specify the cause of the change.
8) a) Charles is taking John to Ulster.
   b) The regiment is sending John to Ulster.
   c) Charles is bringing Mary to London.

Like 4) we have examples like 9) below, where perfective aspect in combination with a causative verb implies a resultative interpretation.

9) a) Charles has taken John to Ulster.
   b) The regiment has sent John to Ulster.
   c) Charles has brought Mary to London.

Perfective aspect with verbs signifying change of location, illustrated in 10) below, are similar to the mutative verbs with perfective aspect as in 5) where again a resultative interpretation is implied.

10) a) John has gone to Ulster.
    b) Mary has come to London.

The result implied by 9) and 10) is like 6) above expressed by the present tense of the copula, though in this case a locative expression, rather than a stative adjective, is used as in,

11) a) John is in Ulster.
    b) Mary is in London.

A further type of change is change of possession. Like Bierwisch (1970 p.176) we would assert that 12) below (like 7) and 1)) embodies the semantic concept of change.

12) John is getting some books.

We would supplement his analysis of sentences such as 13) below, however, in claiming that they embody not only the concept of cause but, more accurately, like 2) and 8), that they embody the concepts of both cause and change (in progress):

13) a) Charles is giving some books to John.
    b) selling
    c) lending
Sentences like 14) and 15) below, are analogous to 4) and 9), and 5) and 10), respectively:

14) a) Charles has given some books to John.  
    b) sold  
    c) lent

15) John has got some books and both imply the resultative sentence

16) John has some books where the verb 'have' like the verb 'be' in 6) and 11) is in the present tense.

Because of the notional and syntactic similarity between all the verbs embodying the concept of change, I now suggest a rule, similar to those in the previous chapter, where C and F were regarded as semantic slots rather than cases. Just as C and F could be 'filled' by N.P. or Prop. so Af can be regarded as a semantic slot capable of being filled by N.P, N.P + A, or N.P. + dative: so that underlying sentences such as 4) b), 9) b) and 14) a), for example, will be the following derivations:

\[ S \]

\[ M_{\text{mod}} \quad \text{Prop} \quad \text{Af} \]

\[ V \quad C \quad \text{N.P.} \]

\[ \text{perfect} \quad \text{break} \quad \text{Charles} \quad \text{the} \quad \text{chair} \]
E.)

**Perfect** send the regiment to Ulster.

E.)

**Perfect** give Charles some books to John.
In the above sentences it was noted that while a sentence may embody the concept of change with no specified cause, sentences may also occur where a resultative state is referred to and the preceding cause and change more or less implied according to context. This means in terms of our grammatical framework that $A_F$ can be chosen independently of cause and a change verb, and that underlying e.g. 16) above is a derivation of the following type:

\[
S \\
\downarrow\text{Mod} \downarrow\text{Prop} \\
A_F \\
\downarrow\text{N.P} \downarrow D \\
\downarrow K \downarrow\text{N.P.}
\]

Obviously, however, 'to John some books' is not identical with 16), nor is 'John to Ulster' equivalent to 11) a), nor especially is 'the chair' equivalent to 6) b) etc.

What is needed, therefore, is a rule indicating that when $A_F$ is chosen, independently of cause and a change verb the following representation will replace the above, underlying 16).

\[
S \\
\downarrow\text{Mod} \downarrow\text{Prop} \\
A_F \\
\downarrow D \downarrow\text{have} \downarrow\text{N.P.}
\]
Similar modifications will have to be made when the locative is chosen i.e. the motional preposition 'to' will be replaced by one of a set of 'stative' prepositions, e.g. 'in', 'on', 'at' etc. and the verb 'be' inserted. Similarly, when there is no change of state verb or mutative the verb 'be' together with a stative adjective may be added to an N.P under the domination of Af.

There are many attractive features of the above analysis. Among them are the following:

a) it provides a formal basis for the intuition that 'have' and 'be' are closely related.

b) it relates the locative and dative cases in the way Lyons suggests (see above P.26)

c) it relates the motional prepositions 'to' with the stative prepositions, and to the 'to' associated with the dative or indirect object.

Finally, it is of interest to note how each of the types of resultative stative can be related to questions with the verb 'get' though not with the verb 'become.' Note the parallelism of the question forms that are related to the following statements:

John is in London. How did he get there?
John has some books. How did he get them?
The chair is broken. How did it get like that?

Before continuing I will try to express the above observations by drawing up a set of grammatical rules, developing a fragment of the propositional component.

Rule 1.

\[
\text{Prop} \rightarrow \begin{cases} 
(A \text{ + action vb } O) \\
(C \text{ + produce vb } F) \\
(C \text{ + change vb } A_f) \\
 \text{(change vb) } A_f
\end{cases}
\]
The above rule formulates the distinction between basic transitive verbs and causatives: between causatives that are related to Factitive semantic slots and those related to Affective semantic slots; between change verbs that take causative semantic slots and those that do not; and between verbs that can appear under the Affective node i.e. 'have' and 'be,' and all others.

Rule 2.

\[
\text{Af} \rightarrow \text{N.P} \begin{cases} \text{Loc} \\ \text{Stat adj} \end{cases}
\]

Rule 3.

\[
\begin{array}{c}
\text{D} \\
\text{Loc} \\
\text{Stat adj}
\end{array} \rightarrow \begin{cases} \text{have} \cdot \text{D} \\
\text{be} \cdot \text{Loc} \\
\text{be} \cdot \text{Stat adj}
\end{cases}
\]

These two rules attempt to make formal the considerations of the present chapter.

The lexical entry for verbs will indicate what type of verb it is. If it is an action verb, there will, of course, be no need to specify the case, environment in which it occurs. Similarly, if it is a 'produce verb' it will be redundant to specify its case environment. However, if like 'make' it can take propositions as effected objects, this must be indicated, as must the fact that it can take a proposition as its subject. A change verb will have a much more exact specification i.e. whether it takes a C as subject or not and which of the various developments of the Af node it takes as 'object': or, of course, 'subject' if it is a change verb that does not take a C as its 'subject' such as 'go', 'become', 'get' etc.

Rule 3 could also be developed so that copula-like verbs such as 'seem' 'appear' 'look' etc. could be inserted as well as the copula.

Finally it is, of course, important that the lexical entry for verbs should also include details of the syntactic or semantic features of
the nouns with which the verb is associated. We have rejected the notion
that there should be an agentive case that is necessarily animate, (though
not, it should be noted a dative case that is necessarily animate), and thus,
the information as to whether a particular verb can take an animate subject
or not must be provided by the lexis. Our lexical entries for verbs,
therefore will look like those of Fillmore (1968) in so far as each verb
will be specified for a case (or, more exactly, in some instances, a semantic
slot) environment. In most other respects, however, they will, as far as I
can see, look like those of Chomsky (1965).

Finally, it will of course be necessary to develop the semantic slots
C and F, in something like the following manner

Rule 4.

\[
\text{C} \rightarrow \{ \text{Prop} \}
\]

\[
\{ \text{S} \}
\]

Rule 5.

\[
\text{F} \rightarrow \{ \text{N,P.} \}
\]

\[
\{ \text{Prop} \}
\]

We have given C the further development S, because of the fact that
sentences rather than propositions appear to fill the causative slot with
verbs such as sadden and gladden which we consider above (P. l i t ) in
relation to the emotional parentheticals.
PART 4

PARENTHEticals AND PERFORMATIVES
CHAPTER 15
Parentheticals

We have already referred to the class of verbs that Austin calls perlocutionary. Austin defines the perlocutionary act as "the achieving of certain effects by saying something," (op. cit. p. 120) so that notionally causation seems to be involved. Among the verbs that are most 'purely' of this type, Austin mentions 'persuade' and 'convince', let us, however, in addition, consider 'tell' and 'inform'.

The class meaning of these four verbs appears to be to (try to) achieve an intellectual result on somebody by the use of language. We will call them intellectual perlocutionaries.

I want to suggest that this sub-class of Austin's class of perlocutionaries is related to Urmson's class of intellectual parentheticals in a similar fashion to which 'give' is related to 'have'.

The first general point that bears out this approach is the obvious one that convince, persuade, etc. are three-term verbs, while the intellectual parentheticals, e.g. know, think, believe, understand, are two-term, e.g.

1)  a) I convinced him of something.
   b) I know something.

Let us now compare 'have' and the intellectual parentheticals.

The first obvious point to note is that 'have' and the intellectual parentheticals are stative in Lakoff's sense.

Secondly, when these and the other intellectual parentheticals can be nominalised it is 'have', acting as a 'dummy verb' that is inserted to link the subject to the nominalised verb. Thus related to:
a) (know)
2) b) I (think) that Sidney is a professor
c) (believe)
d) (understand)

we have the somewhat stilted, but possible alternatives:

a) (the knowledge)
3) b) I have (the thought) that Sidney is a professor
c) (the belief)
d) (the understanding)

This is, of course, not the only dummy verb that can be inserted before a nominalised verb. As we shall see later, performatives are more typically nominalised with the 'dummy verbs' 'make' or 'give', e.g.

4) a) I give you an order to go.
   b) I make a prediction that it will rain.

Let us now consider the similarities between the intellectual perlocutionaries and 'give'.

In the first place they are notionally causatives, as we have already seen, and further evidence of their causative character will be given presently.

The second point of similarity depends on the introduction of yet another instance of embedding in our grammar, this time of a sentence, not a proposition under the N.P. node. Fillmore would give the following derivation of the sentence.

We persuaded John that he could win (omitting the K nodes).

The example is taken from Robinson (1970 p.62).
This analysis seems correct and is easily expressible in terms of our grammatical framework, i.e. by the addition of the AF node dominating D and 0 (or rather N.P.).

What is noticeable about such a derivation, however, would be that it would be identical to F) above where a sentence with the verb 'give' is analysed, apart from the fact that a sentence is embedded. This supports the view that 'persuade', like the other intellectual perlocutionaries, is a causative that takes a dative and a sentential component and is similar to give in that this sentential component changes possession. Notionally what it amounts to is that sentences or rather ideas may be passed from one person to another, i.e. there may be an interchange of ideas between people.

The next point concerns aspect. We have frequently noted that a causative verb or a verb that incorporates the notion of change, when used in the perfect, implies a resultative state that may be referred
to by the present as well as the perfect.

5) a) John has broken the stick
implies both the following:
   b) The stick \{ is \} broken,
   c) \{ has been \}

while

6) a) John has given the book to Mary
implies both the following:
   b) Mary \{ has \} the book
   c) \{ has been given \}

The same holds for the intellectual perlocutionaries.

7) b) He has \{ persuaded \} me that Sidney is a professor
   c) \{ informed \}
   d) \{ told \}

implies both:

8) b) I am \{ persuaded \} that Sidney is a professor
   c) \{ informed \}
   d) \{ told \}

and:

9) b) I have been \{ persuaded \} that Sidney is a professor
   c) \{ informed \}
   d) \{ told \}

On the basis of the above it could therefore be argued that if I am convinced \( \rightarrow \) I know, then convince \( \rightarrow \) cause to know.
Parallel arguments could lead to the setting up of other approximate equivalences, e.g.

Persuade \( \rightarrow \) cause to believe or think,
tell \( \rightarrow \) cause to hear or understand.
It should be stressed that it is not essential to our argument that the above should be more than rough equivalences. They are, indeed, certainly no more than that. Moreover, there are intellectual perlocutionaries such as 'warn' or 'advise' that have no rough intellectual parenthetical counterparts, and conversely many intellectual parentheticals such as 'imagine', 'suppose', 'assume', etc. that have no rough counterparts among the class of intellectual perlocutionaries. It should be noted, however, that the relationship between having and giving is not so straightforward as has sometimes been assumed, i.e. having may be the result of not only giving, but also selling, lending, etc.

What we are trying to show is that there is a sub-class of causative verbs, i.e. the class of intellectual perlocutionaries that are related to a class of resultative stative verbs - the intellectual parentheticals, that the intellectual perlocutionaries have the class meaning 'cause a change to an intellectual result', and the intellectual parentheticals are used in circumstances where that result is assumed to have been attained, i.e. that in terms of our grammatical framework parentheticals should like 'have' and 'be' somehow be introduced under the domination of the AF node.

Not only, then, have we found room for the non-syntactically motivated insights of two philosophers in our grammatical system, we can now also see why intellectual parentheticals and, presumably, other stative verbs like them, cannot take progressive aspect.

We say that 'we are convinced' or that we know; we are told or that we hear; only after a causative process has been successfully concluded. Progressive aspect can be applied to 'be convinced', i.e. it is possible to say

10) a) I am being convinced that S.
This is, of course, related to, e.g.

10) b) John is convincing me that S.
Such sentences signify that a causative process is in progress, and that a result is in view but that that result has not yet been attained. It is only when perfective aspect has replaced the progressive in (10) a) and (10) b) and the resultative interpretation of that aspect on causative verbs is in operation, as in:

11) a) John has convinced me that S.
   b) I have been convinced that S.
   c) I am convinced that S.

that 'know' is roughly equivalent to 'be convinced'. Expressed alternately, we can say that progressive aspect cannot be used with 'know' because the function of the word is to signify that a result has been reached and to imply though not, of course, to state the nature of the cause of that result.

This is of course very close to what Urmson says. Let us quote again his definition of intellectual parentheticals. He says that they are used "to indicate the evidential situation in which the statement is made (though not to describe that situation), and hence to signal what degree of reliability is to be accorded to the statement to which they are conjoined." (op. cit. p.199). This can be related to our analysis in so far as 'the evidence' can appear in subject position, i.e. as the filler of the causative semantic slot before such words as 'convince' and 'persuade', i.e.:

The evidence has convinced/persuaded me that Sidney is a professor.

Sentential or rather propositional elements may, of course, be chosen instead as a filler of the causative semantic slot - the term 'the evidence' is, of course, a short hand reference for such elements, e.g.

Seeing Sidney walk out of the office with that happy smile has convinced/persuaded me that Sidney is a professor.
Thus, when use is made of one of the intellectual parentheticals such as 'I know' or 'I believe', a choice appears to be made between them on the basis of the type of 'affect' that the evidence had upon me at some time in the past and still has upon me.

The reliability of the 'affect' that the evidence had may be signalled as being as great or small as that of a third person who has told me, or informed me, as when we say:

I hear/understand that Sidney is a professor.

In other instances the speaker is prepared to take more responsibility for the quality of the evidence that justifies the truth and reasonableness of the associated statement, as when we say:

I know that Sidney is a professor.

In this instance we have accepted the evidence as overwhelming, convincing, in fact - and consequently the statement as certain.

In the case of:

- I believe
- I think
- I expect

the evidence, while persuasive, is not overwhelming

while in cases such as:

- I suppose
- I imagine
- I suspect

there is even less overwhelming evidence; what is expressed are varying degrees of the possibility of the truth and reasonableness of the associated statement.

That the evidence is seen, in some way, as being in a causative relationship with sentences involving parenthetical verbs, is apparent from the fact that the term 'because' (which we have already referred to as a 'causative conjunction') is used. When such verbs as 'know',
'think', 'believe', etc. are questioned, e.g.

   How do you know
   Why do you think that Sidney is a professor?
   Why do you believe

the evidence is directly referred to as the cause of the statement when
the answer is given:

   Because I saw him coming out of the office with a happy smile on
his face, etc.

Urmson's claim that all statements in standard circumstances are
interpreted as being true and reasonable is evident from the fact that
the same questions can be asked of a sentence that is not qualified by
an intellectual parenthetical, e.g.

   A. Sidney is a liar
   B. How do you know that?
   Why do you think that?

The use of such parentheticals would, therefore, appear to be
governed by a particular desire by the speaker to "prime the hearer"
to the 'evidential situation in which the statement is made'. This
is done by choosing a verb which because of its resultative character
links the statement indirectly to the evidence which is its cause.

A final point in this connection is that the grammatical
framework which has been set up to account for intellectual perlocutionaries
and intellectual parentheticals enables us to interpret quite naturally
expressions such as the following:

   I have an idea that S.
   What has given you that idea?
   I have been forced to the conclusion that S.
   That has certainly made me think that S.

   etc., etc.
CHAPTER 16

Performatives Imperative Sentences and Modality

Turning from parentheticals to performatives what is immediately striking is the difference in the dummy verb which these verbs take when they are nominalised. As we have already noted, parenthetical verbs take 'have', performatives, however, generally take 'make' or 'give'.

From this standpoint verbs generally considered performatives fall into three groups:

A) Those that take 'make', e.g. promise, suggest, state, affirm, propose, predict, assume, judge, vow, deduce, etc. as in:

(promise)
(suggestion)
(statement)
(affirmation)
(proposal)

I make the (prediction) that S.
(assumption)
(judgment)
(vow)
(deduction)

etc.

B) Those that take 'give' e.g. order, command, permit, advise, instruct, name, as in:

(an order)
(a command)

I give you (permission)
(the advice)
(the instruction etc.)
Those that can/both 'make' and 'give'. There seem to be only two verbs of this type, viz promise and suggest.

I make a promise that S
I give you my word that S
I make the suggestion that S
I give you a suggestion that S

It should be noted that, with the exception of 'name', all the verbs in the above list that are nominalised with 'give', have three 'roles' associated with them, i.e. like 'give' they are three-term verbs, but that like the intellectual perlocutionaries one of the roles is an embedded sentence or rather, more accurately, a tenseless, aspectless, modal-less proposition. For example, 'order' implies an orderer, somebody who is ordered, and something (a proposition) that is ordered. Macaulay (1968) and Ross (1970) claim in this connection that the orderer must be 'I', and the person ordered 'you' when the verb is used performatively. This point will be discussed presently.

Verbs that are nominalised with 'make', however, are often not associated with three roles in the same way. For example, 'judge', 'deduce', 'assume' in the sentences:

a) I judge that the prisoner is guilty
b) I deduce that it is not true
c) I assume that he is a liar

do not have 'you' associated with them in the same way as 'order' above or, indeed, as other verbs in the A) list such as 'promise' or 'suggest'.

A further observation about verbs in group A) is that when they are nominalised with 'make' they take an indirect object together with the preposition 'to', i.e. the personal noun or pronoun with which they are associated is in the Dative case. We earlier said about 'make' that it was a verb that appeared in the C-produce verb —
F frame, where the F could be developed as either a N.P. or a proposition. Under these circumstances it is not possible for the verb 'make' or indeed any other 'produce verb' to take a noun in the D case. Any personal noun or pronoun in an associated role will appear, rather, in Fillmore's B case - the benefactive - as illustrated in the following:

2) a) I made a cake for Mary
   b) They built a bridge for the local council.

However, it is quite possible to say

3) a) I make a promise to you
   b) I make a suggestion to you.

Though, the above suggests that 'make' is not being used in an exactly parallel way in 3) as it is in 2), the remarkable consistency with which performative verbs can be nominalised with the dummy verbs 'make' and 'give', verbs to which, not only the previous analysis, but many linguists would give a causative interpretation, strongly suggests that performative verbs, too, should be given this interpretation.

So far we have identified two types of causative verb; those that fit the frame C...F and have the class meaning 'produce' and those that fit the C...AF frame and have the class meaning 'change.' The question then arises as to what the class meaning is of performative verbs. Although Austin does not express himself in these terms, it is fair to say that what Austin's proposals amount to is that the class meaning of performative verbs is what he terms illocutionary force. He says, for example (op. cit. p.103) that the illocutionary act, i.e. the uttering of a statement with illocutionary force "is said to be conventional, in the sense that at least it could be made explicit by the performative formula." When any utterance is made, moreover, he claims, there are two elements that can be abstracted, two things that we are responsible for, illocutionary and locutionary
acts.

We could express this in terms of our theory by saying that the first rule of our grammar could be expressed in the following manner.

$$S \rightarrow \text{if} + \text{illocutionary force} \text{ vb} (\text{D}) + S'$$

We will return to a discussion of the implications of this rule in a moment.

**Performatives and Modality.**

Boyd and Thorne (1969) have tried to relate illocutionary force to the modals. In their own words they "treat the modal verbs as indicating the illocutionary potential of the sentences in which they occur." (p.62).

There is certainly something to be said for this proposal. In order to examine it more closely, however, certain distinctions need to be made. There is, first of all, the distinction between imperative and non-imperative modal related performatives.

The only non-imperative performative with a corresponding modal appears to be 'predict'. (see Boyd & Thorne op. cit. pp.62-65), i.e.

4) a) The train leaves at 7.00.
   and b) The train will leave at 7.00,

is that the latter is to be interpreted in terms of the illocutionary force associated with the performative "I predict", while the former is not.

Among imperative performatives that can be related to modals there are at least three different classes.

a) Strong imperatives

   (i) order or command, e.g.

   I order you to read \( \rightarrow \) You must read

   (ii) suggest or advise, e.g.

   I suggest that you read \( \rightarrow \) You should read or you ought to read.

b) Weak imperatives. These correspond to Leech's
class of verbs that express weak causation (op. cit. p. 208). Leech compares the verbs 'make' and 'compel' with 'let' and 'allow' in this connection. For example, if we compare the two sentences

I have made him go
and I have allowed him to go

it is evident that while the former implies that he has gone, the latter does not imply it in the same strong way, but only that I have supplied the necessary conditions for his going, and that if he wishes to avail himself of the opportunity thus provided, he may do so.

Examples of modal related weak imperatives are permit or allow, e.g.

I allow/permit you to read You may read or you can read.

c) Reflexive imperatives

I interpret the performatives 'promise' and 'vow' as being of this type. What characterises these verbs is that when they are used performatively they are similar to the strong imperatives in that they publicly assert an obligation; the difference being that the person obliged to a course of action is the person who speaks. These verbs are related to the modals 'shall' and 'will', e.g.

I promise to read I shall read or I will read,

although 'I will read' may, of course, also be interpreted as a prediction.

However, not all modal verbs can be explained as being the result of the 'infusing' of the illocutionary force associated with particular performatives into an associated sentence, thus casting doubt on the theory that modality is to be identified with illocutionary force.

Firstly, there seem to be no performative equivalents to such sentences as the following

a) There must be a thousand people here.

5) b) It may rain tomorrow.

c) The train should be arriving at 10:00.
The modals 'must', 'may' and 'should' in these sentences are clearly not related to 'order', 'permit' and 'advise' respectively, as were the previous examples containing these modals. Nor is this simply a question of deixis, the following modal sentences with you as subject are also not open to this interpretation.

a) You must be hungry, (said to someone after a long walk).

6) b) You may be lucky.

c) You should get a good job, (said to a graduate worried about employment prospects).

What seems to determine the choice of modal in the frame.

You - modal - get a good job, said in circumstances like the above is the degree of certainty felt by the speaker. We can set up the following rough correspondences.

I say, with certainty, you get a good job. ⇒ You must get a good job.

I say, with probability, you get a good job. ⇒ You should/ought to get a good job.

I say, with possibility, you get a good job. ⇒ You may/might/can/could get a good job.

The conditions for selecting one modal of this type rather than other are broadly similar to those involved in the selection of one intellectual parenthetical rather than another. Indeed, already in Ch.1 p. we pointed out the similarity between some sentence adverbials, some parentheticals and some modal verbs in the way they asserted or modified the certainty felt by the speaker with regard to the truth and reasonableness of the statement with which they are associated. However, intellectual parenthetical verbs have already been shown to be 'resultatives' rather than causatives, related to 'have' rather than 'give' or 'make', implying varying degrees of reliability of the evidence that backs up a statement. The situation seems the same
when it comes to selecting one non-performative related modal rather than another. Although the individual is responsible for saying that a certain statement is possible rather than certain by the use of 'think' rather than 'know', or 'may' rather than 'must', for example, the cause of the use of one rather than another is not the authority or social position of the individual himself, at that moment, as it is with the performative related modals, but the amount of evidence that the speaker has at his disposal and to which he must refer if asked to justify himself.

We seem to be led to the conclusion, therefore, that modals are to be derived from two sources a causative performative source and a resultative source which is also involved in the selection of certain sentence adverbials and intellectual parentheticals, though the formulation of this must await a more detailed study of modality.

Finally it should be noted that the term 'modality' as used in this section is not to be equated with the term as it is used by Fillmore. Fillmore's modality component contains a great deal more i.e. tense aspect, etc. in addition to the type of modality we have been discussing in this chapter.
Performatives, deixis and 'say'.

McCawley (1968) and Ross (1970) make the point that the person of the subject and the indirect object (i.e. the Dative) are predictable when a verb is used performatively, i.e. in

7) I promise you £1.

'promise' is used performatively, whereas in

8) He promises me £1.

'promise' is not a performative but is rather a report of a performative. Thus 'I verb (in the present tense, with a non-habitual instantaneous interpretation,) you', is a necessary though not of course a sufficient condition for the existence of the performative use. McCawley, therefore, proposes to define the notion first and second person "so that person specification need not appear in deep structure at all. One undifferentiated personal pronoun will become specified for person on the basis of its index and the indices of the subject and indirect object of the performative". (op. cit. p.158).

However, we have already pointed out that some verbs, generally considered performatives, do not have 'you' normally associated with them. Consider

9) a) I name this ship Britannia.

b) I judge the prisoner to be guilty.

In these instances the only sense in which 'you' is present in the meaning or deep structure of the sentence is a result of the fact that sentences are not usually spoken for our own benefit, but for the benefit of a listener a 'you'.

Ross (1970) touches upon this point in relation to a discussion of the relative merits of a pragmatic or performative analysis. He is concerned to explain the occurrence of 'myself' in such sentences as

10) As for myself I promise I will be there.

He says: "The problem is how can the pronoun myself be
generated since [the above sentence] can be a performative sentence it cannot be argued that there is a higher performative verb of saying, for performative verbs cannot be embedded, as was pointed out in connection with 101." (op. cit. p.255).

This latter was a sentence designed to illustrate the impossibility of the embedding of performatives, namely,

11) I admit that I hereby promise that I'll be late.

This argument assumes, however, that 'say' is a performative, an assumption that seems dubious on many grounds.

Firstly, there is the point that 'say' cannot be nominalised with either the verb 'make' or 'give' acting as a dummy verb. We do not make or give a saying. Note that while the same is true of 'tell' it is not true of 'state' or 'affirm'. These verbs are often considered identical by linguists when they discuss performatives (see Boyd & Thorne op. cit. and Ross op. cit.). This is clearly untrue, however, as can be seen from the sentence,

12) a) He affirmed/stated "Oh!/"Damn!"/Really!" which is clearly unacceptable outside (and probably inside) a police-station or court-room, and

12) b) He said, "Oh!/Damn!/Really which is quite normal.

Secondly, while Ross is correct in arguing that performative sentences cannot be embedded, the following sentences seem quite acceptable:

a) I say (to you) that I promise you £1.

13) b) I say (to you) that I order you to go.

c) I say (to you) that I judge the prisoner guilty.

Compare the inadmissibility of the above sentences should 'state' or 'affirm' replace 'say'.

The situation is even clearer when we consider reported speech.

Compare

a) I said (to him) that I promised him £1.
14) b) I said (to him) that I ordered him to go.
   c) I told (him) that I judged the prisoner guilty,

with

   a) I affirmed (to him) that I promised him £1

15) b) I stated that I ordered him to go.
   c) I admitted that I judged the prisoner guilty.

Thirdly, it is not surprising that there is an element of impatience or redundancy present when sentences such as 13) above are uttered or that 'say' is the most commonly used verb of reported speech. Say is a verb without illocutionary force, because it can be associated with any and every utterance. We could, alternatively, express the above by saying that 'say' is the unmarked verb of linguistic communication. Every sentence analysed by a linguist will have 'say' in its deep structure because linguistics is the study of what is said.

The fact that many performative verbs do not have 'you' associated with them and that the speech situation, typically, involves a speaker (I) and a person spoken to i.e. 'you', suggests that the valuable and intuitively satisfying deictic observations of McCawley, noted above, be incorporated into linguistic theory by an amendment of the first rule of the grammar, already suggested, (p. 101 above) thus:

\[
\begin{align*}
S &\rightarrow C + \text{say} + D + S' \\
C &\rightarrow I \\
D &\rightarrow \text{You}.
\end{align*}
\]

I have avoided the issue as to whether S' should be considered a factitive or effected type of result as this is somewhat speculative. However, to say something could be interpreted as either, or indeed both, causing a sentence to be or causing somebody to hear a sentence.

The verb 'tell' can be substituted for say in many contexts though its usage is more restricted, e.g. it could not appear in sentences like 12) above and the associated Dative must be present in
the surface structure, whereas with 'say' its presence is not obligatory. We have, incidentally, already considered 'tell' as an intellectual perlocutionary, in our analysis, related to the intellectual parenthetical 'hear'.

**More on imperatives and modality.**

Now that we have abolished the rule stating that performatives are always associated with the Dative 'you' but that 'you' is rather associated with the unmarked verb of linguistic communication 'say', let us examine the implications of this for the imperative performatives and their associated modals.

McCawley (op. cit. pp. 156) implies that the subject of the embedded sentence of an imperative performative will always be 'you'. This we have, of course, already denied in analysing 'promise' as a reflexive imperative performative, so that the subject of the embedded sentence is frequently I. This accounts for the different reflexive pronouns in the sentences

16) a) I advise you to enjoy yourself
    b) I promise (you) to enjoy myself.

However, the imperative type modals that we have so far only considered with 'you' as subject are also quite clearly capable of an interpretation as imperatives when the subject is not 'you'. Consider the sentences

17) a) (must )
    b) He (should) go on holiday.
    c) (may )
       (can )

said, for example, by an employer to a foreman about an employee.

In terms of our analysis the deep structure of such sentences would be roughly the following:
It is quite clear that the modals in 17) are to be given an imperative interpretation, i.e. they are not similar to the modals exemplified in 5) and 6) above. It also seems true, however, that should also be taken as exemplifying a performative use of the verbs 'order', 'advise', and 'allow'. They pass the following tests:

a) In 19) the speaker is not describing anything, but rather doing something, giving an order, advice or permission.

b) Used with progressive aspect this is no longer true, the speaker is describing what he is doing, and not doing anything.

c) Associated with adverbs of frequency such as 'always', or when simply interpreted as being, in what Leech calls the habitual rather than instantaneous present, the speaker is again describing rather than doing anything.

d) It is possible to use the characteristic performative adverbial 'hereby' in association with 19).

The imperative element may be removed one further stage from what we may, of course, still regard as its fundamental use, where 'you' is the subject of an embedded sentence of an imperative performative. This is exemplified by the following sentences and circumstances.

20) a) He must leave the meeting (said at the time of the forcible ejection of a demonstrator by a policeman).

20) b) He can stay (said when the policeman relents).
20) a) He should give up smoking (said when reporting a doctor's advice).

The above sentences although containing an imperative in their deep structure are not performative, but are reports of another's performative, and are to be analysed in something like the following manner.

\[ \text{(order)} \text{ he leave} \]

21) b) I say to you that somebody (advise) he give up smoking
   c) (permit) he stay.

Even under these circumstances, however, the 'must', 'should' and 'can' or 'may', related to imperative performatives, is to be distinguished from the 'must', 'should' and 'can' exemplified in 5) and 6) above.

Imperatives are best considered as normally operating on a tenseless aspectless propositional component.

22) a) Be reading a book
   b) Be cleaning your teeth

are deviant unless a clause such as 'when I return' is added, and there is no possible interpretation for sentences such as:

a) Read a book yesterday.

23) b) You must read a book yesterday.
   or c) You must have read a book yesterday,

in an imperative sense.

The same constraints do not hold for the modals illustrated in 5) and 6) above, that are related to the intellectual parentheticals and that should be regarded as operating on a sentential rather than a propositional component.

Compare the following sentences:

24) You must read Shakespeare

which can be understood as either an imperative, or as a statement made because, e.g. a conversation interspersed with frequent
Shakespearian quotations has convinced the speaker that it is true.

25) a) You must be reading Shakespeare
or b) You must have read Shakespeare
cannot be understood as imperatives, however.

Similarly, while,

26) You may read Shakespeare
is ambiguous between the interpretation involving permission and
that involving possibility (for example, when imagining a future
university course);

27) a) You may be reading Shakespeare
is not ambiguous, and can only be interpreted in the possibility
sense as can

27) b) You may have read Shakespeare.

'Should' is not so neatly interpretable in this way. Indeed
the semantics of 'should' is more complex than the analysis given
above indicates, as Boyd and Thorne help to indicate (op. cit. pp.66-67).

However, the relationship between some causative performatives
and some imperative-type modals, and that between some parentheticals
and some non-imperative-type modals, is also evident from a
consideration of negation. Compare the following pairs of sentences,
where 'I say to you + certainty' is taken to be equivalent to 'I know'
and 'I say to you + possibility' to be equivalent to 'I think':

28) a) I + order + D + prop = e.g.
He must study at university.

b) I say to you + certainty + sent = e.g.
He must (be) study(ing) at university.

29) a) I + order + D + not + prop = e.g.
He must not study at university.

b) I say to you + certainty + not + sent. = e.g.
He cannot (be) study(ing) at university.
30) a) I + not + order + D + prop = e.g.
He needn't study at university.
b) I say to you + not + certainty + sent. = e.g.
He may not (be) study(ing) at university.

The facts that 30) b) is related to 31):
31) I say to you + possibility + sent. = e.g.
He may not (be) study(ing) at university

and that 29) a) is related to 32):
32) I + not + permit + D + prop = e.g.
He cannot/may not study at university

can be partly explained, at least, by a consideration of the following points. Firstly, necessity is related to possibility in what Leech calls an inversion system, (see Leech, op. cit. especially pp. 55-56 and pp.204-205) i.e. possible = not necessary and not possible = necessary not. Secondly, it seems probable that the imperative modals are also to be ultimately analysed as containing the same semantic elements of necessity possibility (and probability ?) as their non-imperative counterparts.

However, consideration of such factors would lead to a much more detailed analysis of modality than there is space for here. The proposals made by Leech (op. cit. Ch.9) and Seuren (op. Cit. pp.156-161) are of relevance.
In this section we have been concerned with performative verbs and also, subsidiarily, with the imperative sentences and modals to which they can be shown to be related. Before leaving this section, therefore, two questions of relevance to our general theme should be answered.

Firstly, why is it that performative verbs do not take progressive aspect when used performatively? The performative use of verbs seems to be a clear case of what Leech calls the instantaneous present, the 'single - event - now' use, (op. cit. p.139). As we saw above (p. 17), Leech points out that one of the effects progressive aspect has is to "psychologically extend the time span of the instantaneous present." This is clearly true in the case of the performatives. For example, while in:

33) I promise that I will see him.
'I promise' is the performance of an act of promising at that moment;
in
34) I am promising that I will see him.
'I am promising' is to be interpreted as a report of activity in progress of which 34) itself is part.

Secondly, why is it that stative verbs cannot be used in imperative constructions? We have seen that an imperative performative is associated with two noun phrases: the noun phrase that is part of the performative component and which is the indirect object of the performative verb (i.e. in the D case), and the noun phrase that is the subject of the associated tenseless aspectless proposition. Although the second noun phrase must have the same index as the first (unless it is a reflexive imperative, i.e. a promise), it must not be in the same case. It seems essential, indeed, that the subject of the propositional component be dominated by the C or A node in this instance. Moreover, under normal circumstances the subject of the propositional component will be human, or at least animate, in an
imperative construction. Thus, although we have not specified the cases of the N.P.'s that are normally animate and can occur under the domination of the AF node, i.e. the case of John in

\[ \text{John is tall} \]

\[ \text{and John is in the garden,} \]

it is clear that John is not dominated by C or A in these instances, and that this is also true when N.P.'s are associated with copula-like verbs. With verbs like 'have' and 'know', we have already seen that the noun must be in the D case.
PART 5

FURTHER QUESTIONS
CHAPTER 17

Emotional parentheticals and verbs of sensation

There are many other types of stative verb that we have no opportunity to look at in any detail in a brief study like this. Among them are the 'emotional parentheticals,' verbs of liking etc. and verbs of sensation.

The emotional parentheticals are, like the intellectual parentheticals, resultatives, i.e. they are to be interpreted as being introduced under the Af node and associated with a noun in the D case. As intellectual parentheticals are related to intellectual causatives - the perlocutionaries - so are emotional parentheticals related to causatives such as sadden, gladden etc. The difference, however, is that now it is the sentence itself or more accurately the event to which the sentence refers that is the causative agent, and not, as in the case of convince etc., a human agent or 'the evidence.'

Compare:

1) Charles/ the evidence has convinced me that your son is dead.

and 2) (The fact) that your son is dead has saddened me.

However, as we have shown is always the case with causative verbs, the result of the passive transformation on the above is either

3) a) I have been saddened
b) I am saddened that your son is dead.

which can be paraphrased by

4) a) I regret
b) I am sad that your son is dead.

Progressive aspect again cannot be used because this would make it the equivalent of:

5) That your son is dead is saddening me,

which states that a process of change is in existence, but that the result has not been reached. Verbs like 'regret' or 'rejoice', however, have the function of indicating that a result has been reached at some time in the past and is still in existence.
Many linguists have pointed out that 'like' is related to the causative 'please' and some such as Fillmore have pointed out that this implies that the surface structure subject of like should, therefore, be in the Dative (1968 P.30). There are, however, problems in treating 'like' in a parallel way to the emotional parentheticals, although it could be argued that,

6) Going to the cinema has pleased me

is related to

7) a) I have been pleased
   b) I am pleased

by going to the cinema

and that this is a rough equivalent of

8) I like going to the cinema.

(of sentences 2) - 4) above.)

Verbs of sensation are rather a special case. However, they too are related to causatives. For example 'see' is not only related to 'look' and 'look at' as Palmer points out (see p.22 above) but also to 'show' which has sometimes been analysed as 'cause to see'. Similarly to play music to somebody could be interpreted as causing somebody to hear music. However 'show' does not mean 'to cause to see' so much as to 'enable to see,' i.e. we have here an instance of weak rather than strong causation (see above p.102). Strong causation would be better expressed by 'to make somebody look at.' Thus, just as

9) a) I let him go
   b) I showed him it

implies he could go.

implies he could see it.

It is in this way that the existence of 'can' in association with verbs of sensation is to be explained. Boyd and Thorne (1969 p.72) have recently revived an idea of Hornby's, (1953 p.228) that 'can' is used with verbs of sensation as a substitute for progressive aspect. This seems true in so far as

10) I am showing Jim the film
would seem to imply that Jim's process (or whatever) of seeing the film is going on now. My suggestion is that both the above proposals are true and that

11) I am being shown the film.

which can now be interpreted as,

12) I am being enabled to see the film.

is roughly the equivalent of

13) I can see the film.

in a similar way to which 'I am convinced' is roughly the equivalent of 'I know'.

It should be noted that the above account implies that the aspectual characteristics of weak causative verbs, when operated upon by the passive transformation is similar to that of basic transitives and not strong causatives, i.e.

14) I have shown him the picture.

is related to

15) He has been shown the picture.

but not to

16) He is shown the picture.
CHAPTER 18
The Benefactive

Fillmore (1968) fails to discuss the benefactive in any detail apart from stating that it characteristically has the preposition 'for', associated with it. However, the name of the case suggests that he would probably define it as the case of the person or object that would benefit as the result of the action identified by the verb, and it can be exemplified by such sentences as:

1) I painted the picture for Peter.
2) I bought the curtains for the bedroom.

We have so far referred to it only as the case of the Noun phrase that tends to occur after a noun in the Factitive case (cf I above and P.100 above).

It is interesting to contemplate the possibility that B too is a semantic slot capable of being filled by syntactic elements other than N.P's, like C., F. and Af. I think that there is evidence to show that embedding can take place under the B. node, i.e. that nouns in the B. case are a sub-set of the class of possible syntactic elements that can fill the B. slot.

While nouns in the B. case are the answer to implied questions of the form

3) Who did you do it for?

E.g. for Peter in I) above, English has another question that contains the preposition 'for,' namely,

4) What did you do it for?

The answer to this question can take many forms, among the most common of which are sentences that appear to include an infinitive form of the verb and sentences that include what we have hitherto followed Leech in calling the 'causative conjunction' because. That is, in answer to questions such as,

5) What did you come to England for?
we could give the answer,
6) a) To learn English.
   b) Because I wanted to learn English.

However, while 'why' questions can always be substituted for 'what - for' questions the reverse does not hold. For example,

7) a) What is it raining for?
   b) What does oil float on water for?

are the questions of children or the scientifically unsophisticated.

Similarly, while

8) Why did the chair break?

can be answered by, e.g.

9) Because John broke it,

there is no answer to

10) What did the chair break for?

though the question

11) What did John break the chair for?

can be answered by, e.g.

12) a) To annoy his father.
   or b) Because he wanted to annoy his father.

What - for questions are, in fact, used to question human, or at least animate purposes. The answers to them give the reasons for, rather than the causes of, actions. Thus it is a mistake to call 'because' a causative conjunction, as it can not only be used to link actions (or rather changes) to their causes as in 9) above, but also to give reasons for an action as in 12) b).

'Who - for' questions also question animate purposes as Fillmore notes when he suggests that "the occurrence of B. phrases has more to do with whether the sentence contains an A." (op cit P.87) rather than with anything else. Peter is in fact the reason for the painting of the picture in 1) above.

There is also evidence to suggest that the propositional elements introduced by 'to', exemplified by 6) a) and 12) a) above, should also contain the preposition 'for' in the deep structure. This can be seen in sentences
where the benefit accruing from an activity is not that of the subject of the main sentence but somebody else's, e.g.

13) We went to the zoo for the children to see the lions.

Compare with this:

14) We went to the zoo to see the lions.

It could be argued that the best way to account for the existence of 'for' in 13) but not in 14) is to assume that 'for' is present in the deep structure of both sentences, but that the same transformation that deletes the N.P. that is the subject of the embedded proposition by the equi-N.P. deletion rule, is also responsible for the deletion of the underlying preposition 'for'. That is, we assume that at some stage of its derivation 14) above would look something like

15) We went to the zoo for us to see the lions.

There is also the fact that 'for - to' was used to express purpose or the reason for an action in older English and is still used today, in some dialects, e.g.

16) We went to the zoo for to see the lions.

A word that is normally translated as 'for' would be used, moreover, in the French and Welsh translations of the sentence 'I went to see the Queen.'

17) Je suis allé pour voir la reine.

18) Buthum i am weld y Frenhines.

Even more striking evidence comes from a consideration of the words for 'why' and 'because' in languages other than English. With regard to 'why', in addition to modern English 'what for', we have the now archaic form 'wherefore' which is clearly related to the modern German 'wofür'. Then there are examples from the Slavic languages; Polish - 'dlaczego' and Serbo-Croat - 'zasto', both literally 'for what' and the Czech - 'proč' historically derived from a form that could be translated in the same way. In addition there is the French 'pourquoi' and the Welsh 'paham', meaning literally 'for what' and 'what for' respectively. Similarly, a word that is usually translated as 'for',
forms part of the word that is the translation equivalent of 'because' in such languages as the following: Polish - 'dlatego'; Serbo-Croat 'zato'; Czech - 'protože'; Italian - 'perché', etc.

The evidence of the above strongly suggests that embedded sentences of 'reason,' introduced by 'because', and embedded propositions of 'reason' introduced by (for) to, are related to, what Fillmore calls, noun phrases in the B. case, which have the preposition 'for' characteristically associated with them. This can best be expressed by postulating a further semantic slot, this time R. (for reason), that is optionally connected with sentences that contain an A. or a C., and which can be developed by the rule:

\[
\begin{align*}
R. &\rightarrow \begin{cases}
N.F. \\
Prop. \\
S.
\end{cases}
\end{align*}
\]


