

ON SOME SYNTACTIC RULES IN THE LEXICON

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0. Introduction.

In this discussion we will be concerned with the grammaticality paradigm represented in (1) and (2) below:

- (1) (a) John put his books on the shelf.
 (b) *John put the shelf his books.
 (c) John shelved his books.
- (2) (a) John gave his money to the church.
 (b) John gave the church his money.
 (c) *John churched his money.

In superficial terms, English put and give share the property that they select a "complement" consisting in a noun phrase followed by a prepositional phrase. The two verbs differ, however, in relation to the so-called "double object" construction (cf. Larson, 1987) -- this form exists for give, as exemplified by (2b), but it is lacking for put, as shown by the ill-formedness of (1b).

We believe that there is further fact of English which is relevant to the distinction between these two verbs. In semantic kinship with put, but not with give, there exists a "conflated" form (cf. Talmy, 1985) in which, so to speak, the verb incorporates not only the concept of induced motion, or physical transfer, but also the class of "places" corresponding to the endpoint, or locational goal, of motion. Morphologically speaking, this locational component is represented by a nominal root upon which the verb is based. The derived character of the verb, by comparison with the source noun, may or may not be morphophonologically "visible" -- it is visible in the case of shelve from shelf, or house [hauz] from house [haus], but it is not visible in the case of bank, as in bank the money, or box, as in box the candy.

In short, corresponding to put there are denominal verbs such as shelve, meaning "to put on shelve(s)", as in (1c) above. But there are no such denominal verbs corresponding to give -- if to church means anything at all, it does not mean "to give to church(es)"; so one cannot grammatically say (2c) above.

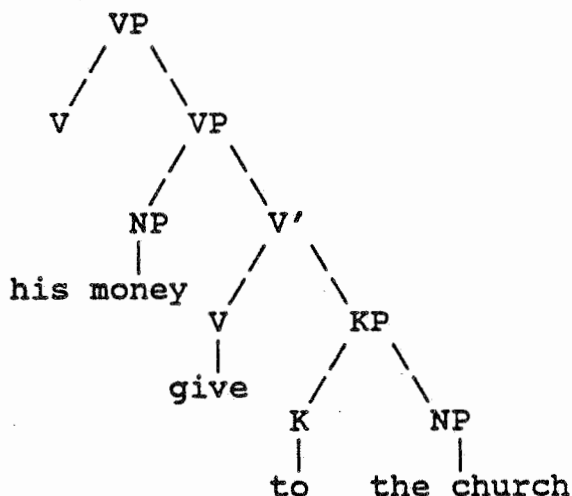
In the following sections we will suggest an explanation for the facts just presented. We will suggest, in addition, that there is a connection between the grammaticality pattern observed in relation to the double object construction and that observed

in relation to conflation.

1. The double object construction.

We will assume here, with certain modifications, the analysis of the double object construction developed by Larson (1987). For the moment, we will assume that the structure of the VP in (2a) above takes the form displayed in (3) below:

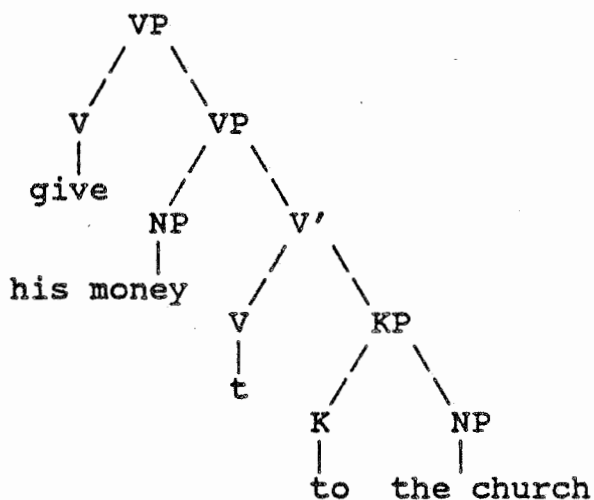
(3)



In this structure, an abstract causative verb takes as its complement a predication lexically headed by the transitive verb of transferral give. This verb is associated with a conceptual structure (cf. Jackendoff, 1983) of approximately the value "x come to be under the control of y", where x corresponds to the "external" argument, or subject, and y corresponds to the "internal" argument, or object. We will assume, temporarily, at least, that the verb give is technically transitive, in the sense that it assigns case to its internal argument. This case is realized as the "dative preposition" to which, departing from Larson, we assume heads the functional projection KP. Since give assigns case to its internal argument, it presumably also assigns an external theta role (cf. Burzio, 1986), to its subject, represented here as a "specifier" of the inner VP.

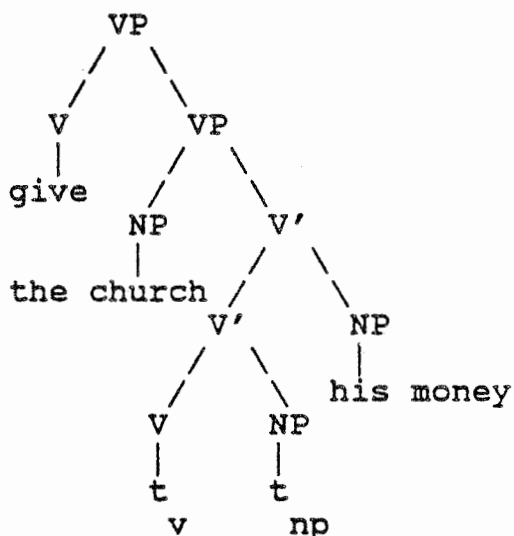
The s-structure of sentence (2a) is derived, in part, by application of the head-movement variant of Move Alpha, which raises the lexical verb give into the position of the abstract causative verb, giving (4) below:

(4)



Our interest here, of course, is in the derivation of sentence (2b), the so-called double object construction. Here we continue to follow Larson, who proposes that the double object construction is, fundamentally, the passive of the inner VP. The observed inversion of arguments results from NP-movement, induced by the case-absorption property of the passive form of the verb, and by the concomitant demotion of the external theta role. The first of these effects forces the dative argument to raise to subject position, where it be assigned case by the matrix verb. Secondly, the demoted theta role is assigned to an adjunct of V', rather than to the "Specifier". Together with verb raising, these effects give rise to the s-structure underlying the VP of (2b), depicted in (5) below:

(5)



With this somewhat schematic exposition of Larson's passive analysis of the double object construction, we are in a position to consider why the locational verb put does not enter into that

construction.

Although we cannot go into it in detail presently, there is good reason to assume that put, like give, involves the complex causative structure represented by (3) above. An important part of Larson's argument for this complex structure, for give and the like, comes from the phenomenon known as "Heavy NP Shift", exemplified by (6) below (Larson, 1987:14):

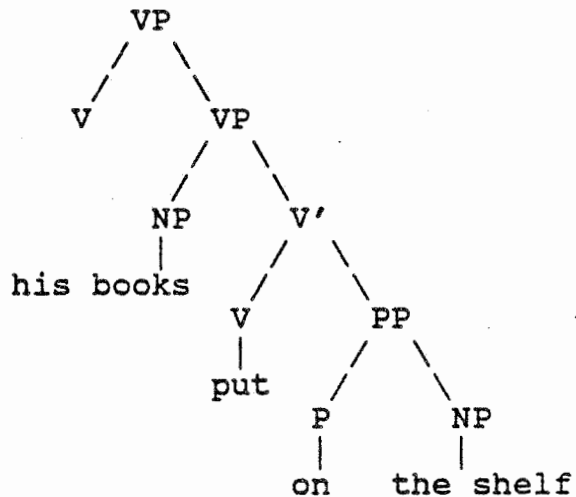
(6) I gave to John everything that he demanded.

Larson's analysis of this construction, which we will assume, depends upon the complex structure depicted in (3). The analogous complex structure is suggested for put by the fact that that verb also enters into the Heavy NP Shift construction:

(7) I put on the first shelf all of the books I bought in Nicaragua.

We suggest, therefore, that the underlying structure of the VP of (1a) above is as follows:

(8)



The s-structure underlying (1a) results, of course, from the application of Move Alpha, which raises the verb put into the matrix (causative) verb position.

An obvious difference between put and give is that the former selects a PP as its complement, while the latter selects an NP, to which it assigns dative case. This is evident from the fact that the complement of put can be headed by any preposition which is semantically appropriate (i.e., fixes its object as the endpoint of a path of motion) -- e.g., under, beside, between, over, etc., all members of the lexical category P. By contrast, the complement of give can be headed only by the dative case, a functional category assigned by the verb itself. In short, put

is an intransitive verb, selecting a PP complement, while give is transitive, assigning case to an NP complement.

If this characterization of the two verbs is correct, then the ungrammaticality of (1b) is explained. The verb put, being intransitive, cannot passivize. It cannot, therefore, enter into the double object construction since that, by hypothesis, is a passive.

[NEED TO ADD SOMEWHERE: Remarks about intransitivity of put; if intransitive and if it cannot assign case, then it must be unaccusative, in which case, the inner VP of (8) above is not correct, technically.]

2. Conflation as incorporation.

We will now attempt to explain the grammaticality pattern exhibited by "conflation", exemplified by (1c) and (2c) above.

It has often been noted that noun incorporation is restricted in such a way as to exclude incorporation of certain arguments (cf., Mithun, 1984; Baker, 1987). In particular, agents and recipients cannot incorporate. Thus, for example, languages which have productive noun incorporation do not have sentences of the type represented by the hypothetical (9a) and (9b) below:

- (9) (a) *Horse-kicked the cowboy.
'The horse kicked the cowboy.'
- (b) *They child-gave the candy.
'They gave the candy to a child/to children.'

What is of interest here is the fact that English conflation conforms to the same pattern. The ill-formedness of (2c) illustrates this for the recipient argument. And the nonexistence of anything corresponding to (10) below reflects the failure of agents to participate in conflation. This would be incorporation of a subject and, in English, would require the use of an expletive (e.g., it), in order to satisfy the extended projection principle (cf. Chomsky, 1986):

- (10) *It horsed the cowboy.
'A horse did something to the cowboy.'

This is not entirely an academic issue, since "subjects" of unaccusative verbs are implicated in conflation, apparently, if Talmy (1985) is correct in his suggestion concerning the weather verbs rain, snow, etc. He proposes, for example, that the verb of (11) below involves conflation of the "figure argument" -- i.e., the "theme" -- with an abstract verb of motion:

(11) It rained in through the window.
(Cf. Rain fell in through the window.)

But themes are generally internal arguments, and if the putative abstract verb involved in (11) is in fact an unaccusative, then this is conflation of an object, not a subject.

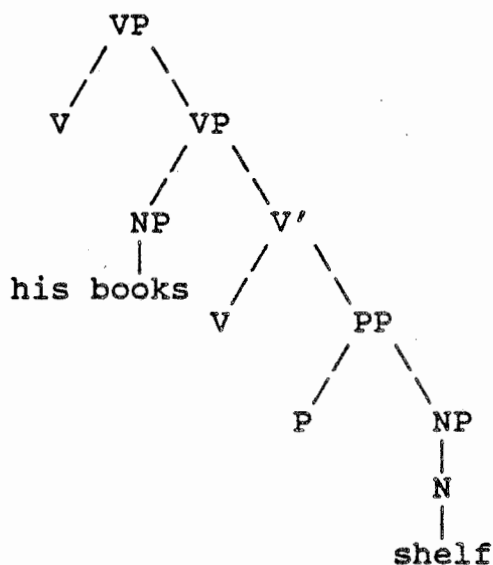
In a syntactic analysis of noun incorporation, of the type developed by Baker (1987), the fact that agents do not incorporate follows from the fact that the agent theta role is assigned externally -- it is assigned to the subject (i.e., Spec of IP). If incorporation takes place in "s-syntax" (i.e., in the derivation of s-structure from d-structure), as suggested by Baker, then incorporation of a subject would violate the ECP, since the subject position is not properly governed.

But even if incorporation is "lexical" in some sense, it is possible to explain the failure of agents to incorporate. We might assume, for example, that incorporation belongs to "l-syntax" and is accordingly defined over the lexical structure (LS) projection of the category V, thereby excluding the agent, which is assigned external to VP. If this is true, then lexical incorporation of the agent would be impossible, since that argument is invisible at LS (cf. Hale and Keyser, 1987a, b).

If conflation is viewed as a type of incorporation, specifically, incorporation of a nominal root into an abstract verb, then the failure of agent incorporation is explained. Our task now is to explain why the recipient argument cannot be involved in conflation -- i.e., why is there no "verb of giving" parallel to the hypothetical verb church of (2c)?

In addressing this question, let us first look at the grammatical conflation type represented by (1c) which, by hypothesis, involves incorporation. By hypothesis also, the source of (1c) is a structure parallel to that depicted in (8), the essential ingredients of which are repeated here as (12):

(12)



This structure differs from (8) in that the verbs and the preposition are all abstract (phonologically empty) members of their categories. If incorporation of the noun shelf proceeded successive cyclically through the preposition and the verb of the inner VP, arriving ultimately at the matrix verb, the surface form of (1c) would be derived (modulo the phonology of the denominal verb), and no known principle of grammar would be violated. The process of incorporation itself is nothing other than the head-movement variant of the general rule Move Alpha, and its successive cyclic application ensures that no barriers intervene between any trace and its proper governor.

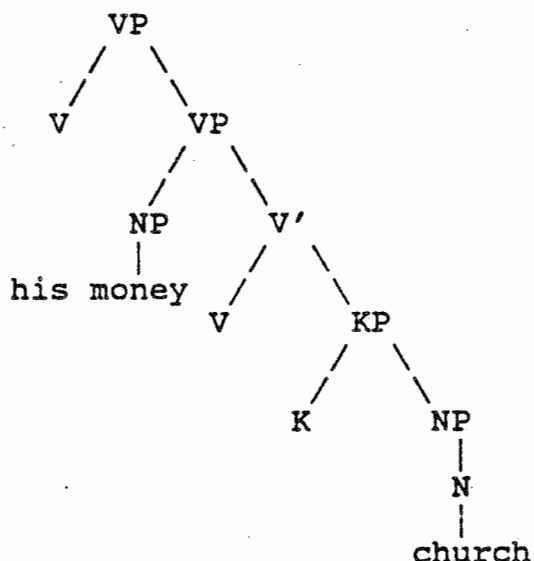
We will assume that conflation of the type at issue here is in fact an instance of incorporation, as sketched above. For the present we will simply assume this, recognizing that we are, to be sure, leaving unexplored a number of important questions which this view entails, a shortcoming which we will address at a later time.

If the verb of (1c) is derived by incorporation (of the nominal shelf, first into the abstract locative preposition, then into the abstract verb of motion, and finally into the abstract causative), then why is there no parallel derivation in the case of the verbal complex denoting transfer of possession? That is to say, why is there no English verb of the type represented by church in (2c)? What is the difference between the verb of "placement", which permits incorporation of the noun denoting "place", and the verb of "giving", which, by contrast, prohibits incorporation of the noun denoting the "recipient"?

The essential syntactic difference between the two verb classes resides in the complement of the inner verb. While the verb of "placement" selects a prepositional phrase, as represented in

(12) above, the verb of "giving" selects a nominal argument, to which it assigns dative case, as depicted in (13), corresponding to (2c):

(13)



The theoretically possible, but factually ungrammatical sentence *John churched his money is, let us assume, ultimately derived by incorporation of the noun church into the abstract causative verb, as suggested above for the derivation of (1c). In this case, however, some principle of grammar is violated. For some reason, the incorporation cannot proceed in the manner sketched above for the closely similar (1c).

It is reasonable to suppose that the crucial factor here is the nature of the prepositions involved in the two cases. The locative prepositions are, so to speak, genuine prepositions. By contrast, the dative is in essence a case, not a true preposition. We can account for the ill-formedness of (2c) if we can show that a lexical category (e.g., N) cannot incorporate into a prepositional case, i.e., into the functional category K -- perhaps because a prepositional case is always assigned by a governor, hence a specific case category and, therefore, never abstract. If this is true, then the derivation of (2c) must by-pass K, violating minimality and, hence, the ECP.