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Edited by
Caroline Duncan-Rose
Theo Vennemann

ROBERT P. STOCKWELL

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Objects (Direct and Not-So-Direct) in English and Elsewhere

STEPHEN R. ANDERSON

Despite the radical attempts of structuralists in the 1930s, 40s, and 50s to do away with her influence, the Miss Fidditch of Henry Lee Smith Jr and Martin Joos continues to assign us much of our homework. Although the concerns of grammarians in the era of generative syntax include many indisputable novelties, the great majority of tools and analytical categories in use today are inherited fairly directly from the same traditional theories of grammar in western Europe that formed Miss Fidditch’s views.

This is especially obvious in the case of the problem described by Stockwell (1980) as that of determining the ‘primitive alphabet’ in terms of which the rules of the syntax are stated: the basic terms and relations of a theory of syntax which are to be taken as primitives in individual statements. As Stockwell notes, theories today differ as to whether they accept, as undefined elements of such a primitive alphabet, parts of speech (plus constituency relations) alone, or semantic roles, or syntactic grammatical relations — but they all seem to assign some place in a syntactic description to the last of these, the set of structural relations which we inherit from a tradition reaching back at least to the grammatical theories of early Greek philosophers.

Miss Fidditch taught us (or at least, most of us) to identify the SUBJECT, DIRECT OBJECT, and INDIRECT OBJECT in a sentence, and most of us learned the lesson well enough. It is indeed quite easy to agree on the assignment of these labels as in (1) — much easier, say, than getting agreement on the correct extension of a term like VOWEL HARMONY in phonology, or the difference between SOURCE and AGENT, GOAL and PATIENT in traditional semantics.

(1) a. Jones bit his dog.
   SBJ. DO

b. Jones threw his dog a stick.
   SBJ. DO
This is not to say that scholars do not differ on the status of such labels: indeed Stockwell's discussion referred to above is precisely a concise comparison of theories that derive them from information about constituent structure alone, theories that derive them from information about semantic roles, and theories that take them as primitives. But virtually everyone agrees that they have some place in the theory.

The present paper investigates one important notion from this tradition: the relation of direct object (and those closely related to it, particularly indirect object). The goal of such an investigation is to determine just how solid a conceptual basis underlies our assignment of direct objecthood to sentence constituents, and indeed whether this notion corresponds to a unitary category at all. In the process, we will be led into a variety of other areas of sentence structure which may turn out to have some intrinsic interest.

Discussions of the traditional grammatical relations generally start with an analysis of the status of subjects — and nearly as often end there, as far as their substance is concerned. It is assumed that if good arguments can be provided for the validity of a category of subjects, a simple 'and so on' will suffice to bring along the rest of the grammatical relations from school grammar. Such arguments for the coherence of the notion of Subject are indeed rather easy to find, in the domains of morphology, syntax and even (to a limited extent, given the general fuzziness of theories) semantics. For example, English is a language with rather impoverished inflectional morphology, but much of what it has is devoted to distinguishing subjects from non-subjects. Verbs agree in number (always, except for modals, and only) with their subjects (e.g. Jones likes cats vs. Cats like Jones), and the only formal reflection of case relations in the language is in the shape of pronouns, which distinguish a subject form from a non-subject form (e.g. I saw her with him vs. He saw me with her).

In more straightforwardly syntactic terms, subjects also occupy a distinct structural position. This is shown, for example, by the fact that it is precisely the subject that constitutes the 'missing NP' in association with infinitives: Jones intended [to arrest his neighbor, but *Jones intended his neighbor to arrest] [to be arrested, for evidence that the semantic role of the NP involved is not the determining factor]. The literature on syntactic and semantic properties of subjects in a variety of languages is by now quite vast, and the well defined nature of subject-hood is not seriously in doubt. Of course, that still does not solve the problem of whether 'subject' is a primitive or a derived notion, and if the latter, what it is to be derived from — but the legitimacy of calling certain NPs (and not others) Subjects is quite generally admitted.

Whether the success of subjects furnishes a license to treat other traditional grammatical relations as equally well founded, however, remains at least logically in question. In fact, when we look at the traditional literature

on the notions of direct object and indirect object, it quickly becomes clear that these are much less securely founded. In the following sections, we will survey several attempts to provide criteria for direct object-hood, and to distinguish direct objects from other complements (especially indirect objects and objects of prepositions). The issues thereby raised lead to the discovery of a number of fundamental aspects of linguistic structure, but the notion of 'direct object' itself turns out to be merely a convenient descriptive label for a cluster of properties that are related as a 'family resemblance' rather than being co-extensional. Our conclusion is that direct objects (per se) have much less theoretical relevance than subjects.

1. SOME BASIC PROPERTIES OF 'OBJECTS'

Plato founded the notion of 'subject' on the relation between what we are talking about and what we have to say about it, whilst Aristotle saw subjects as the particular individuals of which a universal is predicated. In both cases, the underlying intuition was that 'subject-hood' was fundamentally an aspect of the semantic structure of sentences, susceptible to a unitary definition in terms of the nature of the judgment. Following a similar line, traditional grammar attempted to define the direct object semantically as well.

Jespersen (1924, 1927) surveys a number of attempts of this sort. Considering pairs of sentences in which the same verb appears with or without an object, he notes that He doesn't smoke differs from He doesn't smoke cigars in that 'the object serves to make the meaning contained in the verb more special, or to limit its sphere of applicability' (Jespersen 1927: 230); but immediately points out that all sorts of other complements fall under this vague criterion as well (compare He doesn't smoke in public, etc.).

The most common attempts Jespersen finds in the literature to define objects are in terms of what we would today call 'thematic relations': definitions such as 'the person or thing to which something is done', 'the receiver of the action', 'the thing directly affected by the action', etc. But as Henry Sweet (1898) among others had already noted, such a definition cannot possibly encompass the full range of noun phrases which we would like to call objects. In the case of perception verbs, for instance, the 'person to whom something is done', who 'is directly affected', etc., is surely the subject:

(2) a. Jones saw a pink elephant in his sleep.
   b. The elephant heard Jones coming.
   c. Jones fears more dreams like that.

Consideration of a representative sample of verb types makes it clear that
there is no unitary semantic role which is consistently filled by direct objects.

Another sort of problem for the attempt to define direct object-hood semantically is that it is often possible to describe the same state of affairs in more than one way, using the same verb and the same NPs, where the difference lies precisely in the choice of one or another NP to serve as direct object. In pairs like the following, there is surely no difference whatsoever in the semantic role filled by a given post-verbal NP in the (a) and the (b) sentences:

(3) a. Jones made a silk purse out of a sow’s ear.
    b. Jones made a sow’s ear into a silk purse.

(4) a. Our chess club furnishes arms to the Montenegrin rebels.
    b. Our chess club furnishes the Montenegrin rebels with arms.

(5) a. Jones pounded his fist on the table.
    b. Jones pounded the table with his fist.

If it is indeed possible for the same NP to fill the same role with respect to the description of the same state of affairs, using the same verb, by two different sentences, it is obvious that specific semantic roles cannot be criterial for direct objects.

If it is not its semantic role that makes a given NP a direct object, then what is it? Considering the pairs (3–5) above, it is evident that (in English, at least) ‘direct objects’ are the otherwise-unmarked NPs that come immediately after the verb. In other languages, criteria such as overt case-marking or (non-subject) agreement in the verb might be more important; while others such as word order might be irrelevant. Nonetheless, it is clear that direct objects are much more centrally a formal class than a substantive semantic one.

When we consider any given English verb, we might expect that we could at least predict, from a consideration of the semantic roles that are implied for the participants in the state of affairs it describes, what formal possibilities are employed for the complement phrases that represent these participants. Even this much of a match between semantic and syntactic structure does not seem to be possible, however. Different lexical items describing (at least grossly) similar situations differ considerably in the sets of complements with which they occur:

(6) a. Jones hung his walls with pictures / hung pictures on his walls / hung pictures.
    b. Jones covered his walls with pictures / covered his walls / covered pictures on his walls / covered pictures.

Each of the verbs in (6) describes the fact that Jones established a relation between a set of pictures and a set of walls; each can in fact occur with both a direct object and a prepositional phrase, but they differ as to which of the two sets can be referred to by a direct object alone, or which of the two appears as direct object when the other is described in a prepositional phrase.

From such considerations (which could be multiplied without effective limit), we see that the set of complements (unmarked NPs, prepositional phrases, etc.) taken by a given verb is an idiosyncratic lexical property, together with the particular ways in which these complements are integrated into its semantic interpretation. It is necessary to describe, as a part of the lexical specification for each verb in the lexicon of the language, just what sorts of complements it can be associated with: what specific prepositions appear with such complements, and whether some complement can appear with no associated preposition whatsoever.

There are two aspects to this specification — the formal description, such as ‘appears with an on-phrase’, ‘appears with a with-phrase’, ‘appears with an unmarked NP’, etc.; and the interpretation to be assigned to each such formally characterized complement. Obviously there is an intimate connection between these two: on-phrases describe locations, but not more, etc. The relation is not one of complete predictability, however, and it is precisely in the area of the association between direct objects and their interpretation that the most evident ambiguity arises (cf. the variants of (6a) vs. (6b) with direct object alone, for example). The fact that syntactic and semantic structure are related in such a fashion is an aspect of the claim that syntax is ‘autonomous’, and the observation of this autonomy is hardly a new one. An exactly parallel point is made by Stockwell (in Hill ed, 1962: 27), who notes that languages can differ in the formal categories that realize complements whose semantic roles are essentially the same, and that this argues that ‘one cannot hope to discover the syntactic structure of a language from a set of semantic absolutes’.

Now in fact, although it is not possible to associate the relation of direct object with a unitary semantic role, this does not mean that there are no semantic correlates of the direct object relation. One such correlate was noted some years ago (Anderson 1971), and has been investigated by a number of authors. When a given ‘participant’ associated with a particular verb can appear either as an unmarked NP or in a prepositional phrase, it is often the case that the unmarked NP is interpreted HOLISTICALLY (as affected more completely, definitively, successfully, etc. by the action), as opposed to PARTITIVELY. To see the nature of this distinction, consider the following pairs:
(7) a. Jones assembled the Linguistics Department into a volleyball team.
b. Jones assembled a volleyball team from the Linguistics Department.

(8) a. Every night I read War and Peace to my wife.
b. Every night I read to my wife from War and Peace.

(9) a. Rosie ran the New York Marathon two years ago.
b. Rosie ran in the New York Marathon two years ago.

(10) a. A disappointed diner shot Girardet last week.
b. A disappointed diner shot at Girardet last week.

Each of these pairs describes essentially the same situation, but with subtle differences. In (7a), for instance, it is at least strongly implied that the entire Linguistics Department was pressed into service, while (7b) says only that a team was assembled whose members were from the Linguistics Department. Taken at its word (8a) describes an astonishing amount of reading, since it (and not the otherwise parallel (8b)) implies that I read the entire novel each evening. The sentences in (9) relate to the famous incident a few years ago in which one runner in the New York Marathon appears to have run only a short distance (a couple of miles or so), and then slipped away to take the subway to a point near the finish, where she rejoined the course and finished well before any other woman in the race. Describing this event, one could perhaps use (9b), since she did indeed run in the race, but not (a), since she didn’t in fact run all of the race. Finally, my concern for the health of the world’s greatest chef will be much more acute if I hear (10a), which implies Girardet was in fact hit by the shot, than if I hear only (10b).

In each instance, an NP is interpreted as ‘holistically’ affected when the variant is used in which that NP appears as a direct object, but not when it appears as an oblique complement. Of course, not all verbs admit such a holistic interpretation of their direct object. In particular, it appears to be a phenomenon associated (in English) with the specific case of verbs which can take the same participant as either a direct (unmarked) or an oblique (prepositional phrase) complement. Verbs like examine, discuss, convince, destroy, etc., whose objects are always direct, do not present any contrast. Still, it seems that holistic interpretation (where it arises) is a consistent property of direct objects.

Relatively little search, however, turns up cases in which holistic interpretation appears to be a property not of direct objects, but of subjects:

(11) a. The seeds we planted grew/spouted into opium poppies.
b. Opium poppies grew/spouted from the seeds we planted.

(12) a. John broke out in a rash.
b. A rash broke out on John.

In (11a), it is implied that all of the seeds we planted (or at least all of those for which we have evidence) grew or sprouted into opium poppies; while (11b) only asserts that opium poppies were among the results of the germination. Similarly, (12a) asserts (if construed literally, though perhaps exaggeratedly) that John was covered with a rash, while (12b) only says that he had one somewhere. With these intransitive verbs, it is apparently the subject NP that is interpreted holistically. Of course, subjects share with direct objects the property of being otherwise unmarked (i.e., of appearing without a relation-specifying preposition); and the intransitive verbs in such sentences are exactly the ones in which any one of several semantic roles may be realized by the subject NP, with others realized in prepositional phrases. From this, we might conclude that there is a unitary generalization at work: the possibility of a holistic interpretation is a property of unmarked NPs that alternate with prepositional phrases, rather than a property of (direct) objects per se.

The sort of alternation between holistic and partitive interpretation which we can see in English is far from isolated in the languages of the world. Many other languages show similar pairs of sentences, differing in approximately the same way semantically, and differing formally in that the holistically interpreted object is formally ‘direct’ (in some language-particular sense) while the partitively interpreted one is ‘oblique’. Polish, for instance, shows pairs in which the holistic object is case-marked in the accusative, while the partitive object is in a prepositional phrase.

(13) a. Kocham Anię
    'I love Ann (acc.)'
    'I love Ann.'
b. Marysia kocha sies w stylnym aktorze
    Mary loves refl prep. famous actor
    'Mary is in love with a famous actor.'

(13a) and (13b) differ in a fashion similar to their English glosses: in (13b), the actor may not even know of Mary’s existence, while (13a) carries much more of an implication of the object’s involvement (though not necessarily reciprocation).

Many languages, in fact, make much more systematic use of such a device than the lexical idiosyncrasies of English or Polish. In Warlpiri, for example (cf. Hale 1973), objects of transitive verbs are usually marked in the absolutive case (while transitive subjects are in the ergative). Systematically, however, it is possible to indicate that an action was incompletely or unsuccessfully carried out by marking the object with the dative:
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(14) a. njuuti-ju 0-npa-tju pantu-pu ngatu
    you-ergative Aux.-2-1 spear-past me
    ‘You speared me.’

b. njuuti-ju 0-npa-tju-la pantu-pu ngatu-ku
    you-ergative Aux.-2-1 obl. spear-past me-dative
    ‘You speared at me; you tried to spear me.’

Some languages even have a distinct case with exactly this function. In Finnish, for example, the partitive case is used for the object when the action is incompletely carried out, the object is incompletely affected, or simply to indicate an imperfective aspect:

(15) a. Hanuki kirja-n
    He read-past book-gen./acc.
    ‘He read the book.’

b. Hanuki kirja-a
    he read-past book-partitive
    ‘He was reading the book.’

In contrast (cf. (15a)), completely affected objects in perfective sentences are marked with the accusative (distinct only for pronouns; syncletic with the genitive for singular nouns, and with the nominative for plural nouns).

In the Polish and Warlpiri cases, the contrast which marks holistic vs. partitive is formally an aspect of the marking of objects of transitive verbs, and so examples parallel to (11) and (12) in which the same distinction is marked with intransitive verbs do not arise. In Finnish, however, the partitive case can appear on the subjects of intransitives, where it marks a difference of definiteness:

    room-in play child-partitive
    ‘There were children playing in the room.’

b. Lapse-t leikki-vait 電oneessa.
    child-nom.pl played-pl room-in
    ‘The children were playing in the room.’

The distinction found in intransitive subjects clearly shares at least a family resemblance with that found in objects, and one would probably want to subsume them under the same generalization — as in English.

We conclude, therefore, that there is no unitary semantic characterization available for the notion of ‘direct object’. Attempts to base such a definition on semantic roles founded on the general semantic diversity of objects, together with the fact that the same role may be realized with a given verb both as objects and as oblique (prepositional) complements. The one semantic characteristic which does seem to be associated with objects, on the other hand, is the possibility of holistic vs. partitive interpretation, and this exists for subjects as well as for objects. It is clearly a generalization about certain formal properties of surface NPs (in English, unmarked ones), rather than about a class of elements filling a syntactic structural position (direct objects).

2. DIRECT VS. INDIRECT OBJECTS

From the evidence of the preceding section, we conclude that the notion of direct object is a formal one, rather than being based on semantic factors: direct objects are otherwise-unmarked NPs that follow the verb. By itself, however, this definition is insufficient. A central class of problem cases is presented by the traditional indirect object construction:

(17) a. The committee offered the position to Jones.
    b. The committee offered Jones the position.

(18) a. Surrupcitously, Jones picked an edelweis for his mother.
    b. Surrupcitously, Jones picked his mother an edelweis.

Like the constructions discussed above with regard to the difference between holistic and partitive interpretation of objects, the indirect object construction involves an alternation between complements introduced in a prepositional phrase (the (a) sentences in (17) and (18)), and the same complements introduced as unmarked NPs (the (b) sentences). In the latter cases, of course, sentences contain two post-verbal unmarked NPs; and if this notion is to be well defined, it is necessary to resolve the issue of which of these (if either, and not both) should be considered the ‘direct’ object.

Consider this issue as it is addressed by Jespersen (1927: 279): ‘the direct object is more essential to the verb and more closely connected with it than the indirect object’, as shown by the fact that ‘it is possible to isolate the direct object (they offered a reward), but not the indirect object ([*] they offered the man). Jespersen’s claim is thus that, when a verb takes two unmarked complements (one of which alternates with a prepositional phrase in or for), one of these (but not the other) is obligatory, and it is this object that should be called ‘direct’.

With some verbs, however, neither complement can be isolated in Jespersen’s sense:

(19) a. hand Jones a hot potato / hand a hot potato to Jones
    *hand a hot potato / *hand Jones
When we consider a full range of verbal NP complements, it is clear that the criteria of optionality and existence of to-phrase paraphrases cannot provide us with necessary and sufficient conditions for assigning the labels 'direct' and 'indirect' to objects. Consider, for example, the verb *bet. This verb takes up to three complements: (a) a sum wagered; (b) the party with whom the wager is made; and (c) a proposition with respect to which the wager is made. The first of these can appear alone; the second can appear unmarked, but not alone. It would thus appear that the sum wagered is the direct object, and the person with whom the bet is placed the indirect object — but the latter has only a with-phrase paraphrase, and not a to-phrase. Further, the sum wagered is not an obligatory complement, since it can be omitted if the subject of the wager is mentioned. This latter can appear as an on-phrase if nominal (or a gerund), or as a bare complement if sentential:

(23) a. Smith *bet $10 (with Jones) (on a horse / on Mary's being fired).
b. Smith bet $10 / *bet Jones / *bet $10 to Jones.
c. Smith *bet (Jones) that Mary would be fired.
d. *Smith bet a horse / Mary's being fired.

Jespersen's definitions fairly clearly do not provide us with a way of satisfactorily identifying the various complement NPs in association with many verbs. Note that there is no particular objection to saying that a single unmarked NP following a verb is its direct object: the problem arises exactly with verbs which can take more than one such complement. Here Jespersen attempts to provide us with a basis for saying that one of these is the 'real' direct object, while the other is an indirect object. The goal is to specify properties that designate one of the complements (defined by its semantic role) as direct object. As we noted initially, it does not appear possible to specify the notion of direct object in terms of a constant semantic role; Jespersen thus attempts to base his selection on formal properties (unmarked NP as direct object, and to-NP as indirect object). Where more than one NP meets the formal condition for being a direct object, the reference must be to other, related structures in which the same verb occurs. We have just seen, however, that the attempt to refer to optionality or the presence of a to-phrase in such structures does not in fact solve the problem completely.

Quirk et al. (1972: 349) attempt to resolve these problems by introducing an additional criterion for distinguishing between direct and indirect objects in sentences with two unmarked NPs, one not making reference to other related structures: 'AN INDIRECT OBJECT, where both are present, precedes the DIRECT OBJECT, and is semantically equivalent to a prepositional phrase; a direct object may occur without an indirect object, but not vice versa ...' In fact, their definition incorporates both of Jespersen's...
criteria (equivalency to a prepositional phrase, though they do not specifically limit this possibility to *to-phrases, and optionality), as well as a factor of linear order. If the notions of direct object and indirect object correspond to real and unitary aspects of grammatical structure, then, they are implicitly claiming that these factors will coincide in all cases.

We have already noted above (cf. (20)–(21)) that it is not always the case that indirect objects are optional, while direct objects are not. We can also note that some ‘indirect objects’ do not correspond to a prepositional phrase:

(24) a. fine miscreants $10 / *fined $10 to miscreants
   b. envy bankers their wealth / *envy their wealth to bankers
   c. spot the Bruins ten points / *spot ten points to the Bruins

In these cases, we are left with only the criterion of relative linear order to distinguish ‘direct’ from ‘indirect’ objects. This would appear to conflict, however, with the fact that for the verbs in (24), if either NP is optional it is not always the one corresponding to the first of the two complements:

(25) a. fine repeat offenders / *fine more than they can pay
   b. envy the rich / envy Jones’s new job
   c. *spot Milan / *spot three goals

Furthermore, there are some complements which can appear unmarked but which alternate with prepositional forms (and thus ought to be called indirect objects), but which do not occur with another unmarked complement following them:

(26) a. write (telephone, wire, etc.) mother / write to mother
   b. signal the waiter / signal to the waiter

Is the single complement in structures such as these a direct object or an indirect object? Neither Jespersen nor Quirk et al. have a satisfactory way to resolve this problem.

In identifying direct objects, it is apparently a necessary (though not sufficient) condition that a post-verbal complement be unmarked by a preposition. Indirect objects (at least in the traditional acceptance of this term) are typically optional, typically have prepositional phrase paraphrases (usually with *to or *for), and typically come before the direct object when unmarked. We have seen above, however, that none of these characteristics can really be treated as definitional for indirect objects.

Another property of indirect objects has been noted by Stowell (1982): it is generally the case that when both direct and (unmarked) indirect objects co-occur, the indirect object can be interpreted as having some sort of (generalized) possessor relation with regard to the direct object. Sometimes, a verb that occurs with direct and indirect objects, so long as this relation can be imposed on the two, appears only with a direct object and a prepositional phrase if the apparent indirect object cannot be interpreted in this way:

(27) a. Jones sent a telegram to Canada.
   b. *Jones sent Canada a telegram.
   c. Jones sent Smith a telegram.

(28) a. Clean your room for Aunt Mary!
   b. *Clean Aunt Mary your room!
   c. Clean Aunt Mary a nice plump chicken!

The status of this condition is not clear, however, and it is surely not definitional for indirect objects. On the one hand, it cannot be a necessary condition, since there is no obvious sense of ‘possession’ that applies to the presumptive indirect objects of sentences like (22, 23, 24a), but not to otherwise parallel cases where indirect object constructions are not possible. And it is also not a sufficient condition, since it is well known that many verbs for which such an interpretation is possible do not allow unmarked indirect objects:

(29) a. Jones donated $10 to the Red Cross / *donated the Red Cross $10.
   b. Jones appointed a nurse for his son / *appointed his son a nurse.

Thus, while it is probably a general principle of English that the first of two unmarked post-verbal NP complements in interpreted where possible as standing in some sort of abstract possessive relation to the second, this cannot be taken as a definition of the indirect object relation.

We may note that ‘indirect objects’ may sometimes also be subject to holistic interpretation, as with other unmarked NPs like direct objects:

(30) a. Jones left a dog and cat hospital all of his money.
   b. Jones left all of his money to a dog and cat hospital (but the will was invalidated).

(31) a. Jones handed the butler his hat (who then dropped it).
   b. Jones handed his hat to the butler (who didn’t take it).

Judgments are moderately subtle in such cases, but at least to my ear, (30a) implies that in fact the dog and cat hospital actually received the
money, while (30b) in contrast is consistent with the state of affairs in which for some reason Jones’ testamentary wishes were not carried out. Similarly, (31a) implies that the butler received the hat, while (31b) only implies that it was directed toward him. If this description is accurate, it would appear that the unmarked indirect objects are interpreted as more holistically implicated in the action described by the verb than the otherwise synonymous prepositional phrase paraphrases — surely a fact to be described by whatever principle is responsible for holistic interpretation.

On the basis of the considerations adduced in this section, then, we conclude that however convenient the labels ‘indirect object’ and ‘direct object’ may be (especially for the case in which two unmarked complements occur together), the traditional difference is not based on a set of significant and generally applicable criteria. Again, we come down to the fact that lexical specification for each verb must describe the exact set of complements that it can occur with, and the role to be assigned to each of them in its interpretation. There are surely many partial predictabilities in this domain, but these have the status of limited generalizations over the lexicon, rather than rules of syntactic structure. Similarly, there are undoubtedly rules of semantic interpretation that operate on the basis of syntactic structure (such as the rules of holistic interpretation and the possessive rule discussed by Stowell), but these rules are not definitional for categories in that structure. Indeed, there is no evidence that they need access to the information that would be represented in the labeling of such categories as direct and indirect object.

3. OBJECTS AND PASSIVIZATION

A particularly notable characteristic of objects, in English at least, is their susceptibility to passivization. The two notions of object-hood and passivization, indeed, are often regarded as virtually synonymous. As Jespersen (1927: 299) succinctly puts it, ‘[w]hat in the active is an object, is made the subject in the passive’.

(32) a. A man in uniform demanded my passport at the border.
    b. My passport was demanded at the border by a man in uniform.

As the relation between (32a) and (32b) illustrates, the direct object of a transitive verb with no other unmarked NP complement appears as the subject of the corresponding passive.

With verbs taking more than one unmarked complement (i.e., those taking an ‘indirect’ object), as in (33a), the ‘direct’ object may be passivized as in (33b). It is also possible to passivize the ‘indirect’ object, as in (33c)—but only if this appears unmarked. The virtually synonymous sentence with a prepositional phrase does not have a variant with passivized indirect object:

(33) a. The railway gave Jones a gold watch when he retired.
    b. A gold watch was given Jones by the railway when he retired.
    c. Jones was given a gold watch by the railway when he retired.
    d. *Jones was given a gold watch to by the railway . . .

It seems, then, that there is a simple generalization at work: unmarked NP complements of verbs, their ‘objects’ in a generalized sense, can appear as the subjects of corresponding passives. Unfortunately, however, this claim is falsified in both possible directions: some unmarked post-verbal NP complements of verbs are not passivable, and some NPs that can be passivized are apparently objects of prepositions. Turning to the first of these cases, we can note with Jespersen (1927: 300) that ‘[n]ot every object can be made the subject of a passive sentence. Some verbs do not admit of a passive turn, although according to the analysis here preferred they take an object in the active […].’ Such verbs include the following:

(34) a. *40 tons is/are weighed by the Soviet space station.
    b. *Four is equalized by the square of two.
    c. *Too much is cost by the new edition of my book.
    d. *Jones’ children are resembled by him.

The usual reaction to this observation is to claim that ‘obviously’ the post-verbal NPs in such sentences are not ‘real’ objects at all, but rather some sort of quasi-adverbial complements. This is not, however, to solve the problem, but simply to restate it. If we confine the Primitive Alphabet of syntactic description to information about word class (and phrasal type, derived from word-class information in some variant of an X-theory) plus an indication of constituent structure, there is no reason to deny that the phrases following verbs like weigh, equal, cost, resemble, etc. really are NPs. And since the verbs in question are apparently just as much sub-categorized for their complement phrases as a verb like beat is for its object, there is equally no reason to deny that they occupy a position in constituent structure parallel to that occupied by ‘real’ objects.

Of course, if we extend the Primitive Alphabet of syntactic description to include labels for grammatical relations borne by particular constituents, we could simply deny the label ‘object’ to the complements of such verbs. Aside from the difficulties encountered above in deciding what status the relations direct and indirect object should have, however, are those that will be noted below with the claim that exactly objects of verbs can be passivized, Jespersen (1927: 232) notes another problem:
If I call two pounds and three years objects in "it costs two pounds" and "it will last three years", my chief reason is that it is possible to say "it will cost you two pounds" and "it will last you three years", where it is most natural to speak of an indirect and a direct object... but then we must also call two pounds in "it weighs two pounds" an object; and probably also two miles in "he walked two miles".

In other words, the complements in question are integrated into the system of 'direct' and 'indirect' objects in the same way other direct objects are. Their failure to undergo passivization remains an idiosyncrasy which cannot be eliminated simply by saying that they are not 'real' or 'full-fledged' objects, at least in any coherent and explicit sense of that term.

The second problem noted above is that the subject of a passive may correspond to a prepositional object or some other complement rather than to a 'direct object', as in the following examples:

(35) a. Our Mr Jones is looking into your request with care.
   b. Your request is being looked into with care by our Mr Jones.
   c. Jones made use of Zorn's Lemma in proving his theorem.
   d. Zorn's Lemma was made use of by Jones in proving his theorem.
   e. Use was made of Zorn's Lemma by Jones in proving his theorem.

(35b) illustrates the possibility of passivizing what is apparently the object of a preposition in the corresponding active (35a). In (35d) we have the same sort of relation, made still more complex by the fact that the prepositional phrase in question is apparently not a complement to the verb make itself, but rather to its object use — which is independently passivizable as well, as shown by (35e).

The usual account of sentences like (35b,d) is to appeal to the fact that many verbal lexical items in English actually consist of a verb plus a preposition-like element: the 'Verb-Particle' construction. Jespersen (1927: 312ff) suggests such a line:

What in the active is the object of a preposition connected with a verb or with a verb and its object may be made the subject of a passive construction. [From this] we see that the particle has greater cohesion with the verb than with what (in the active) is the object either of the particle alone (preposition) or of the whole phrase.

If we interpret this 'greater cohesion' as the claim that the verb plus its particle form a constituent (a verb), we can then say that the apparent prepositional objects in such cases are actually the (unmarked) direct objects of this complex verbal unit.

In fact, as a substantial literature argues (see for example Fraser 1965, Palmer 1965, Bolinger 1971, and many other works), it is possible to distinguish genuine verbal particles from prepositions accompanying other post-verbal complements. One important distinguishing property, for instance, is the fact that genuine particles, but not prepositions, may follow objects:

(36) a. Jones looked up Smith's telephone number.
   b. Jones looked Smith's telephone number up.
   c. Jones looked into Smith's request.
   d. *Jones looked Smith's request into.

Unfortunately for the attempt to appeal to the Verb-Particle construction (36a,b) as the basis for passives such as (35b,d), it is not only in these cases that passivization is possible. Both of the passives in (37) are well formed:

(37) a. Smith's telephone number was looked up by Jones.
   b. Smith's request was looked into by Jones.

Despite the possibility of passivizing either (36a) or (36c), the contrast between (36b) and (36d) suggests that into Smith's request in (36c) is actually a prepositional phrase, and thus a constituent, as opposed to a sequence of verbal particle plus unmarked NP like up Smith's telephone number in (36a). This conclusion is reinforced by other considerations as well. For instance, prepositions, but not particles, form a phrase with the object, as shown by their moving together with it in the formation of relative clauses and questions:

(38) a. The request into which Jones was looking was Smith's.
   b. Into which request do you imagine Jones is looking now?
   c. *The telephone number up which Jones was looking ...

Similarly, with reference to the construction in (35c-e), there is good reason to believe that both of X and use of X are constituents in the phrase make use of X:

(39) a. Zorn's Lemma, of which Jones made use in proving his theorem, is equivalent to the Axiom of Choice.
   b. Zorn's Lemma, use of which was made by Jones ...

If this is correct, however, it is difficult to see how X in this construction can be construed syntactically as the direct object of a hypothetical complex verb make use of, parallel to the structural position of the number in look up the number.
Another argument against the proposal that the subjects of ‘prepositional passives’ like (35b,d) correspond to the direct objects of Verb–Particle constructions, rather than to objects of prepositions, can be constructed from the facts of ‘Heavy-NP Shift’. Essentially, NPs that are (in some sense that remains to be explicated) heavy or internally complex can appear sentence-finally, out of their normal structural position.

(40) a. The constable watched patiently the building which the suspect had been seen to enter.
   b. The constable told to move along the last few of the spectators who had surrounded the vandalized statue.

There are, however, two classes of NP which are not in general subject to displacement in this way: subjects, and objects of prepositions.

(41) a. *Finally moved along the last few of the spectators who had been standing around the vandalized statue.
   b. *The constable waited before all afternoon the building which the suspect had been seen to enter.

By this criterion, we can determine that work on X and work in X in sentences like those in (42) below are sequences of verb plus prepositional phrase, while dig up is a Verb–Particle combination taking an object structurally parallel to that of simple verbs like cultivate:

(42) Jones has been cultivating digging up for weeks a pathetic little *working on *working in garden plot in which he hopes to raise vegetable marrows.

However, the NP object following any one of these may be the subject of a corresponding passive:

(43) This garden looks like it has been recently cultivated.
   dug up.
   worked on.
   worked in.

From these facts, we conclude that the phenomenon of ‘prepositional passives’ cannot be reduced to the existence of Verb–Particle sequences. As a result, we are left with the two difficulties we originally noted for the view that exactly objects of verbs can be passivized in English. On the one hand, some apparent verbal objects cannot be passivized, while on the other, some NPs that can be passivized are evidently objects of post-verbal prepositions, not of the verbs themselves directly. In the next section, we suggest a line of inquiry that may lead to an account of these problems.

4. THE NOTION OF ‘GRAMMATICAL PERSPECTIVE’

The difficulty raised in the preceding section concerns the circumstances under which a given post-verbal complement can serve as the subject of a corresponding passive sentence. It would of course be of considerable interest if it were possible to give a purely syntactic solution to this question, in the form of a set of necessary and sufficient syntactic conditions for passivization. In traditional grammar, what is commonly proposed is that direct objects can passivize; but we have already seen that the notion of direct object is not an altogether satisfactory one; and in any event, indirect objects as well as direct objects can be passivized in English. A natural refinement would be to abandon the relational characterization and say that what can be passivized is an unmarked post-verbal NP complement; but we saw in the previous section that this is both too strong and too weak, since some passive subjects correspond to objects of prepositions on the one hand, and some unmarked post-verbal NP complements cannot be passivized on the other.

In the absence of a compelling syntactic alternative, we might examine the possibility that some other area of grammatical structure is central to determining the well-formedness of passives. A point made above in section 2 may have some methodological relevance: it is often the case that the same gross semantic content can be presented in more than one grammatical form, but when this happens, there are frequently subtle semantic distinctions associated with the difference. We suggest that there are semantic properties of passive sentences which furnish a key to the problem at hand.

The relevant aspect of semantic interpretation can be described, following suggestions of Fillmore (1977), as a theory of ‘Grammatical Perspective’. Fillmore observes that the semantic content of a sentence is represented from a particular (not necessarily unique) grammatical point of view. This ‘perspective’ is oriented by one of its purportedly referring expressions (NPs), which is taken as central to its content. Much previous work (e.g. Anderson 1977, Wasow 1980, Bresnan 1982a) has identified this central NP with a particular semantic role (the theme) in a theory of Thematic Relations; but there are reasons to believe that no one particular semantic role can be identified with the participant which anchors the Grammatical Perspective of a sentence. Still following Fillmore’s insight, we propose to call this NP the Grammatical Figure (as in ‘figure’ vs. ‘ground’). The designation of a Grammatical Figure is not the only aspect
of the determination of a sentence's Grammatical Perspective. Other relevant aspects include the assignment of responsibility (Agency) to some participant in some sentences, an aspect of sentence semantics which is interestingly grammaticalized in the Salish languages (Thompson 1976); abstract 'Source-Goal' patterns for movement or change, etc.

The Grammatical Figure is a sort of 'logical topic' (not to be confused with the discourse topic). It is the argument of a logical relationship of predication which forms part of the interpretation of a sentence. Since Plato is no longer around to defend himself, it might in fact be possible to identify this notion with his conception of ONOMA (the thing about which something is said) as opposed to RHEIMA (which says something about it). When a sentence is logically 'about' the fact that an event results in a change in the state of some object, it is that object which constitutes its central orientation or Grammatical Figure. In a sentence describing motion, it is typically the Grammatical Figure that moves; if a sentence describes an event that results in the creation of some object, this object is the Grammatical Figure. In the description of perceptions, it is usually the source of the perception rather than its experiencer which is the Grammatical Figure. In so far as a sentence ascribes some identifying property, attribute, or (possibly abstract) location to an object, it is the object so identified that is the sentence's Grammatical Figure. It will be seen that this characterization is quite similar to that usually given of the theme in a theory of semantic roles; but as we will note below, there are some reasons to believe the two concepts should be kept separate.

In the most usual cases, the Grammatical Figure is identifiable from the grammatical relations borne by various NPs in the sentence. Usually the Grammatical Figure in a sentence containing a 'garden-variety' transitive verb is its direct object, with an intransitive verb, it is the subject.

Since the Grammatical Perspective of a sentence is an independent aspect of its semantic interpretation, however, the association of grammatical relations with this structure is not completely mechanical. Though most structurally transitive verbs have their direct object as Grammatical Figure, for example, a few must be construed as making something else occupy this place. Verbs such as resemble have this property: in Jones' children resemble him, the natural interpretation is that in which an identifying property is ascribed to Jones' children, rather than to Jones. Thus, with such verbs, the subject is the Grammatical Figure rather than the object. With some (especially locative) verbs describing essentially symmetrical relations, either subject or object may be the Grammatical Figure.

These remarks hardly constitute an articulated 'theory' of Grammatical Perspective, but they suggest the direction in which such a theory could be constructed. For further discussion, see Fillmore (1977). On the assumption that a full theory of this sort could be developed, we can suggest the following hypothesis in relation to our original concern: the Grammatical Figure of a passive sentence cannot be in non-subject position unless the corresponding active also has its Grammatical Figure in the same position. The latter possibility is intended to accommodate examples like (44) below:

(44) a. Jones served Smith a dead fish.
    b. Smith served Jones a dead fish (by Jones).
    c. Jones has put an end to Smith's intransigence.
    d. An end has been put to Smith's intransigence (by Jones).

In (44a), it may be the fish which is the Grammatical Figure, since the action of serving it results in its conveyance from Jones to Smith. This remains the case in the passive (44b), and the structural position of the Grammatical Figure is the same in both cases. In (44c), it is Smith's intransigence which constitutes the Grammatical Figure, since it is this which undergoes change as a result of the event described. In the corresponding passive, the Grammatical Figure remains the same, and occupies the same structural position as in the active.

The more usual case, however, is that in which the (non-subject) Grammatical Figure in the active becomes the subject in the passive:

(45) a. Jones' slovenliness incensed his mother.
    b. Jones' mother was incensed (at/by his slovenliness).

Assuming that the Grammatical Figure must either remain in place or become the subject in the passive immediately accounts for the standard class of exceptions to passivization, such as equal, resemble, weigh, cost, lack, etc. We can call such verbs 'pseudo-transitive', since their semantic interpretation is not normally consistent with taking their 'object' as their Grammatical Figure. In the passive, the post-verbal NP becomes the subject, and the original subject (which is the Grammatical Figure) would thus have to move to a non-subject position:

(46) a. Jones lacks confidence / *Confidence is lacked (by Jones).
    b. The cheese weighs a kilo / *A kilo is weighed by the cheese.

Interestingly, there are exceptional circumstances in which these verbs can be given such an interpretation:

(47) a. In the result of this peculiarity, it [Othello] is resembled only by Antony and Cleopatra. (Bradley, Shakespearean Tragedy, apud Jespersen 1927: 300)
    b. Jones' world record has recently been equaled by a Swiss.
In these examples, we can note that *resemble* is normally used to assert a property of its subject, but in (47a), the property under discussion is a characteristic of the post-verbal NP in the active: that is, because of the peculiarity in question, *Othello* has the property that only *Antony and Cleopatra* resembles it. Similarly, in ordinary uses of *equal* (e.g., *Pl equals 3.1415926...*), some property of the subject (*pi*) is asserted, but in (47b) the sentence describes a change which the post-verbal NP has undergone. While the Grammatical Perspective of a sentence can be thought of as a sort of organization imposed on its basic semantic content, it is not the case that it is uniquely determined by this content. With many verbs, the logical predication relationships that can be expressed are unambiguous, but in other cases there is more than one possible mode of interpretation. For example, (48) below can be interpreted as expressing a property either of the troops (their present location), or of the territory beyond the river (that of being occupied by our troops):

(48) Our troops have crossed the river.

On the first of these readings, it is the subject (*our troops*) that constitutes the grammatical figure, while on the second it is the object. If the generalization suggested above is correct, we would predict that a passive could only be formed on the latter reading, in which the Grammatical Figure becomes subject, and not on the former, in which the Grammatical Figure would have to be deleted (or displaced to a by-phrase). This is of course correct, since (49) can only be used to describe the current state of our conquest, and not to tell someone where to forward mail addressed to the troops:

(49) The river has been crossed by our troops.

Transitive verbs that do not admit of an appropriate Grammatical Perspective do not have directly corresponding passives:

(50) a. The list includes your name.
    b. *Your name is included by the list.
    c. Your name is included on the list.

Sentence (50a) describes a property of the list, not of the name, and thus does not directly passivize; while the related adjective *included* expresses a property of its subject (like other adjectives), and thus allows for sentence (50c).

In some cases, it is clear that not only the verb of the sentence but the entire state of affairs it describes can determine the range of possible Grammatical Perspectives. Thus, (51a) cannot plausibly be interpreted as expressing a property of the stadium, though (51b) can be interpreted as describing the surprising result (as an effected object or object of result, in traditional terms). Correspondingly, the latter has a passive (51c) while the former does not (51d):

(51) a. Jones arrived at the stadium.
    b. Jones arrived at a surprising result.
    c. A surprising result was arrived at by Jones.
    d. *The stadium was arrived at by Jones.

An area of grammatical structure in which an account similar to that offered here has been suggested (cf. Anderson 1977) is the phenomenon of 'Vissers Generalization', whose significance was pointed out by Bresnan (1976). This is the observation that when a verb takes a complement phrase, the passive is only possible if that complement refers to the immediately preceding NP:

(52) a. John will make Mary a docile wife.
    b. Mary will be made a docile wife by John.
    c. John will make Mary a docile husband.
    d. *Mary will be made a docile husband by John.
    e. The vision struck John blind.
    f. John was struck blind by the vision.
    g. John strikes his friends as pompous.
    h. *John's friends are struck by him as pompous.
    i. (cf. John's friends are struck by his pompous)
    j. Mary was persuaded (by John) to take a taxi.
    k. John promised (by John) to take a taxi.
    l. *Mary was promised (by John) to take a taxi.

These facts have been discussed by a number of writers. Bresnan (1982b) treats a wider range of cases, and argues that the central principle is one which follows from the assumptions of Lexical Functional Grammar. On that theory, the relevant complements (in (52c,g,k)) are subject to the condition that the subject of the basic verb serve also as the subject of the complement: ((SUB) = (XCOMP SUBJ)). Accordingly, the lexical rule of Passive must transfer the control relation to an oblique phrase, which is not a well formed functional control structure. In (52a,e,i), however, the control relation in the basic verb is ((OBJ) = (XCOMP SUBJ)), and the lexical Passive rule transfers the functional control relation in a well formed way to the subject of the derived passive.

We are essentially in agreement with Bresnan's account, but would like to derive it from other aspects of grammatical structure if possible. In particular, we would like to suggest that the difference between verbs with the
property that \((\text{SUBJ}) = (\text{XCOMP SUBJ})\) and those with \((\text{OBJ}) = (\text{XCOMP SUBJ})\) follows from the difference between verbs whose subjects are interpreted as Grammatical Figures and those whose objects are so interpreted. In other words, only Grammatical Figures are eligible to serve as \((\text{XCOMP SUBJ})\). The advantage of this account is that it allows us to encompass the complementation facts, the absence of passives like \((50b)\) and \((51d)\), and the unambiguous interpretation of \((49)\), under the same principle. Since these latter examples do not involve complements at all, it cannot be the simple failure of functional control to transfer from subjects to obliques that is at work. We suggest that it is really the failure of ‘Grammatical Figure’ to transfer to obliques that is responsible both for the examples with complements \((52)\) and for those without them.

If the preceding observations are essentially correct, they furnish a basis for determining which of a verb's complements is eligible to serve as its Grammatical Figure in some cases. Assuming that certain (‘verb phrase internal’) complements are interpreted as predicated of the Grammatical Figure, we can suggest that the ‘direct object’ but not the ‘indirect object’ of give has this function, regardless of whether the latter appears with a preposition or unmarked.

\(\text{(53)}\)

a. The fish came raw to the table.
   b. The Japanese will often serve tuna to you raw.
   c. *They give the tuna a special sauce raw.

With present, on the other hand, the status of the theme as Grammatical Figure not depends on whether it is the unmarked complement (the direct object) or appears in a with-phrase:

\(\text{(54)}\)

a. I presented Jones' cat to him dead.
   b. *I presented Jones with his cat dead.

With some verbs, either subject or direct object can serve as Grammatical Figure by this test:

\(\text{(55)}\)

a. The government abandoned Cleveland as a slum.
   b. Jones abandoned Cleveland as a boy.

As expected, however, only the first of these readings undergoes Passive:

\(\text{(56)}\)

a. Cleveland was abandoned by the government as a slum.
   b. *Cleveland was abandoned by Jones as a boy.

Similarly, the classic set of exceptions to Passive (cost, weigh, resemble, etc.) only allow complements predicated of their subjects, as we would expect if this is necessarily the Grammatical Figure of sentences containing them:

\(\text{(57)}\)

a. As an adult, Jones resembles his late father.
   b. *As a child, Jones' new son resembles his late father.

It may be appropriate to characterize certain grammatical constituents other than complete sentences as having a specific (internal) grammatical perspective. Noun phrases in particular, as is well known, often have interpretations parallel in many ways to those of clauses, and these interpretations might be presumed to have similar internal structure. An instance in which the grammatical perspective established by specific lexical items has consequences for the well-formedness of noun phrases is the following. Given a \([N-N]_k\) compound, one element of which is derived from a verb, the other noun must usually be interpreted as the Grammatical Figure in the interpretation of the deverbal element:

\(\text{(58)}\)

a. birdsong, rainfall, babbling, earthquake
   b. playboy, rattlesnake, glowworm, crybaby
   c. punchcard, pushbutton, callgirl, scarecrow
   d. handshake, lionhunt, birth control, haircut

The compounds in \((58a)\) correspond to intransitive verbs, whose only argument is of course the Grammatical Figure of interpretations based on them. The examples in \((58b)\) are based on transitive verbs. Regardless of whether the deverbal part of the compound precedes the other noun in the compound (as in the punchcard examples) or follows it (as in the handshake examples), this other noun is interpreted as an argument corresponding to the direct object of a related sentence, which would in fact be the Grammatical Figure of such a clause. Interestingly, some verbs have both transitive and intransitive uses, and both may serve as the base of a compound. The interpretation of the compound, however, depends on what the Grammatical Figure of the corresponding clause would be:

\(\text{(59)}\)

a. bird call (‘call of a bird’ or ‘thing to call birds with’), turntable
   b. bee-sting, frostbite, heartbeat, sound change

The compounds in \((59b)\) appear to be built on transitive verbs, with the other noun representing the direct object. The verbs that serve as the basis of such compounds, however, are those that also have intransitive uses (bees sting, that dog bites, his heart beat wildly, etc.) which can be taken to be the foundation of the compounds in question.
Crucially for our purposes, those transitive verbs whose objects are not the Grammatical Figure of their clause (as shown by their inability to passivize) are interpreted differently from the ones in (58b):

(60) family resemblance, women’s equality, food costs, engine weight

A family resemblance is a way in which (members of) a family resemble each other, rather than a way in which someone resembles a family. Women’s equality is the condition of women being equal (to something) rather than that of something’s being equal to women (contrast this with women’s liberation, the act of liberating women rather than an act of women liberating someone). Similarly, food costs and engine weight refer to what food costs or engines weigh, rather than to something that costs (as much as) food or weighs (as much as) an engine.

The sort of phenomenon discussed above has been associated, in previous work, with the semantic role of Theme, defined in rather vague terms as the participant whose location is specified, which undergoes movement, etc., together with metaphorical extensions of these. We suggest, however, that it is not correct to identify all of the various ways the Grammatical Figure of a clause may be integrated into its semantic interpretation as a single role relationship. In any event, there is good reason to believe that the theme in this sense does not always constitute the Grammatical Figure:

(61) a. Giant pussy-cats inhabit the north woods.
    b. The north woods are inhabited by giant pussy-cats.

Sentence (61a) presumably asserts the location of giant pussy-cats, and thus its subject should be its theme. The passive in (61b), however, shows that the sentence may nonetheless be interpreted as asserting a property of the north woods, in which case the Grammatical Figure is not the same as the theme. It seems preferable, therefore, to separate these two notions, reserving the notion of theme for a role in the core semantic interpretation of a sentence; and using the conception of Grammatical Perspective (including the notion of a sentence’s Grammatical Figure) to refer to a distinct aspect of its meaning, perhaps related to the notion of ‘predication structure’ appealed to by various authors in recent work (e.g. Williams 1980, Hellan 1983).

We have no illusions that these issues have been satisfactorily resolved by the sketchy remarks above. Our aim here is rather more limited, however: starting from a discussion of the conditions on passivization, we have uncovered a set of properties associated with certain NPs in a clause. Our goal was to show that these properties are related to an aspect of semantic structure, and that they are not uniformly associated with the grammatical relation ‘direct object’. As such, they cannot serve to substantiate the content or the significance of this relation.

5. Conclusion

In concluding, we must stress that the skepticism implicit in the above remarks about the notions of direct object and indirect object do not at all imply a corresponding disbelief in the possibility of representing formally a difference between them within (any one of a number of) current syntactic theories. The formal apparatus of phrase markers obviously can distinguish two structural positions for unmarked post-verbal complements (cf. Stowell 1982 for some possibilities). Similarly, Relational Theories can simply incorporate these two distinct terms as undefined primitives. The point of view taken here is probably closest to that of Lexical Functional Grammar, which simply allows for one or two unmarked post-verbal complements called ‘OBJ’ and ‘OBU2’ (in addition to prepositional objects); but within this theory, it would of course be perfectly possible to distinguish direct and indirect objects in Functional (as well as Constituent) Structure if this were warranted.

Rather than maintaining that the traditional terms direct object and indirect object are unrepresentable, we have tried to show that they are unwarranted — or at least that they do not represent significant and unitary grammatical categories in syntactic structure. It is of course convenient to have these labels available for discussing the parts of particular sentences, and in a large central core of cases, we can determine their reference with little risk of ambiguity. This convenience does not by itself justify them as terms of a theory of grammar, however.

Theoretical status would only follow if it could be shown that they correspond to some non-trivial set of syntactic and/or semantic properties. As we have seen above, the ‘canonical’ direct object in English is (a) an unmarked NP which comes immediately after the verb; (b) an obligatory complement of the verb; (c) interpreted holistically; (d) capable of serving as the subject of a corresponding passive; and (e) interpreted as the Grammatical Figure of its sentence. Since these properties are independent of one another, however, there is no motivated set of generally applicable criteria which define ‘direct objects’ (and by extension, ‘indirect objects’) in a uniform and non-ambiguous way. A principled theory thus should not include them as part of what Stockwell (1980) calls its Primitive Alphabet — or even as important derivative terms.
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