The English Preposition WITH*

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TABLE OF CONTENTS

	Page
Introduction	31
1. Three classes of have sentences	31
2. Stative have sentences	39
3. Possessive have sentences	57
4. Absolute be sentences	61
5. Copula sentences as verb complements	70
6. The do the same thing with test .	76
References	79

Introduction

In this treatise I will demonstrate the existence of a transformation which prefixes with to subjects of English sentences. It will be shown that the with that occurs in four apparently dissimilar environments has this source. The four environments are: 1) reduced relative have sentences, e.g., The house with the white shutters was torn down, 2) absolute sentences, e.g., With the radio playing, you can't hear the canary, 3) complements to a certain class of "causative" verbs, e.g., John planted the field with oats, 4) the pro-form do the same thing with, e.g., Harry put his car in the garage, and Mary did the same thing with hers. My point requires a cursory analysis of each of these four constructions. The first three sections are devoted to delineating and analyzing the class of have sentences which as relative clauses can undergo reduction to relative clauses introduced by with.

Some of the arguments that follow were contained in a paper presented by the author to the Chicago Linguistics Society (Lee, 1966).

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1. Three classes of have sentences

This section is a necessary preliminary to subsequent arguments. It is important to distinguish what I shall call 'stative' have sentences from two other varieties--'causatives'

and 'pseudo-causatives'. To that end I list with examples some properties shared by one or two, but not all three of the classes of have sentences.

Examples of the three classes

Causative:

- (1) Henry had Mary jump off the cliff
- (2) My coach has me do rush-ups every day
- (3) I have cherry doughnuts sent to the old lady occasionally

Pseudo-causative:

- (4) John intentionally had the stopper out of the bottle
- (5) Harry had Papa's package in Linda's mailbox
- (6) Bill has the door closed

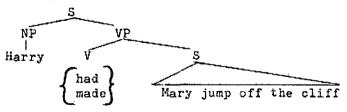
Stative:

- (7) The table has a book on it
- (8) This tree has a bird's nest in its top branch
- (9) John had dirt all over him

The causatives I assume are complex and have the same deep structure as sentences where make takes a sentence complement.

Causative:

(10) Harry { had made } Mary jump off the cliff



Causatives differ from the other two classes in taking the progressive. (Statives take the progressive in circumstances which will be noted in the next section.)

Causative:

- (11) Bill is having us visit him tomorrow
- (12) John was having Mary iron his shirt

Pseudo-causative:

- (13) *John was intentionally having the stopper out of the bottle
- (14) *Bill is having John's car in Mary's garage Stative:
 - (15) *My car is having a dent in its fender
 - (16) *The table is having a book on it

The embedded sentence in a causative must have an agent and, therefore, a non-stative verb or adjective.

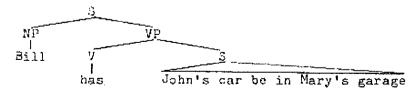
Causative:

- (17) Bill had the men break the piano into little pieces
- (18) *Bill had the piano break into little pieces
- (19) Bill had the piano broken into little pieces by the men
- (20) *Bill had the piano broken into little pieces by the sledgehammer

Pseudo-causatives may be viewed as having the same deep structure as causatives, except with a copula sentence as complement.

Pseudo-causative:

(21) Bill has John's car in Mary's garage



The copula of the complement of a pseudo-causative is always deleted. Unlike causatives, pseudo-causatives do not take

I 'Agent' and 'stative' are traditional terms. However I rely on the arguments Lakoff (1966) makes for ascribing the feature stative/non-stative to English verbs and adjectives. Likewise I refer you to Fillmore (1967) for an account of what part cases, the agent case among others, play in English syntax. Fillmore (1967, p. 57) has noted that sentences with stative verbs lack agents.

complements with agents. However, in case a copula sentence has an agent, it may occur as complement in a causative; in this case the copula is not deleted.

Causative:

- (22) John had Mary be at his house by 8 Pseudo-causative:
- Unlike the copula, the be of the passive is deleted from the complement of a causative. Thus in the case of a complement which can be either a passive or a copula sentence, the have sentence can be causative or pseudo-causative; be is deleted in either case.

Causative or pseudo-causative:

(24) John had Mary's car painted

Causatives always have an agent as subject. Pseudo-causatives may have an agent. These two classes, then, form imperatives, take adverbs like <u>intentionally</u>, and in general have the properties of sentences with agents (except that pseudo-causatives cannot be progressive).

Causative:

- (25) Have Mary jump off the cliff!
- (26) Have John put the car in the garage!
 - (27) Bill intentionally had Mary jump off the cliff
 - (28) Bill cleverly had Harry store the beans

Pseudo-causative:

- (29) Have the car in the garage by midnight!
- (30) Have the chair in the hall when the movers get here!
- (31) John intentionally had the bed on the roof
- (32) Bill cleverly had the door open

Stative sentences may not have agents. I rely on your intuition in demonstrating that imperatives and sentences with agent-type adverbs which may look like stative sentences must be interpreted as pseudo-causatives. (Stative sentences with human subjects can generally also be interpreted as pseudo-causatives.)

Stative or pseudo-causative:

- (33) Bill has his clothes dirty
- (34) John has a cut on his arm Pseudo-causative only:

(35) Have your clothes dirty!

- (36) Have a cut on your arm!
- (37) Bill cleverly has his clothes dirty
- (38) John intentionally has a cut on his arm

When have is in the simple past tense, pseudo-causatives and statives take by time adverbs. Causative sentences do not.

The adverb can however occur as part of the embedded sentence inside a causative sentence.

Causative:

- (39) *Simons had [Esther carve the turkey] by five atclack
- (40) *Charley had [Bill eat a cracker] by last week The adverb must belong to the sentence complement in
 - (41) George had [Phillis have the dishes washed by meal time].

Pseudo-causative:

- (42) Bill had the picture on the wall by yesterday
- (43) Harry had John's house built by last year

Stative:

- (44)This chair had its leg already broken by last week
- (45) The cage had a tiger in it by Thursday The existence of a reflexive pronoun in the verb phrase

of the complement sentence serves to distinguish pseudo-causatives from statives.

Pseudo-causative:

John intentionally had mud covering himself so that nobody would recognize him

Have the greasepaint smeared all over { you yourself} by the time I get back!

Stative:

- (48) The church tower has a huge clock on { it itself }

 (49) That tire has a puncture in { it itself }

As relative clauses, stative have sentences can be reduced by taking out NP (repeated) Tense have and inserting with. (repeated) signifies the noun phrane in the relative clause that is identical with the noun phrase the relative clause modifies. Neither causatives nor pseudo-causatives can undergo this reduction.

Causative:

- (50) The man who has Mary steal chairs for him is in this very room
- *The man with Mary steal chairs for him is in (51) this very room

Pseudo-causatives:

- The man who has George's belt in Mary's handbag is in this very room
- *The man with George's belt in Mary's handbag is in this very room

Stative:

- (54) The man who has a scar on his left wrist is in this very room
- (55) The man with a scar on his left wrist is in this very room

Negated stative sentences may sometimes have be without instead of not have. The other two classes of have sentences do not turn up with this alternate type of negative.

Stative:

- (56) John doesn't have a mark on him
- = (57) John is without a mark on him

There is a noun phrase contained in the verb phrase of every stative have sentence, that is identical with the subject of the have sentence. Causatives and pseudo-causatives may or

may not have such an identical noun phrase. Since this identical noun phrase is a repeated occurrence (the subject being its first occurrence), it is either deleted or pronominalized. It can be deleted just in case (!) it is genitive (that is, if it would come out after of or with 's), and it occurs next to the noun it modifies. Even if the identical noun phrase is deleted, its presence in the underlying structure can be inferred from semantic evidence.

Stative:

- (58) John has a cut on his arm
- = (59) John has a cut on the arm
 - (60) This pot has a hole in the bottom of it
- = (61) This pot has a hole in its bottom
- = (62) This pot has a hole in the bottom
- Sentence (63) is unacceptable because a) it is a have sentence with an inanimate subject and so must be stative, b) a stative have sentence must have a noun phrase identical with its subject in its verb phrase, c) since neither this pot nor any pronoun that might represent it appears in the verb phrase, this pot must have been deleted, d) only a genitive noun phrase can be deleted, so the this pot that was deleted must have been genitive, e) the two noun phrases that of this pot could be associated with are in the bottom of the pan and of the pan, f) of this pot could only be a part of the noun phrase in the bottom of the pan if it were a part of of the pan, or if it were conjoined with of the pan, and g) pots do not ordinarily possess pans, nor do a pot and a pan ordinarily possess a common bottom.

Stative have sentences have paraphrases which lack have and the subject of have sentence, but which are obviously closely related to the have sentences in structure. I list some statives with copula sentence paraphrases. (Some of the copula sentences have undergone the rule that moves the auxiliary and be to the front and adds there.)

Stative

- (64) The table has a scratch on it
- = (65) There is a scratch on the table
 - (66) The pot has a hole in the bottom of it
- = (67) There is a hole in the bottom of the pot
 - (68) A locomotive has the cowcatcher on its front end
- = (69) The cowcatcher is on the front end of a locomotive
 - (70) The refrigerator has its door broken
- = (71) The door of the refrigerator is broken
 - (72) This jug of wine has a fly in it
- = (73) There is a fly in this jug of wine
 - (74) I have a mar in the finish of the inside of the top of my car's left front fender
- = (75) My car has a mar in the finish of the inside of the top of its left front fender
- = (76) My car's left front fender has a mar in the finish of the inside of its top
- = (77) The top of my car's left front fender has a mar in the finish of its inside
- = (78) The inside of the top of my car's left front fender has a mar in its finish
- = (79) The finish of the inside of the top of my car's left front fender has a mar in it
- = (80) There is a mar in the finish of the inside of the top of my car's left front fender

The following chart summarizes the properties of causative, pseudo-causative, and stative have sentences.

Causatives

progressive
agent in
sentence complement

agent as
subject
imperative
agent-type
manner adverbs

Pseudo-causatives

reflexive in VP of sentence complement

copula deleted from sentence complement

past + by time X

be without replaces
not have or have no

with in relative clause

identical NP in VP related paraphrase

Statives

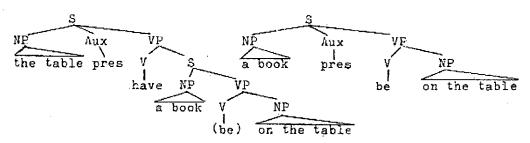
2. Stative have sentences

Now I will give my account for a few (but only a few) of the facts noted in the preceding section. It was noted that stative have sentences have paraphrases whose relation to the have sentences is formally rather simple. In the paraphrase the subject of have and have itself are not in evidence, except that a noun phrase identical to the subject of have, the noun phrase that must occur in the predicate of a have sentence, is present. The auxiliary of the have sentence occurs somewhere in the paraphrase, and after it occurs be (at least in the first examples to be considered). Otherwise the paraphrase is identical to the

have sentence. Assuming the same sort of structure for the stative have sentence as was assumed for pseudo-causatives, then, the following surface trees will illustrate the relationship.

(82) The table has a book on it

There is a book on the table (before the there rule)



I suggest that a stative have sentence and its related paraphrase mean the same thing because they are both derived from the same deep structure. Two alternatives then present themselves; either the have sentence is closer to the deep structure, or the copula sentence is. If the former, then in the derivation of the copula sentence one will eliminate all the elements of the superordinate sentence that occurs in the derived structure of the have sentence save the sentence complement to have. If the copula sentence is closer to the deep structure, then a superordinate sentence whose subject is a copy of some noun phrase in the copula sentence will be added to the copula sentence to derive the have sentence.

I favor the second alternative, that the <u>have</u> sentence is secondary, and will address myself to the task of formulating a transformation which, when applied optionally to the phrase marker that directly underlies a copula sentence, results in a <u>have</u> sentence. But first I shall list some reasons why I think the second alternative more advisable than the first. This is especially necessary since structure-adding transformations like the one I propose have not often been adduced. In fact I have seen arguments that use the necessity for postulating such a transformation as a reductio ad absurdum.

If one chose to derive the copula sentence paraphrases by eliminating the superordinate structure of a <u>have</u> sentence, then all copula sentences would probably have to be derived in this fashion. (And, it will later appear, this applies to a larger class of sentences than just copula sentences.)

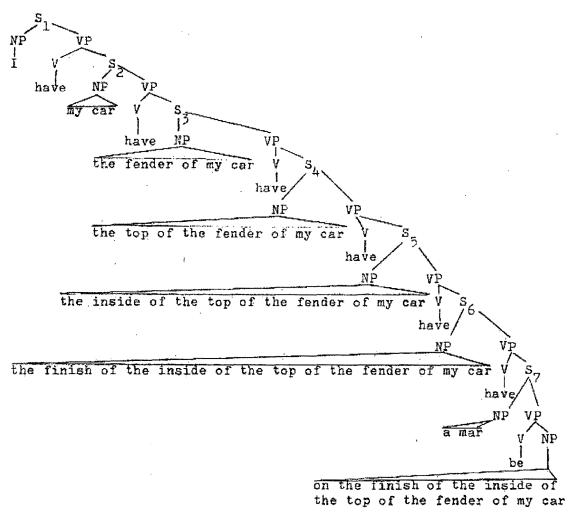
There seems to be no semantic justification for postulating the extra structure (given, of course, that there is no more than a stylistic difference between the paraphrases). The alternative I choose will furnish a natural way of characterizing the semantic distinctness between stative have sentences on the one hand, and causatives and pseudo-causatives on the other, since the two will have quite distinct deep structures.

Charles Fillmore has suggested to me another reason one would prefer the <u>have</u> sentences to be secondary. The copula sentence paraphrases translate rather literally in most languages. This is by no means the case with the stative have sentences.

Three more formal arguments are the following. 1) If the subject of a stative have sentence comes from copying some noun phrase of the source sentence, then the obligatory identity between the subject of a stative have sentence and some noun phrase in its verb phrase is automatically accounted for. 2) The lack of reflexivization in stative have sentences can be accounted for by having the reflexivization rule precede the copying operation which creates the subject of the stative have sentence.

3) Several have sentences may correspond to only one copula sentence paraphrase. (See, for example, sentences (74) to (80) in section 2.) Attempting to deal with this situation by deriving copula sentences from have sentences would lead to absurd results. Either one would have to give up the goal of deriving all the paraphrases from one deep structure (in other words, refusing to deal with the situation), or one would have to assume a deep structure containing one sentence for each paraphrase. That is, something like the following.

(83) There is a mar in the finish of the inside of the top of the fender of my car

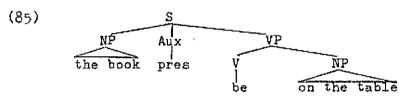


Perhaps this is not unreasonable as a deep structure for this sentence, but it is absurd. Then, a rule must be formulated for eliminating the subject and verb of at least five of the sentences s_1 , s_2 , s_3 , s_4 , s_5 , s_6 . Such a rule would be without parallel.

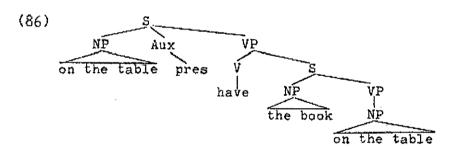
If the <u>have</u> sentences are secondary, one need allow only an optionality in the choice of which noun phrase is to be copied, and a much more economical solution is achieved.

I must admit, however, that I lack a definitive demonstration that the approach I choose is the only tenable one. The transformation that optionally converts a deep structure, which would otherwise result in a copula sentence, into a have sentence I choose to call FRONTING. (84) is a preliminary formulation.

(84) will convert (85) into (86).



(The book is on the table)



To convert (86) into (87),

(87) The table has the book on it the second occurrence of the book must be pronominalized to it, and the initial on must be deleted. Since the subject of a finite sentence is never introduced by a preposition, a transformation which deletes prepositions from subjects before tense may be supposed.

This gets rid of on. A further use for this transformation will be found in section 3.

Notice that I have now accounted for the fact that the stative have sentences I have cited do not take the progressive. Since the source of the auxiliary of the have sentence is the auxiliary of the copula sentence, and this latter can not contain the progressive marker, then neither can the auxiliary of the have sentence contain the progressive marker.

- (89) *The book is being on the table
- (90) *The table is having the book on it

Let me now make an assumption which I cannot here justify, and that is, that the structure of the string that results from application of FRONTING is assigned by some device independent of the operation of FRONTING itself. This assumption will aid my exposition. FRONTING can now be written as follows.

I shall try to simplify the formulation of FRONTING by appealing to rules which are needed for other reasons. I first suggest that be need not be deleted by FRONTING; that is, that the transformation can be written as (92).

The <u>be</u> can later be deleted by the rule that is required to delete the copula from complements in pseudo-causative <u>have</u> sentences.

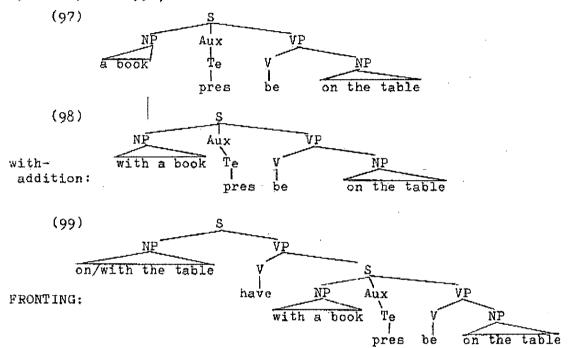
 \rightarrow (94) I had my car in the garage by 8

Next, the auxiliary of the copula sentence can be later moved up into the superordinate <u>have</u> sentence. That is, FRONTING can be simplified to (95).

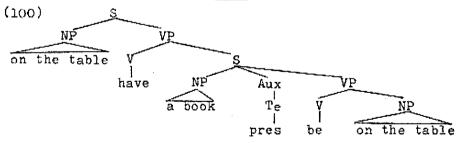
This same rule moves have + en and not from the complement to the main sentence in (96).

(96) I hadn't expected him to go yet.

In section 4 it will be shown that a transformation that adds with at the beginning of sentences is desirable. It is convenient for me to assume the existence of this transformation in what follows. Whether the transformation 'with-addition' applies before or after FRONTING, it may add with at some point in the derivation of a stative have sentence. That is, either $(97) \rightarrow (98) \rightarrow (99)$.



or, if FRONTING applies before with-addition, (97) - (100) - (99).

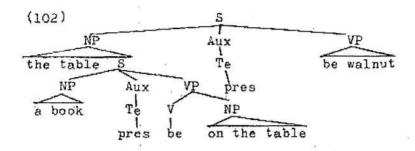


(99) eventually becomes (101).

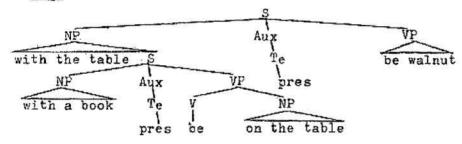
(101) The table has a book on it

It was noted in section 1 that stative <u>have</u> sentences as relative clauses may have a reduced form where <u>with</u> turns up. Now to account for this we need only add a rule for relative clause

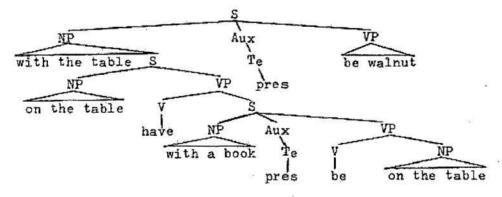
reduction NP (identical) have $\rightarrow \emptyset$ similar to the rule NP (identical) be $\rightarrow \emptyset$, which is needed in the derivation of sentences like The book on the table is brown. So the derivation of The table with a book on it is walnut goes something like (102).



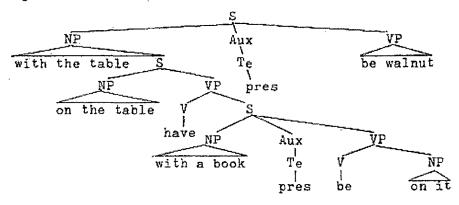
a) with-addition:



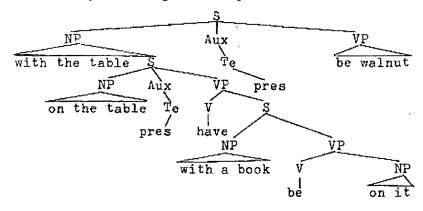
b) FRONTING:



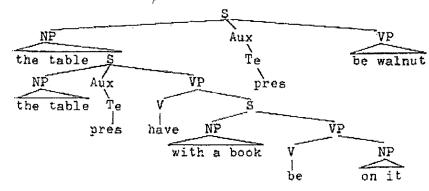
c) pronominalization:



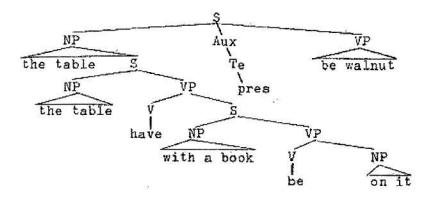
d) Auxiliary moved up into superordinate sentence:



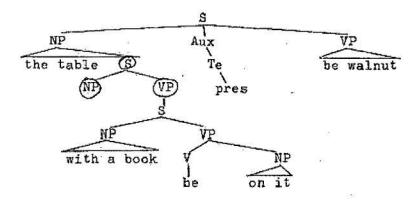
e) Preposition is deleted at beginning of finite sentence:



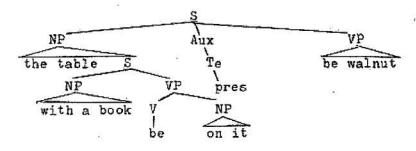
f) Auxiliary in relative clause that is identical to Auxiliary in main sentence is deleted:



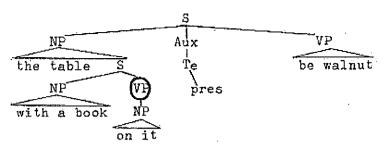
g) relative clause reduction:



The circled nodes are deleted (see Ross (1966)), giving



h) be-deletion (be is deleted when it is not preceded by Aux-sometimes):



(VP) -node is deleted, as before.

Lest we turn out something like The table which has with a book on it is walnut, we must delete with in case the relative clause reduction rule does not apply.

I will not go into the ordering (obviously crucial) or the exact formulation of the transformations I mention except as these matters directly concern my argument.

A further revision of FRONTING allows greater generality. Suppose that instead of adding have, FRONTING adds be. That is, revise FRONTING to read

This obviates the necessity for having a special relative clause reduction rule for stative have sentences. The rule NP (identical) have - Ø is no longer necessary, because the regular rule NP (identical) be - Ø will do the job. In this fashion pseudocausatives can be prevented from being reduced when they occur as relative clauses and their subjects are relativized. previous formulation of FRONTING along with the other rules I posited would allow such a reduction.

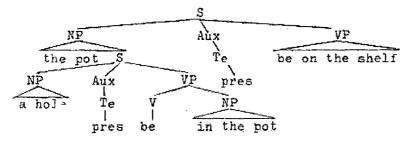
But now if FRONTING adds be instead of have, then be must at some point be changed to have in case be is not previously deleted. Then let (105) follow relative clause reduction.

(105) be, with
$$\rightarrow$$
 have \emptyset 2

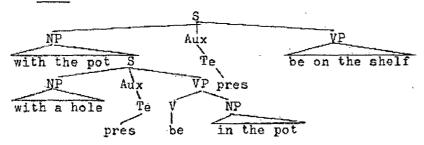
The rule that deletes with after have (103) must follow (105).

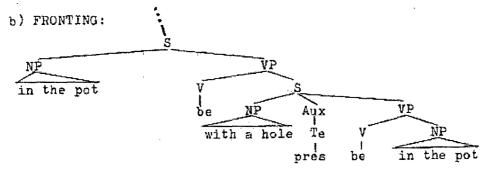
To exemplify the application of the revised rules, I outline the derivations of The pot which has a hole in it is on the shelf and The pot with a hole in it is on the shelf.

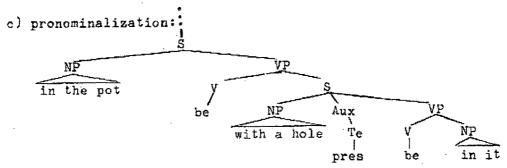
(106) The pot which has a hole in it is on the shelf



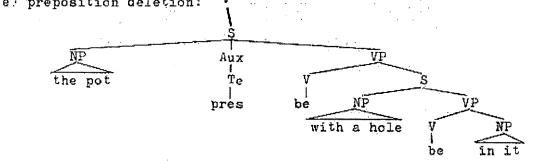
a) with-addition:



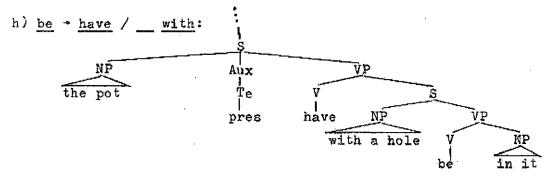


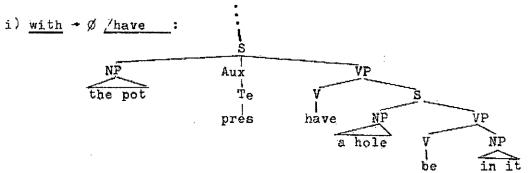


d) Auxiliary is moved up:

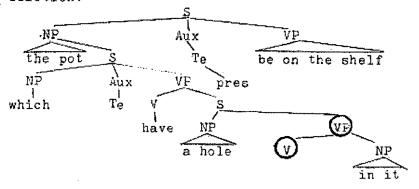


- (f) delete identical Auxiliary:)
 - (g) relative clause reduction:)





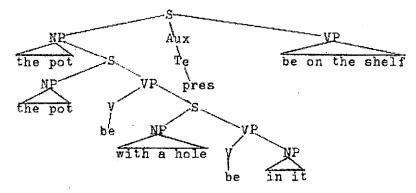
- j) relativization:
- k) be-deletion:



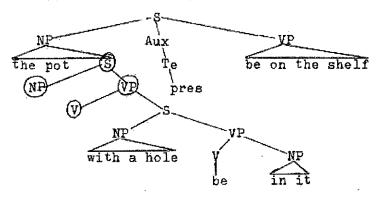
The rule that deletes an auxiliary in a relative clause if it is identical with the auxiliary in the main sentence was not applied in the derivation of (107). If it does apply, then (107) is derived.

(107) The pot with a hole in it is on the shelf

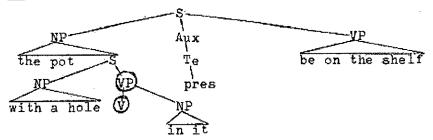
f) delete identical Auxiliary:



g) relative clause reduction:



- (h) be \rightarrow have / with :)
- (i) with $\rightarrow \emptyset$ / have :)
- (j) relativization:)
- k) be-deletion:



I have two final notes on the have of stative have sentences originally being be. First, if this is so, then the occurrence of be without instead of not have is somewhat easier to deal with. Before be is changed to have, not with can be changed to without.

Second, changing <u>be</u> to <u>have</u> is optional in some infinitival complements.

- (108) I expect my pie to have ice cream on it
- = (109) I expect my pie to be with ice cream on it
- = (110) I expect ice cream on my pie

If have were not derived from be, these paraphrases could only be accounted for in a completely ad hoc way.

The last formulation of FRONTING was (111).

In this formulation it is implicitly claimed that the noun phrase that is preposed occurs after be, and that only copula sentences can undergo FRONTING. If FRONTING gives rise to all stative have sentences, then both of these claims must be given up. In sentence (112) the noun phrase that has been proposed was originally part of the subject.

- (112) The chair has its leg broken

 (= The leg of the chair is broken)
- (113) is derived from a sentence that does not contain be.
- (113) My coffee pot had twelve people try to break it by
 throwing it on the floor last night at the party
 (* Twelve people tried to break my coffee pot by
 throwing it on the floor last night at the party)

 Removing the unnecessary restriction on FRONTING allows the following simpler formulation.

Earlier in this section I claimed that stative <u>have</u> sentences do not take the progressive because the copula sentences that they are derived from do not take the progressive. Now if a <u>have</u>

sentence is derived from some sentence in which the progressive does occur, one would expect that the stative <u>have</u> sentence would also contain the progressive. This is in fact the case. Note the following paraphrases.

- (115) Some men were painting those shacks
- = (116) Those shacks had some men painting them
- = (117) Those shacks were having some men paint them
 - (118) A ship was being built in that bottle
- = (119) That bottle had a ship being built in it
- = (120) That bottle was having a ship built in it

 It appears from these examples that the entire auxiliary need not be moved up into the have sentence proper; be + ing can be left behind. On the other hand, a modal or the perfect have + en must be moved up.
 - (121) Those shacks might have some men paint them
 - (122) *Those shacks had some men may paint them
 - (123) Those shacks had had some men paint them
- (124) *Those shacks had some men have painted them But the passive be + en must be left behind.
 - (125) That bottle had a ship built in it
- (126) 'That bottle was had a ship built in it
 These facts suggest that the structural description for the transformation that, it was said before, moves the auxiliary up should
 in part read

Before concluding this section with a list of restrictions that must probably be imposed on FRONTING, I give below a bunch of examples to illustrate what positions preposed noun phrases can occupy in the source sentence.

NP is part of subject:

- (128) The door of the cupboard was left open
- = (129) The cupboard had its door left open
 - (130) One of the tubes in the amplifier burned out
- = (131) The amplifier had one of the tubes in it burn out

NP is object:

- (132) Right now five people are using this toilet
- = (133) Right now this toilet has five people using it
 - (134) Two million people visited the World's Fair in one week
- = (135) The World's Fair had two million people visit it in one week

NP is part of object:

- (136) Someone stole the front tire of my bike last week
- = (137) My bike had someone steal its front tire last week

NP is locative in the VP:

- (140) 1000 cubic feet of air had been pumped into the balloon before it burst
- = (141) The balloon had had 1000 cubic feet of air pumped into it before it burst

NP is indirect object

- (142) Five pounds of bonbons were sent (to) the janitor by mistake
- = (143) The janitor had five pounds of bonbons sent (to) him by mistake (The mistake was not the janitor's.)

MP is in reduced sentence complement to the verb:

- (144) Many people have tried to ride that horse
- = (145) That horse has had many people try to ride it

There are apparently strong restrictions on the application of FRONTING. The following are just some accidental observations: some readers may disagree with my judgments of acceptability.

- a) To be preposed, the noun phrase cannot be subject.
 - (146) The hat was on the rack
 - (147) *The hat had itself on the rack
 - (148) This sword has skewered twenty men

- (149) *This sword has had itself skewer twenty men
- (150) John was in Wyoming last summer
- (151) ?John had himself in Wyöming last summer (if acceptable, must be pseudo-causative)

a possible exception:

- (152) I hear your city hall was renovated last year
- (153) ?I hear your city hall had itself renovated last year
- b) The noun phrase, if it is arimate, cannot be dominated by an animate noun phrase. (An animate noun phrase is one whose head is animate.)
 - (154) John's wife is in labor
 - ≠ (155) ?John has his wife in labor
 - (156) There is some dirt on John's friend's jacket
 - ≠ (157) John has some dirt on his friend's jacket2

- c) A sentence whose main verb or adjective is stative is not subject to FRONTING.
 - (158) I don't appreciate that kind of music
 - (159) *That kind of music doesn't have me appreciate it
 - (160) Bill knows that man
 - (161) *That man has Bill know him
 - (162) Judy loves those hatpins you sent her
- (163) *Those hatpins you sent Judy have her love them However, animate objects of stative verbs can at least occasionally be preposed.
 - (164) Mary believed me
 - = (165) I had Mary believe me
 - (166) Unfortunately, someone saw me as I stole out of the building
 - = (167) Unfortunately, I had someone see me as I stole out of the building
 - (168) Some people had suspected John of stealing money
 - = (169) John had had some people suspect him of stealing money

²Mary Bremer pointed out this type of ungrammaticality.

The fact that the above have sentences are unambiguously stative makes it impossible to say that these verbs, which ordinarily lack agents, may take agents when their objects are animate. Recall that sentences with agents can be complements in causative have sentences. If the sentence Mary believed me contained an agent, one would expect to be able to form the causative have sentence I had Mary believe me. Yet this sentence admits only a stative interpretation.

This is puzzling, but it is no more puzzling than the fact that some stative verbs occur in the command imperative construction just when they have animate objects.

- (170) Believe me!
- (171) *Believe that theorem!
- (172) Know thyself!
- (173) *Know Sanskrit!

I have been unable to decide whether a noun phrase can be preposed if it is a part of neither the subject nor the verb phrase and whether a noun phrase can be moved across an intervening S-node.

My final version of FRONTING is

2 be 1 2 3

where: X is not null

if NP is animate, it is not dominated by an animate NP

the main verb of S is non-stative

3. Possessive have sentences

It is not difficult to find have sentences which are clearly neither causatives nor pseudo-causatives, yet which do not exhibit all of the properties of stative have sentences listed in section 1. For example, have may be used in the sense of 'consume' or 'enjoy', in which case it takes an agent. But (175) and (176) have neither the structure of a causative nor that of a pseudo-causative.

- (175) We had dinner early
- (176) We were having dinner early

In this section I propose a tentative analysis of a class of exceptional have sentences which I call 'possessive', for want of a better name. These sentences can often be closely paraphrased by replacing have with possess. Some examples follow.

- (177) He has a house to be proud of
- (178) He possesses a house to be proud of
- (179) This machine has no moving parts
- (180) This machine possesses no moving parts
- (181) Our library has a million books
- (182) Our library possesses a million books
- (183) Mary has red hair

Replacing have- by possess in the stative have sentences that have been previously considered produces unacceptable sentences.

- (184) John has dirt all over him
- (185) *John possesses dirt all over him
- (186) The table has a book on it
- (187) *The table possesses a book on it

Possessive <u>have</u> sentences as relative clauses may be reduced by removing <u>NP (identical)</u> be and inserting <u>with</u>. This is a property of stative <u>have</u> sentences not shared by causatives and pseudo-causatives.

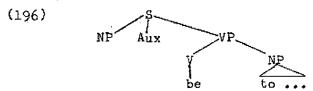
- (188) A machine that has no moving parts is unlikely to break down
- = (189) A machine with no moving parts is unlikely to break down
 - (190) A library that has a million books is pretty big
- = (191) A library with a million books is pretty big
 However possessive <u>have</u> sentences do not have the other two properties of stative sentences upon which the analysis in section
 2 was based. First, there are no related paraphrases of the
 sort that stative have sentences were found to possess.
 - (192) They have related paraphrases
 - (193) There are related paraphrases ?? them

This fact is not always obvious in the case of possessive have sentences with inanimate subjects. One might maintain that (194) was a paraphrase of (195).

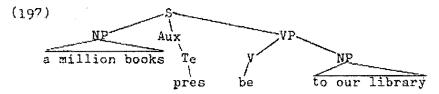
- (194) Our library has a million books
- (195) There are a million books in our library However these sentences do not mean the same thing. A library might keep some of its books in a warehouse, yet "have" them.

Second, it is apparent that there is no noun phrase in the predicate of a possessive <u>have</u> sentence that is identical (save for a preposition) with its subject.

The fact that when their subjects are relativized possessive have sentences have a reduced form in with indicates that they are, despite appearances, to be analyzed as stative have sentences. Otherwise, it seems to me, the analysis in section 2 must be incorrect. Therefore the problem is to provide likely source sentences which, after they undergo FRONTING, can be made to yield possessive have sentences. There is no getting around the fact that these sentences have no structurally related paraphrases, so in their derivations FRONTING must be obligatory. I propose source sentences of the following form.



FRONTING must apply to prepose the noun phrase introduced by to, and this noun phrase that is copied must then be deleted. Then Our library has a million books is from (197).



FRONTING is applied, to our library is deleted, and the other rules discussed in the last section are applied. 3

Terence Langendoen first suggested to me that possessive have sentences should be derived by deleting to and identical noun phrase.

Of the sources that could be postulated for possessive have sentences (given my assumptions), I choose the preceding because in special circumstances copula sentences of this form are acceptable without the deletion of to NP, and, in this case, the noun phrase with to can be deleted after FRONTING has applied with no change in meaning. The special circumstances are that the subject of the copula be a noun phrase whose head is one of a class of nouns including air, appearance, look, side, facet, and that the relation between the subject and predicate of the copula sentence be that of part to whole.

- (19%) There are many aspects to this problem
- (199) There is a strange look to the house
- (200) There is a white appearance to the water

 The deep structures of these sentences may undergo FRONTING, in
 which case we get
 - (198) = (201) This problem has many aspects to it
 - (199) = (202) The house has a strange look to it
- (200) = (203) The water has a white appearance to it The noun phrase with \underline{to} can now be deleted with no discernable effect on the meaning.
 - (201) = (204) This problem has many aspects
 - (202) = (205) The house has a strange look
 - (203) = (206) The water has a white appearance to to does in fact occur introducing noun phrase complete.

So to does in fact occur introducing noun phrase complements of the copula, and, to explain the above paraphrases, there must be a rule to delete a noun phrase with to that is otherwise identical with the subject of the stative have sentence.

An awkward point to this analysis is that FRONTING is obligatory just when, after it applies, the noun phrase with to must be deleted.

In section 5 evidence will be presented that the source sentences I postulate for possessive <u>have</u> sentences do occur as non-finite complements to some verbs and have some connection with possessive <u>have</u> sentences.

4. Absolute be sentences

A be sentence is a sentence whose tense carrier is be (as opposed to a have sentence, which, for me, is a sentence whose main verb is have). The absolute be sentences that I shall talk about are subordinate to sentences whose main clauses follow the absolute be sentences. The absolute be sentences are tenseless, be-less, and are introduced by the preposition with. Some examples are given below along with what the absolute sentence might come out to be were it independent.

- (207) With the door wide open, the bugs can get in (The door is wide open)
- (208) With so many dishes still in the sink, we'll have to wash them before we leave

 (So many dishes are still in the sink)
- (209) With nobody picking the fruit, it's getting rotten (Nobody is picking the fruit)
- (210) With Harry going to town early, he can pick up some things for dinner (Harry is going to town early)
- (211) With Harry about to mow the lawn, we'd better put gas in the mower
 (Harry is about to mow the lawn)
- (212) With their apartment building to be razed the following week, they felt they had to move (Their apartment building was to be razed the following week)
- (213) With the trees all cut down by lumbermen, the birds are finding new homes

 (The trees are all cut down by lumbermen)
- (214) With the hole enlarged by the men, the trapped miners could escape

(The hole was enlarged by the men)

The source of the be can be the copula, the progressive. be to or the passive.

My claim is, then, that absolute be sentences (the term assumes my conclusion) are from be sentences that lack tense and modal. It seems likely that the tense is deleted because of identity to that of the main, finite clause.

Note that the with that introduces these absolute constructions differs in two important respects from subordinate conjunctions like if, since, when, after. The first difference is the obvious fact that subordinate conjunctions introduce finite sentences that may contain modals. The absolute sentences can contain neither tense nor modal. The second difference is that, unlike subordinate conjunctions, with seems to have no lexical semantic content (if you see what I mean). With indicates only that the clause that contains it is subordinate. To support this rather impressionistic observation I note that, for me at least, the with can occasionally be omitted without altering meaning in the slightest.

- (215) (With) One chair painted, he started on the next Also, the with construction may be closely paraphrased by subordinate sentences that are finite. Compare sentence (214) with the following.
 - (216) After the hole was enlarged by the men, the trapped miners could escape
 - (217) Since the hole was enlarged by the men, the trapped miners could escape
 - (218) If the hole were enlarged by the men, the trapped miners could escape

Sentence (214) can be understood in each of these ways. In the case of the absolute construction in (214), then, the relation between the subordinate and main clauses is not so closely specified as in the case of clauses introduced by subordinate conjunctions.

With is then a function word, and it is appropriate to introduce it by a non-lexical sort of transformation, a "spelling rule" (see Lakoff (1965)).

Since with introduces absolute sentences, I propose that it is attached to the initial noun phrase, i.e. the subject, of every sentence by (215).

(215) with addition [, NP - 1, with 2

If a sentence is made absolute by deleting its tense and \underline{be} , this with remains. Otherwise it is deleted by (216).

(216) With deletion [[, with, X] Tense → 1 Ø 3

It seems that absolute sentences introduced by with can only be derived from be sentences. Sentences like (217) are rather marginal.

(217) ??With trains go by every hour, how will you be able to sleep?

So the existence of with in the subjects of other than be sentences must be motivated by the examples given in section 2 of stative have sentences derived from non-be sentences.

Of course, absolute <u>be</u> sentences are only one variety of non-finite sentence, and the rules given so far predict that <u>with</u> will be present in all non-finite sentences, unless their tense marker is deleted after the <u>with</u> deletion transformation applies. That <u>with</u> does indeed occur in at least two other non-finite constructions will be shown in sections 5 and 6. First two difficult varieties of absolute <u>be</u> sentences must be dealt with.

Since the <u>be</u> that is deleted to form absolute <u>be</u> sentences may be the <u>be</u> of the progressive marker <u>be + ing</u>, we can derive absolute sentences where <u>ing</u> is attached to the first verbal element after the subject. But some absolute sentences with <u>ing</u> apparently cannot be derived this way, because they would have no grammatical source.

- (218) With the guide knowing so many languages, we got along very well on our tour
- (219) With Bill believing everything Mary says, you'll have a hard time convincing him she's a jerk
- but (220) *The guide was knowing so many languages
 - (221) *Bill is believing everything Mary says

The progressive must not occur in the auxiliary of a stative verb (see Lakoff (1966)).

But this same problem crops up in deriving reduced relative clauses. If relative clauses are reduced by the rule

(222) NP (identical) be

Ø

then how are the following to be derived?

- (223) A man who knows Sanskrit will go far
- = (224) A man knowing Sanskrit will go far Again we are faced with the problem of postulating an ungrammatical source sentence.

The fact that sentences (223) and (224) are paraphrases leads me to suggest the following solution. The progressive marker be + ing is deleted before stative verbs and the copula. The rule that accomplishes this follows the relative clause reduction transformation and the transformation that deletes the be in absolute be sentences. If either of these two latter transformations applies to delete the be of be + ing, the structural description for the rule that eliminates be + ing before a stative verb or the copula is no longer met, and the +ing remains.

I mention it as an interesting possibility that the presence or absence of <u>be + ing</u> before the copula may correspond to the distinction in languages like Portuguese between the forms of the copula that attribute accidental (<u>estar</u>) and inherent (ser) properties to their subjects.

Unfortunately the class of absolute sentences in <u>ing</u> is not yet exhausted. But before the next variety is examined, it is convenient to note the existence of reduced absolute sentences. As in the case of relative clauses and <u>while</u> clauses, <u>NP (identical)</u> be can be deleted from absolute sentences. As with time adverbial <u>while</u> clauses, the noun phrase deleted must be identical to the subject of the main clause.

(225) Wide open, the door will let in too many bugs (With the door wide open, ...)

- (226) Shielding your eyes, you can still see land (With you shielding your eyes, ...)
- (227) Being too stupid to turn the knob, John couldn't open the door

 (With John being too stupid to turn the knob, ...)
- (228) About to mow the lawn, Harry broke his ankle (With Harry about to mow the lawn, ...)
- (229) Cut down by the lumbermen, the trees were being trimmed and hauled away

(With the trees cut down by the lumbermen, ...)

It is important to distinguish sentences like (226) and (227) from superficially similar reduced while clauses. A repeated tense and NP (identical) be can also be deleted from while clauses.

- (230) While I was going to town, I met an old man
- = (231) While going to town, I met an old man Further, the while can be deleted.
 - = (232) Going to town, I met an old man
- (233) can be understood either in the sense of (234) or (235).
 - (233) Wearing her high heels, Mary seems very tall
 - (234) With Mary wearing her high heels (today), she seems very tall
 - (235) While Mary is wearing her high heels, she seems very tall

Stative <u>have</u> sentences, since they are at one point <u>be</u> sentences, may occur as absolute sentences. <u>Be</u> is deleted before it can be changed to <u>have</u>. Unfortunately such absolute sentences are at best awkward.

(236) With the sink with so many dishes in it, we'll have to stay home to wash them

The absolute sentence in (236) is derived from the deep structure of So many dishes are in the sink by applying the transformations FRONTING and with addition. When one of the with's is for some reason eliminated, such constructions are more acceptable. The

second with will be deleted if the source copula sentence contains the progressive, since in this case the be of the progressive is deleted to form an absolute sentence, and the be added by FRONTING remains. The latter be is changed to have, and after have, with is deleted.

(237) With the sink having so many dishes in it, we'll have to stay home to wash them
Below is an outline of the steps in the derivation of the absolute sentence in (237).

(238)so many dishes be +ing be in the sink] in the sink be f so many dishes be +ing be in the sink] with the sink be [with so many dishes be +ing be in the sink] with the sink be [with so many dishes be +ing be in it] with the sink be ring be [with so many dishes be in it] with the sink +ing be [with so many dishes be in it] with the sink +ing have [with so many dishes be in it] be in it] with the sink +ing have [so many dishes +ing have [in it] with the sink so many dishes

On the other hand the first with is deleted along with the noun phrase that contains it if this noun phrase is identical to the subject of the main clause.

(239) With a horse to get to Paris, Henry could conquer the world

(With Henry with a horse to get to Paris, ...)

Note that in (240) the presence of the perfect have + en in the absolute construction is demanded by the "sequence of tenses" rule.

(240) With a horse to get to Paris, Henry could have conquered the world

compare

(241) If Henry had had a horse to get to Paris, he could have conquered the world

We may suppose that the perfect in the absolute sentence is deleted along with the tense, since the perfect is also present in the main clause and is a repeated occurrence. The assumption that FRONTING has applied in the derivation of sentences like (239) and (240) seems of one. For example the absolute sentence in (242) could as well be derived from the structure underlying <u>Wax is on the car</u> as from that underlying The car has wax on it.

(242) With wax on it, the car looks like a million dollars If the pronoun it in the absolute sentence were reflexive, this would constitute evidence that FRONTING had applied, since a pronoun is made reflexive only if its antecedent occurs in the same minimal sentence. However as was noted in section 2, reflexivization applies before FRONTING. So the crucial evidence is missing.

It should be noted that the underlying structures of while clauses may undergo FRONTING and undergo the same reduction as absolute sentences.

- (243) While trees have leaves on them, they are difficult to see through
- = (244) With leaves on them, trees are difficult to see through

The following are examples of the class of absolute sentences with ing that remains to be accounted for.

- (245) With John having painted one chair yesterday, he has one fewer to paint today
- = (246) Having painted one chair yesterday, John has one fewer to paint today

The reduction transformation has applied to sentence (246). By the foregoing analysis the absolute construction in (245) must be from (247).

(247) John be +ing Have +en paint one chair yesterday

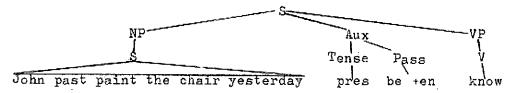
Of course *John is having painted one chair yesterday is unacceptable, and the anomaly cannot this time be dismissed by supposing that be +ing is deleted if the sentence is not made absolute.

This is so, since have + en comes before be + ing in the auxiliary, not after. The tentative solution that I propose is a slight extension of the analysis proposed by T. R. Hoffman (1966). In

(248) the perfect is from what Hoffman calls the "past tense (248) John is known to have painted the chair yesterday replacement" transformation. The past tense must occur in the deep structure of (248), since yesterday can only occur with a past tense. Note that (249) is unacceptable.

(249) *John has painted the chair yesterday (248) is a paraphrase of (250), and both sentences can be derived from the same structure, namely (251).

(250) It is known that John painted the chair yesterday (251)



(251) has undergone the passive transformation. The embedded sentence in (251) can be made into a that clause or into an infinitive clause. In case it is made into a that clause it may be extraposed, giving sentence (250). If it is made into an infinitive clause its auxiliary and verb phrase, past paint the chair yesterday, winds up at the end of the superordinate sentence and its subject, John, becomes the derived subject of the main clause. This gives (252).

(252) John pres be + en know to past paint the chair yesterday

The past tense marker cannot remain in this position, and is replaced by the perfect have + en. By familiar rules, this gives John is known to have painted the chair yesterday, which is the desired result.

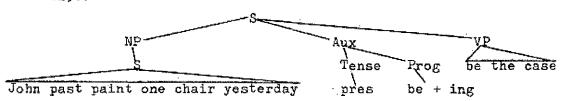
Sentences (253) and (254) can be derived from one deep structure in a similar fashion. Here to does not appear, and the case must be deleted. In sentence (254) then, although

On the deletion of so in similar circumstances, see Lakoff (1966b). Whether the abstract item to be deleted is best represented by so, the case, or true seems problematical.

- (253) It must be the case that John painted the chair yesterday
- (254) John must have painted the chair yesterday must appears to be part of the auxiliary that goes with the verb phrase paint the chair yesterday, it is really from the auxiliary of a superordinate sentence. Similarly the progressive be +ing in (255), which underlies (256), is from a superordinate sentence.
 - (255) John be +ing have +en paint one chair yesterday
- (256) With John having painted one chair yesterday, ... As Hoffman notes, the <u>have + en</u> in such absolute sentences must be from the past tense replacement transformation. Note that (257) is a paraphrase of (256).
 - (257) (With) It being the case that John painted one chair yesterday, ...

Both (256) and (257) arise from the same structure, namely (258).

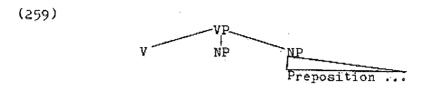
(258)



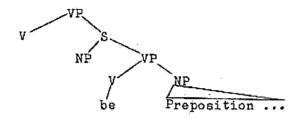
To derive (257) pres and the <u>be</u> of the progressive are deleted and the embedded sentence is made into a <u>that</u> clause and extraposed. To derive (256) the auxiliary and verb phrase of the embedded sentence are put after the verb phrase of the main clause, <u>be the case</u> is deleted, and <u>past</u> is changed to <u>have + en</u>.

5. Copula sentences as verb complements.

My thesis in this section will be that certain verb phrases which have in the past been analyzed as having the structure (259) actually have the structure (260), or something essentially similar.



(260)



Note first that copula sentences certainly occur as complements to the verbs expect, want, like. Along with to the copula may be deleted after expect and want. In (265) it must be deleted after like.

- (261) I expect ice cream to be on my pie
- = (262) I expect ice cream on my pie
 - (263) He wants water to be in the pool when he gets back
- = (264) He wants water in the pool when he gets back
- (265) I like your lamp on John's table like that Evidence that these complements are in fact sentences is provided by their ability to undergo FRONTING.
 - (266) I expect my pie to have ice cream on it
 - = (267) I expect my pie to be with ice cream on it
 - = (268) I expect my pie with ice cream on it
 - (269) He wants the pool to have water in it when he gets back
 - = (270) He wants the pool to be with water in it when he gets back

- = (271) He wants the pool with water in it when he gets
- (272) I like John's table with your lamp on it like that Also, Lakoff's FLIP transformation can apply to (265) and (272) to give (273) and (274) (see Lakoff (1965: A-15)).
 - (273) Your lamp on John's table like that pleases me
 - = (274) John's table with your lamp on it like that pleases me

Probably no one would doubt that the complements in the above examples constituted sentences. The important thing to note is that the with that turns up in (268) and (271) is a trace of the underlying sentences; its source is the rule that adds with at the beginning of a sentence.

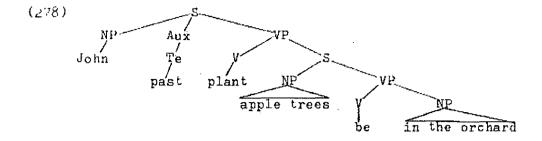
Now consider complements of verbs like plant.

- (275) John planted apple trees in the orchard

 The locative in the orchard is shown to be in the verb phrase by
 the do so test developed by Lakoff and Ross (1966). The proform do so replaces verb phrases.
 - (276) *Harry planted apple trees in the yard, and John did so in the orchard

That apples and in the orchard in (275) constitute a syntactic unit as well as both occurring in the verb phrase could probably be demonstrated by a co-occurrence argument, although I shall not attempt this. That is, there are mutual restrictions on noun phrases in these positions that are independent of restrictions imposed by plant. (257) is odd just because apple trees would be to big for a window box, not because one doesn't plant things in window boxes.

(277) John planted apple trees in the window box I shall claim that apple trees in the orchard is from a copula sentence and that the deep structure of (275) is the following.



Since apple trees is the subject of a sentence, it will be changed to with apple trees by the with addition rule. The fact that with does not show up must be because plant is like have in deleting a following preposition.

But there is a switching rule that may apply to such complements which in the present case has the effect of reversing the order of apple trees and in the orchard. Now in the orchard is next to the verb, and it turns out that its preposition is deleted. So the rule that deletes the preposition must follow the switching rule. The with added to apple trees therefore remains, since after the switching rule with apple trees no longer directly follows the verb.

- (279) John planted the orchard with apple trees

 Verbs that take copula sentences as complements and allow the order of elements in these complements to be reversed are quite common. I give some examples below.
 - (280) John stocked fish in the stream
 - (281) John stocked the stream with fish
 - (282) John hung curtains in the kitchen
 - (283) John hung the kitchen with curtains
 - (284) John heaped ridicule on Bill
 - (285) John heaped Bill with ridicule
 - (286) John spread the butter on the bread
 - (287) John spread the bread with butter
 - (288) John inspires confidence in me
 - (289) John inspires me with confidence
 - (290) They conferred honors on John
 - (291) They conferred John with honors

However I do not claim that the members of each of these pairs of sentences are exact paraphrases. John planted the orchard with apple trees means that the orchard wound up with no other kinds of trees, while John planted apple trees in the orchard does not imply this. A similar observation applies to (292).

(292) John spread the box with papers
In addition this can be understood either as John spread papers
on the box or as John spread papers in the box.

I suggest that the proper analysis is one along the lines of that proposed in section 3. Prepositions are not freely deleted after the verb; only to and with (and possibly other "function prepositions") can be deleted. Then the sentences with with have underlying structures where the preposition after be is to.

Some peculiar semi-paraphrases obtained with verbs like hang can be given an explanation similar to the above if it is assumed that these verbs may lack underlying subjects, and that their underlying objects become superficial subjects.

- (293) Cobwebs hung in the kitchen
- (294) The kitchen hung with cobwebs
- (295) Fish teem in the sea
- (296) The sea teems with fish
- (297) Bees swarm in the garden
- (298) The garden swarms with bees

 $^{^{5}\}mathrm{The}$ existence of such pairs of sentences was pointed out to me by James Heringer.

A further rule is necessary to delete with in the complements of verbs that allow unreversed copula sentences with to noun phrases. After the verbs in the sentences that follow, this rule is optional.

⁽²⁹⁹⁾ John assigned a task to Bill

^{= (300)} John assigned Bill with a task

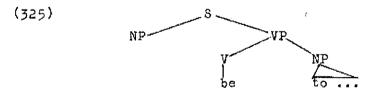
^{= (301)} John assigned Bill a task

- (302) John supplies them with money
- = (303) John supplied money to them
- = (304) John supplied them money
 - (305) John furnishes books to libraries
- = (30£) John furnishes libraries with books
- = (307) John furnishes libraries books
 - (308) John presented a ring to Bill
- = (309) John presented Bill with a ring
- = (310) John presented Bill a ring
 - (311) John provided cash to Bill
- = (312) John provided Bill with cash
- = (313) John provided Bill cash
 - (314) John left a fortune to his nephew
- = (315) John left his nephew with a fortune
- = (316) John left his nephew a fortune
 - (317) John left Bill with nothing to do
- = (318) John left Bill nothing to do

But after another class of verbs, the rule is obligatory.

- (319) John gave a typewriter to Bill
- = (320) John gave Bill xxxx a typewriter
 - (321) John sent a letter to Bill
- = (322) John sent Bill with a letter
 - (323) John handed a gun to Bill
- = (324) John handed Bill with a gun

The two classes of verbs exemplified in (299) to (324) are of course two kinds of indirect object verbs. They take complements of the form (325).



It was proposed in section 3 that sentences of this form underlie possessive have sentences, so what I am now claiming is that these classes of indirect object verbs take complements which, were they independent, would come out to be possessive have sentences. This position is supported by the fact that an

indirect object sentence of the above type implies the acceptability of some possessive have sentence with the original indirect object as subject and the original direct object as object. The unacceptability of (326) implies the unacceptability of (327).

- (326) *Bill has truth
- (327) *John gave Bill truth

The acceptability of (328) implies the acceptability of a sentence like (329) given an appropriate choice of subject for the indirect object verb.

- (328) The house had a funny appearance
- (329) The purple light gave the house a funny appearance

It may be that the rule which reverses the positions of the noun phrases in a copula sentence complement is FRONTING. Evidence against this is the fact that the noun phrase with to sometimes appears after FRONTING has applied to an independent sentence. When however the indirect object is moved next to the verb, it is never echoed by to plus pronoun.

- (330) The house had a funny appearance to it
- (331) *The purple light gave the house a funny appearance to it.

6. The do the same thing with test.

In this section I present some preliminary results of a syntactic "test" modeled on the do so test for verb phrase constituency (see Lakoff and Ross (1966)). These results support what was said in section 5 about certain verb complements.

Some verb phrases can be replaced by do the same thing with plus the direct object of the verb, if they are duplicated (aside from their objects) earlier in the sentence.

- (332) Bill planted the pear trees in the orchard, and John did the same thing with the apple trees
- (333) Bill spread the jam on the drapes, and John did the same thing with the butter
- (334) Bill put the chair on the porch, and John did the same thing with the lamp

In the last section it was seen that with is sometimes a trace of an underlying sentence. The with that occurs after do the same thing in the above sentences likewise shows that the verb phrases replaced by do the same thing with plus object contain sentence complements. The source of this with is, again, the with addition rule.

The verb phrases that I previously analyzed as containing sentence complements can all be replaced by do the same thing with plus object if the verb of the verb phrase is non-stative. On the other hand verb phrases without sentence complements cannot be so replaced.

- (335) *Bill built the table, and John did the same thing with the chair
- (336) *Bill killed a man, and John did the same thing with a woman
- (337) *Bill drank some beer, and John did the same thing with some wine
- (338) *Bill broke the stick, and John did the same thing with the branch
- but (339) Bill broke the stick in(to) pieces, and John did
 the same thing with the branch

There are some exceptions to the observation that <u>do the</u>

<u>same thing with plus object replaces verb and sentence complement.</u>

I list three classes of exceptional verbs with suggestions about how to make them fall into line.

Apparent exceptions:

- a) throw away, spend, lose
- (340) Bill threw his old shoes away, and John did the same thing with his
- (341) Bill spent his money, and John did the same thing with his
- (342) Bill loses his gloves, and John does the same thing with his

In (340) his old shoes away is from a sentence with <u>be</u> (or perhaps go) deleted. The complements of <u>spend</u> in (341) and <u>lose</u> in (342) are <u>his money away</u> and <u>his gloves away</u>. <u>Spend</u> and <u>lose</u> delete away.

- b) paint, butter, fertilize, dye, store
- (343) Bill painted his house, and John did the same thing with his
- (344) Bill buttered his bread, and John did the same thing with his
- (345) Bill fertilized his lawn, and John did the same thing with his
- (346) Bill dyed his hair, and John did the same thing with his
- (347) Bill stored his winter clothes, and John did the same thing with his

Sentences (343) to (346) contain the verb phrases <u>put paint on</u> <u>his house</u>, <u>put butter on his bread</u>, <u>put fcrtilizer on his lawn</u>, <u>put dye on his hair</u>. <u>paint on his house</u>, etc. are from sentences with <u>be</u> deleted. When <u>put takes</u> such a sentence complement, the subject of the complement may replace <u>put</u>, in which case the former noun is realized as a verb. Sentence (347) has the verb phrase <u>put his clothes in storage</u>. In this case it is the locative complement of <u>be</u> that replaces put.

- c) heat, boil, bake
- (348) Bill heated his sandwich, and John did the same thing with his
- (349) Bill boiled his socks, and John did the same thing with his
- (350) Bill baked the potatoes, and John did the same thing with the ham

The verb phrases are really cause his sandwich to heat, cause his socks to boil, cause the ham to bake. Heat, boil, bake may replace cause. This analysis of causative verbs is in essential respects similar to the analysis given in Lakoff (1965).

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