### O. Introduction\*

The rule of Predicate Raising was first proposed by McCawley (1968) for the prelexical syntax of English causative verbs, such as kill. Chomsky (1970) pointed out that this rule lacked syntactic support. This paper shows that, while that may be true for English, it is not for French. French provides evidence of the strongest kind that PR is a rule of French syntax. An analysis of certain French verbs shows that the rules relating these verbs to their semantic analyses must be closely interwoven with the rules of French syntax. It also appears that, contrary to superficial evidence, the dative in French originates regularly from the subject of a transitive S which is embedded, usually, under a verb of causing or letting. Through Predicate Raising this subject is raised to the higher S to find itself as a bare NP between the higher subject and its own sister-object.

Evers (1971) proposes Predicate Raising for Dutch and German; Langacker (1970) provides evidence for a few Uto-Aztecan languages. Starosta (1971) gives data of morphological causative constructions in Sre and Tagalog which strongly suggest PR, - which is, however, rejected by Starosta on the ground that PR is not syntactically motivated. Instead, Starosta introduces a new category of non-syntactic, purely lexical rules, "derivational rules", whereby new lexical items can be morphologically derived from others. It is maintained in this paper that lexicalist solutions such as Starosta's leave much unexplained which is, in fact, predictable if PR is accepted as a syntactic rule. Starosta's theory is rejected mainly because it deprives general linguistic theory of an obvious generalization and thereby of a means of further restricting the notion "possible grammar of natural language".

Our findings for French have a direct bearing on certain problems of general theory which have been discussed over the past few years. Criteria of explanatory adequacy lead us to posit that in any language the regular origin of the dative is as it is seen to be in French; it does not originate as a prepositional phrase following the object. It furthermore becomes clear that Chomsky's theory of a fully lexicalized deep structure level of

representation for sentences preceding all syntactic transformations must be taken to be false, according to accepted standards of linguistic argument. Syntactic transformations are allowed to precede lexical insertion. It also appears, however, that it is common for a language to limit the applicability of certain rules to either prelexical or postlexical syntax. Thus, PR seems to occur only prelexically in English; the process of dativization appears limited to prelexical syntax in English and German, but not in French. Finally, and not unimportantly, McCawley's VSO-hypothesis is supported because of the simplifying effect it has on the rules involved in the faire-construction.

## 1. The faire-construction

French has a predicate complement construction, henceforth the <u>faire</u>-construction, which has no counterpart in English:

(1) Je ferai manger une pomme à Jules.

This sentence means "I'll get Jules to eat an apple", but literally it says "I'll make eat an apple to Jules".

This construction has a few peculiar properties, the most notable of which are the occurrence of the dative and the behaviour of clitic pronouns. Whereas usually, in French, when the finite verb form is followed by an infinitive, clitic pronouns are placed between the two, as in:

- (2) Je veux le faire. (I want to do it; lit.:"I want it do") this is not possible with faire as the main verb:
- (3) \*Je ferai la lui manger (lit.: "I'll make it to him eat").

  Instead, the only possible form is:
  - (1) Je la lui ferai manger.

Faire (cause, make) is not the only verb governing this construction. The verb laisser (let, allow) takes the faire-construction optionally, allowing also for Subject-Raising, as we shall see. Traditional grammars mention, furthermore, voir (see) and entendre (hear) as optional cases, and sometimes envoyer

(send). (Voir and entendre only take pronominal datives, - see note 2.)

- (5) Je lui ai vu écrire la lettre. (I saw him write the letter.)
- (6) Je lui ai entendu chanter la chanson. (I heard him sing the song.)

<u>Envoyer</u> is a special case. It does not take the dative but animate object pronouns precede it:

(7) a. \*Je lui ai envoyé chercher la lettre.

(I sent him to look for the letter.)

b. Je l'ai envoyé chercher. (I have sent for him.)

Not usually mentioned is donner à, as in:

- (8) J'ai donné à boire ce vin à Pierre. (I gave Pierre this wine to drink.)
- (9) Je le lui ai donné à boire. (I gave it to him to drink.)

(Notice that Clitic Movement does not usually place the pronoun in front of the finite verb when this is followed by à + VP:

- (10) Je tiens à l'écrire. (I do wish to write it.)
- (11) Il procéda à l'écrire. (He proceeded to writing it.))

# 2. Kayne's rules.

Kayne (1969) devoted chapters 3 and 4 of his thesis to a discussion of the <u>faire</u>-construction. He showed convincingly that there is an underlying embedded object-S under <u>faire</u>, whose subject surfaces as a dative when the embedded S also has an object, as in (1), and otherwise as an accusative, as in:

- (12) Je ferai partir Paul. (I'll get Paul to leave.)
- (13) Je le ferai partir. (I'll get him to leave.)

but not:

- (14) \*Je ferai partir à Paul.
- (15) \*Je lui ferai partir.

Kayne's main purely syntactic argument for showing that there is

an underlying embedded S rests on the occurrence of a parallel form of (1):

(16) Je ferai manger une pomme par Jules.
(1it.: "I'11 make eat an apple by Jules.")

He argues (pp.103-5) that (16) contains a passivized complement-S on the ground that restrictions on the occurrence of the passive in French are exactly mirrored in the faire par-construction:

- (17) a. Mon fils fera le malade. (My son will behave as though he is ill. Lit.: "My son will do the sick.")
  - b. \*Le malade sera fait par mon fils.
  - c. Je ferai faire le malade à mon fils.
  - d. \*Je ferai faire le malade par mon fils.
- (18) a. Lucien sait la solution. (Lucien knows the solution.)
  - b. \*La solution est sue par Lucien. (The solution is known by Lucien.)
  - c. Je ferai savoir la solution à Lucien.
  - d. \*Je ferai savoir la solution par Lucien.
- (19) a. Jean quittera la maison. (Jean will leave the house.)
  - b. \*La maison sera quittée par Jean. (The house will be left by Jean.)
  - c. Je ferai quitter la maison à Jean.
  - d. \*Je ferai quitter la maison par Jean.

Objects of inalienable possession do not allow for the passive:

- (20) a. Jean ouvrira les yeux. (Jean will open the (his) eyes.)
  - b.  $\neq$ Les yeux seront ouverts par Jean.
  - c. Je ferai ouvrir les yeux à Jean.
  - d. #Je ferai ouvrir les yeux par Jean.

If, however, the object of <u>ouvrir</u> (open) is not one of inalienable possession, the passive is not restricted:

- (21) a. Jean ouvrira la porte. (Jean will open the door.)
  - b. La porte sera ouverte par Jean.
  - c. Je ferai ouvrir la porte par Jean.

It seems clear enough that par with faire is indeed the par of the

French passive, so that the conclusion is inescapable that we have to do with an embedded complement-S in deep structure.

There is a complication, however, glossed over by Kayne, which deserves serious attention, although it does not affect the argument at this point. There are many verbs which, when embedded under faire, require passivization. They include tuer (kill), suivre (follow), accompagner (accompany), dicter (dictate), présenter (present, introduce), recommander (recommend), séduire (seduce), tromper (deceive), conduire (drive). Other, very few, verbs resist passivization, mainly verbs of cognition and perception, such as voir (see), entendre (hear), sentir (feel), connaître (know). Thus, for example:

- (22) a. Je ferai tuer les prisonniers par les soldats. (I'll have the prisoners killed by the soldiers.)
  - b. \*Je ferai tuer les prisonniers aux soldats.
  - c. Je ferai voir la lettre à Jules. (I'll let Jules see the letter.)
  - d. \*Je ferai voir la lettre par Jules.

It is not clear what the explanation is. One can speculate on what semantic properties correlate with this distribution of active and passive. It would seem, for example, that the verbs which prefer the active under <u>faire</u> tend not to include a semantic element "do", whereas those that take the passive are strong "do"-verbs. But such speculation does not appear fruitful at the present moment. Traditional grammarians give numerous examples, but no valid generalizations. Spang-Hanssen (1963) notes, on p. 132, a "tendency" to use the passive if both the subject and the object of the complement-verb denote living beings. But we do have:

(23) Je ferai connaître ma fille à ce garçon.
(I'11 get that boy to know my daughter.)

On the same page he claims that the passive is obligatory when an ambiguity may arise because of an embedded verb already having a dative, as in:

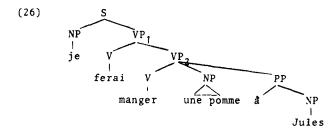
(24) Je ferai présenter Jeanne à ma femme.
(I'11 get Jeanne to be introduced to my wife.)

which might mean, if the passive were not obligatory with this verb, "I'll get my wife to introduce Jeanne". Yet we do frequently have ambiguities of this type:

- (25) a. Je ferai dire cela à Pierre. (I'll get Pierre to say that. I'll have that said to Pierre.)
  - b. Je ferai écrire une lettre à Jean. (I'll get Jean to write a letter. I'll have a letter written to J.)

That there must be a rule of some kind explaining these facts is borne out by the capacity of foreign learners of French to predict the occurrence of active or passive under <u>faire</u>, once the principle of the <u>faire</u>-construction has been understood, without having to memorize lists of verbs. More will be said about this problem in the sections 7 and 8.

The surface structure of sentences in the <u>faire</u>-construction cannot be such that the original embedded S ends up as a VP-constituent of a higher VP in, for example, the following way (for (1)):



In (26) the original subject <u>Jules</u> has, somehow, been shifted around its verb, and the original embedded S has become a VP. In general, it can be shown that any treatment whereby the original subject of the embedded S is shifted around to either the lower or the higher VP must be incorrect, as can be seen from the behaviour of clitic pronouns. In French, clitic pronouns move in front of the verb of the VP to which they belong. They never move beyond their lowest VP-boundary. This explains why in (2) the pronoun <u>le</u> ends up in front of <u>faire</u>. (27a) turns into (27b) through Equi-NP-deletion and S-pruning, after which <u>le</u> moves to

the left of faire, i.e. within its own VP:

The verb <u>laisser</u> provides decisive evidence. As was noted above, it allows for two different constructions, which are very nearly synonymous. One of these is the faire-construction, as in:

- (28) a. Je laisserai lire la lettre à Paul. (I'll allow Paul to read the letter.)
  - b. Je la lui laisserai lire. (I'll allow him to read it.)

The other is describable in terms of Subject Raising 4:

- (29) a. Je laisserai Paul lire la lettre.
  - b. Je le laisserai la lire.

Through Subject Raising the embedded subject <u>Paul</u> becomes object of <u>laisser</u>, leaving behind the VP <u>lire la lettre</u>. Consequently, the original embedded subject, when pronominal, is moved to the left of its new sister-constituent <u>laisser</u>, but the embedded object stays within the lower VP and moves, when pronominal, to the left of lire, as in (29b). Thus, we have both:

(30). a. Je laisserai partir Paul. (I'll let Paule leave.) with the faire-construction, as in (12), and:

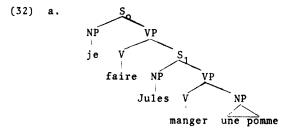
(30) b. Je laisserai Paul partir.

as a result of Subject Raising. If  $\underline{Paul}$  is replaced by a pronoun the result is identical for both constructions:

(31) Je le laisserai partir.

(which is thus seen to be derivable in two different ways, although it is not noticeably ambiguous).

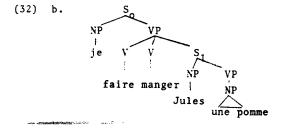
Clitic Movement and, in particular, the dual construction of <u>laisser</u> thus shows that in the <u>faire</u>-construction there cannot be a VP left behind as a remnant of the embedded complement-S. There seems to be no alternative but to raise the lower verb to the position of the higher verb and make the NP's of the embedded S constituents of the higher VP. Kayne wants his rules to achieve precisely that. He takes as deep structure for (1):



The obligatory cyclic rules now operate:

(33) a. Faire-Attraction (FA):  $X - faire - NP - V - Y \rightarrow 1 2 4 3 5$ 1 2 3 4 5

to be interpreted in such a way that the embedded verb ( $\underline{manger}$ ) is raised, and not the subject ( $\underline{Jules}$ ) lowered:



(33) b. <u>a</u> - Insertion (a-Ins):

X - faire - V - NP - NP - Y → 1 2 3 a + 4 5 6

1 2 3 4 5 6

where the second NP ensures that no  $\underline{\mathring{a}}$  is inserted in an objectless complement-S.

(33) c. Dative-Movement (DM):  $^{6}$ X - faire - V -  $^{2}$  + NP - NP - Y  $\rightarrow$  1 2 3 5 4 6

1 2 3 4 5 6

which is meant to have the following effect:

- (32) c. Solve VP VP VP VP VP VP Faire manger NP NP Jules une pomme
- d. Son VP VP Je V V NP PP A NP faire manger Jules

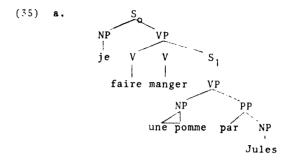
The lower VP disappears and S<sub>1</sub> is pruned.

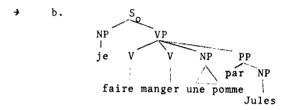
Passives under <u>faire</u>, such as (16), are taken to imply only Agent Postposing, without Subject Preposing (p.136):

(34) Je ferai [Jules manger une pomme par Ø] → Je ferai [manger une pomme par Jules]

It should be noted that FA, as formulated above, does not now apply, since term 5 is lacking. This would leave us with manger une pomme par Jules as an embedded VP, which cannot be correct in view of Clitic Movement. If FA is reformulated so that it does apply to a passivized embedded S without Subject Preposing,

then further pruning conventions will be required to reduce (35a) to the more acceptable (35b):





## 3. Criticisms of Kayne's rules

Kayne's treatment is open to various criticisms, apart from his all too summary dealing with passives under  $\underline{faire}$ . One point to be made is that there are various reasons for taking  $\underline{faire}$  and the following infinitive together under one V-node in the following way:



and not as two sister V's directly under VP and on a par with the nominal complements, as in (32d). One reason is that the statement of Clitic Movement would be complicated: pronouns would have to move across the <u>leftmost</u> V of the VP. If (36) is adopted the A-over-A principle will ensure the right result. Or more precisely, a proper statement of Clitic Movement will put the pronouns to the left of the node (V,VP), - or, in VSO, of (V,S). If

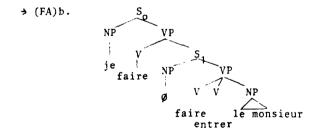
transformations are stated in terms of Phrase Markers, the A-over-A principle is unnessecary: its apparent necessity arose out of a defective notation.)

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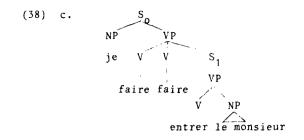
Sister-adjunction of the lower verb is unsatisfactory also for another reason. Consider the sen\_tence (Kayne, p.136):

(37) Je ferai faire entrer le monsieur. (I'11 get someone to make the gentleman come in; I'll have the gentleman shown in.)

Here FA must have applied on two successive cycles. From the underlying (38a):



(where " $\emptyset$ " is used for an empty node), by FA on the  $S_1$ -cycle, we get (38b) ( $S_2$  is pruned). Agent postponing on  $S_1$  deletes the empty subject node. FA on  $S_0$  will now give (overlooking the complication, mentioned above, that it would not apply in the absence of the subject of  $S_1$ ):



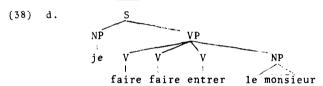
This cannot be the correct surface structure, since if <u>le monsieur</u> is pronominal Clitic Movement would result in the ungrammatical:

(39) \*Je ferai faire l'entrer.

instead of the correct:

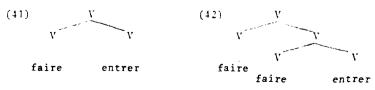
(40) Je le ferai faire entrer.

FA will have to apply again, on the same cycle, in order to pick up the forgotten verb entrer:

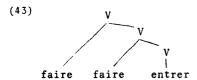


This, however, would create the anomalous situation that FA were to be the only cyclic rule known to be allowed to apply more than once on the same cycle. Rather than change our theory of the transformational cycle, we will assume that FA results in the lower verb being brought under one V-node with faire.

Let us suppose this is done by Chomsky-adjoining the lower verb to the right of <u>faire</u>. The resulting V-node on the  $S_1$ -cycle or (38a) will then be as in (41). On the  $S_0$ -cycle the node will be as in (42):



Another way of maintaining a single V-node, proposed in McCawley (1968) as part of his rule of Predicate Raising, is to apply daughter-adjunction. The resulting V-node after the  $\rm S_{O}^{-}$  cycle of (38) will then be:



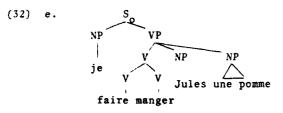
Daughter-adjunction, however, does not seem correct. The rules ensuring the correct morphological form of the first verb, which is the finite verb form, will certainly need the label "V". 8 Moreover, in non-negative imperatives clitic pronouns are placed immediately after the finite verb, even in the faire-construction:

(44) Faites-le-moi voir. (Let me see it.)

No matter how the correct position of the clitics is accounted for in these cases, it will crucially involve a V-node. (42) is, therefore, to be preferred to (43).

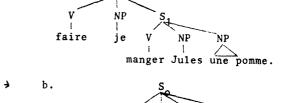
## 4. The VSO-hypothesis

A further difficulty concerns the role of the VP-node in Kayne's rules (33a-c). In (32b) une pomme is both NP and VP. But in (32d), which is taken to be the result of Dative Movement, une pomme is only NP: the VP-node has been pruned, although no justification for this VP-pruning has been given. The S<sub>1</sub>-node has also been pruned, but here one can maintain that any S-node which does not dominate a V-node is automatically pruned away. We might assume the same for any VP-node, so that the result of rule (33a), FA, would not be (32b), but:

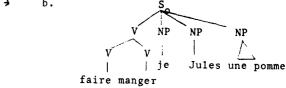


Yet, although S-pruning is supported by many arguments,  $^9$  VP-pruning is not.  $^{10}$  In these stages of the derivation, VP is a troublesome node, which we would rather do without.

McCawley (1970) has indicated a way of doing so. He defends the theory that the deep structure of the sentences of many languages, including English and French, is of the type Verb-Subject-Object (VSO), and not NP - VP. Languages which do not have VSO in their deep structure, have SOV. His argument is that a number of transformational processes are simplified if that assumption is made. The case at hand provides further support for McCawley's thesis. In VSO-terms, the deep structure of (1) is (45a):

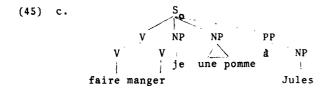


(45) a.



FA, appropriately amended, results in (45b), where  $S_1$  has been pruned since it no longer dominates a V. Apart from a difference in the internal structure of the V-node in (45b), the result of FA is now identical to that of Predicate Raising, as proposed by McCawley. We shall henceforth speak of Predicate Raising, which seems a better term than FA.

We can now reformulate the rule of <u>a</u>-Insertion in such a way that it applies to any NP which is flanked by a subject on the left and an original object on the right. Dative Movement now makes the object-NP interchange position with the new PP by a simple swivelling movement:



McCawley (1970) makes use of Predicate Raising in his analysis of the verb <u>kill</u>, which he decomposes into "cause (to) become not alive". He then presents this analysis as an argument for the VSO-theory. It was pointed out by Chomsky, however, that "Predicate Rasing surely is not (syntactically motivated); it is simply a device to convert phrases that are to be replaced by a lexical item into a single constituent" (1972,152). It is now clear that for French, if not for English, Predicate Raising is a well-motivated rule.

Assuming further, with McCawley, that  $S_0$  is the scope of a higher Auxiliary predicate, in this case the tense <u>Future</u>:

and that Auxiliary-verbs are subject-raisers, Subject Raising on  $S_{-1}$  will yield:

McCawley now assumes a rule of V-NP Inversion. For (46b), this rule would result in inverting <u>Future</u> and <u>je</u>. At this point sentence structures have the form NP - Aux - S, where <u>S</u> lacks a subject. This S represents the VP of more traditional theories. According to McCawley, all arguments supporting the presence of

a VP-node apply to postcyclic structures, and VP is, in fact, the remnant of an original embedded S. In questions, V-NP Inversion is taken not to apply, thereby making the old rule of NP-Aux Inversion for questions superfluous (p.294).

The status of V-NP Inversion seems, however, open to serious doubt. It simply accommodates the fact that subjects precede verbs in English and other languages. But no independent justification has been found, apart from the argument that it eliminates the rule of NP-Aux Inversion, which would otherwise be required for questions and for sentences beginning with a negative adverb. It is not necessary, however, to accommodate the fact that verbs come second in English declarative sentences, since Aux has to be lowered anyway into the VP. If it is lowered from a position such as in (46b) the process falls into one category with lowerings of quantifiers and negation.

The question-argument is not very strong. It is limited to English (which, to my knowledge, is unique in having a rule of do-support), and does not hold for any other language. In French, for example, the interrogative of (1) is:

(47) Ferai-je manger une pomme à Jules?

which shows that <u>Future</u> and <u>faire</u> have coalesced prior to Question-Inversion. Notice, moreover, that in French this type of question formation is restricted to pronominal subjects and that the pronominal subject becomes a clitic. Yes/no questions with a full NP as a subject exhibit the standard NP-VP structure. The cliticisation of the pronominal subject suggests that (47) is the result of one of the postcyclic Clitic Movement rules.

In a newer version of the VSO-paper (available in MS at the time of writing), McCawley raises the problem that V-NP Inversion would also apply to embedded S's of the type to admire Spiro, or to give him his money, yielding:

- (48) \*Arthur seemd Spiro to admire (or: to Spiro admire).
- (49) \*The robber forced Schwartz him to give (or: to him give) his money.

Leaving aside ad hoc adjustments of the rule, McCawley ventures

to suggest that one should "supplement a theory of grammar by the principle that when an S loses its subject its node label is automatically changed from S to VP (thus, VP would not exist in semantic representation but would arise in the course of a derivation). Then V-NP Inversion could be formulated as applying to the first V of an S (NB: not of a VP)."

If the rule of V-NP Inversion is dropped, this problem does not arise, although it may still be a value to have an S become a VP when the subject is deleted or moved out of that S. S-pruning would now be formulated to include the following condition:

(50) a. "Any S which does dominate its subject but not its original verb is pruned."

A related convention of VP-labelling would be:

(50) b. "At the end of the cycle, any S whose subject has been deleted or moved out of it becomes a VP."

(It seems preferable to let this VP-labelling take place at the end of the cycle, in order to preserve a uniform formulation for various cyclic rules.) Under this formulation,  $\underline{S_0}$  in (46b) is replaced by  $\underline{VP}$  at the end of the cycle.

5. NP-Baulk: a Zero Output Rule

In one case, Kayne makes critical use of the VP-node. If Kayne is right there, that node cannot be dispensed with in the rules of the <u>faire</u>-construction, and, by implication, in the cycle.

French has both:

(51) Je ferai connaître Paul à mon fils. (I'll get my son to know Paul.)

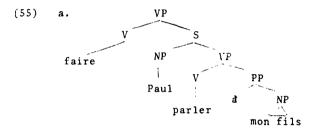
and

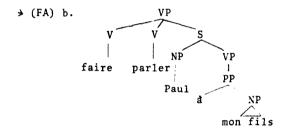
(52) Je ferai parler Paul à mon fils. (I'll get Paul to speak to my son.)

However, Dative Clitic Movement (DCM) only applies to the former:

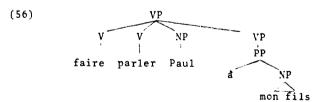
- (53) Je lui ferai connaître Paul.
- (54) \*Je lui ferai parler Paul.

Kayne devotes considerable space (pp. 96-102; 129-30) to this problem. His proposed solution is that DCM is blocked if there is an object to which the dative pronoun is not a sister-complement. According to his rules, (52) would be derived as follows (ignoring structure above the highest VP):

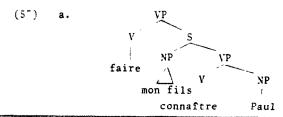


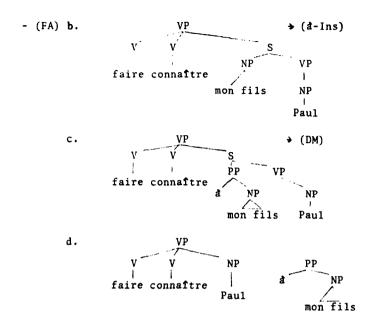


He assumes that S, but not VP, is pruned, so that the resulting structure, at the end of the cycle, is:



The derivation of (51), however, would be:





For Kayne, the crucial difference between (56) and (57d) is that the dative in the former, but not in the latter, is dominated by VP. This would make the dative in (56) a non-sister to the object <u>Paul</u>, so that DCM would not apply.

This solution, however, does not seem plausible. It depends crucially on pruning conventions for which no motivation is given. In particular, it strikes one as quite arbitrary to let VP be pruned over NP, but not over PP.

Furthermore, DCM applies in relative clauses, the object of which is a relative pronoun so that it is no longer a sister-complement to the indirect object:

(58) Je cherche le livre que je veux lui vendre.

(I am looking for the book which I want to sell to him.)

It should be understood that wh-Movement precedes Clitic Movement. First and second person object pronouns block DCM (see below):

(59) \*Je vous lui présenterai. (I'll introduce you to him.)

But DCM is not blocked when a first or second person object pronoun is relativized: The following sentence:

(60) Ce n'est pas vous que je veux lui présenter. (It isn't you whom I wish to introduce to him.)

is perfectly grammatical. Also, the dative pronoun, when relativized, retains the preposition  $\underline{a}$ , which it would have lost had it been cliticised earlier:

(61) Le voilà à qui je veux la présenter! (There he is to whom I wish to introduce her!)

It is quite clear, therefore, that the VP-node, on which Kayne relies in order to explain the curious ungrammaticality of (54), is not of any use here. We shall have to look for a better solution. A closer look at the facts may help us.

Not only does DCM not apply to (52), there is no surface structure in French for the deep structure underlying (54). 11 If DCM simply did not apply, we would expect:

(62) \*Je ferai parler Paul à lui.

which is not a translation of "I'll get Paul to speak to him", with unstressed <u>him</u>, and can only be grammatical if the pronoun <u>lui</u> is heavily, or contrastively, stressed. We shall, henceforth, speak of unstressed pronouns simply as pronouns. Stressed pronouns seem to behave as ordinary full NP's; they will, however, not be considered here.

It is to be noted that the blocking of DCM in this case is not due to an output constraint in the sense of Perlmutter (1971, 19):

"This constraint is to be interpreted as a template or filter that is applied to sentences generated by the transformational component. If the object pronouns in sentences generated by the transformations are in the correct order, the sentence is ungrammatical. If not, it is discarded as ungrammatical. It is shown that as a result of the surface structure constraint on object pronouns in Spanish, there are well-formed deep structures to which there correspond no grammatical surface structures."

The ungrammaticality of (54) cannot be due to a "template" for surface structure, since (53), which has exactly the same structure, is grammatical.

According to Perlmutter, it is an output constraint which prevents (59) from being grammatical. French does not allow an accusative pronoun of 1st or 2nd person or the reflective <u>se</u> together with a dative pronoun in clitic position. It should be noted, however, that it is not the case that (59) has no grammatical counterpart in surface structure. There is:

(63) Je vous présenterai à lui.

(with unstressed <u>lui</u>), whereas:

- (64) \*Je lui présenterai vous.
- (65) \*Je présenterai vous à lui.

(with unstressed pronouns) are undoubtedly ungrammatical. This is not accounted for in Perlmutter's theory of output constraints. It is explained, however, without any output constraint, by assuming 1) that Clitic Movement is obligatory except when blocked; 2) that accusative pronouns are cliticised first, and without restrictions (except NP-Baulk: see below); 3) that dative pronouns are cliticised after accusative pronouns, but that DCM is blocked when there is already a 1st or 2nd person, or third person reflexive, accusative pronoun in clitic position: in such a case DCM simply does not apply and the dative pronoun remains uncliticised, as in (63). Although Perlmutter's theory may still be necessary to explain other facts of clitic ordering, the observations given in (59) and (63)-(65) are explained by a standard rule system.

The system outlined here, however, does not explain the ungrammaticality of (54), nor can it be extended to cover this case. For then there should be a grammatical sentence where DCM has not applied. But (62) is clearly ungrammatical. There must, therefore, be a rule which, at some stage, rejects a transformational product underlying (54) or (62) as unfit for further treatment.

This is borne out further by the behaviour of pronouns under penser à (think of), or verbs of going, such as aller à (go to), retourner à (return to), or also expressions such as avoir recours à (resort to) or faire attention à (pay attention to). With these verbs, pronouns after à do not cliticise when they refer to a person, but they do when referring to an inanimate object:

- (66) a. Jules pense à elle. (Jules thinks of her.)
  - b. \*Jules lui pense.
  - c. Jules pense & la maison. (Jules thinks of the house)
  - d. Jules y pense. (Jules thinks of it.)

Since the pronoun in (66a) is not cliticisable, one would expect no difficulty when (66a) is embedded under <u>faire</u>, - if one follows Kayne in attributing (54) to a blocking of DCM. Yet, the following are ungrammatical: 12

- (67) a. \*Cela fera penser Jules à elle. (That will make Jules think of her.)
  - b. \* Cela fera retourner Jules â elle. (That will make Jules go back to her.)

It looks very much as though this is due to the same reason why (62) is ungrammatical. What is involved does not seem to be a blocking of DCM, which would not have to be blocked for (67) and would anyhow leave behind as grammatical the uncliticised version.

Furthermore, neither Kayne's nor Perlmutter's rules explain why (68a) is grammatical, but not (68b):

- (68) a. Je vous ferai présenter à lui. (I'll get you to be introduced to him.)
  - b. \*Je vous ferai parler à lui. (I'll make you speak to him.)

As in (63), in (68a) DCM was blocked and left a grammatical, non-cliticised <u>a lui</u> behind. A different principle from DCM must account for (68b).

This principle appears at work also in other cases than the <u>faire</u>-construction, and there is not necessarily always a dative pronoun involved. Sometimes an accusative pronoun finds itself in

a position where it can be neither cliticised nor left behind. Thus, while French has both:

(69) a. Cela rendra Jean fou. (That will make Jean mad.)

b. Jean l'est déjã. (Jean is it) already.)

it does not have:

and

c. \*Cela le rendra Jean. (That will make Jean it.)

Likewise, although there is (Kayne's example, pp. 91, 131):

(70) a. Je ferai devenir mon fils un bon professeur. 13
(I'11 make my son become a good teacher.)

and: b. Il le deviendra bientôt. (He will soon become so (it).)

the sentence

c. #Je le ferai devenir mon fils.

can only mean "I'll make him become my son", and not "I'll make my son become so (it)".

Then, while we have:

(71) a. Je rendrai les acteurs responsables au régisseur.
(I'11 make the actors responsible to the director.)

there is no, otherwise identical, surface structure where régisseur is pronominal:

(71) b. Je lui rendrai les acteurs responsables.

c. Je rendrai les acteurs responsables à lui.

However, if <u>les acteurs</u> is given a relative clause, which makes the NP "heavy", so that it can be moved to the far right, cliticization of the dative pronoun takes place in the normal way:

(72) a. Je rendrai responsables au régisseur les acteurs qui se sont montrés mécontents.

(I'll make the actors who showed themselves dissatisfied responsible to the director.)

b. Je lui rendrai responsables les acteurs qui se sont montrés mécontents.

The ungrammatical cases not accounted for by the rules given or outlined above, have one property in common: there is, before Clitic Movement, between the pronoun (dative or accusative) and the clitic-attracting verb, an NP which originated as the subject of an embedded S. In (52), (54) and (62), Paul is the original subject of parler, but in (51) and (53) Paul is the original object of connaître. In (67), (68b) and (69c), the original subjects of the embedded verbs are, or were before Clitic Movement. in a position between V and the pronoun. For (69c) this is only true if it is assumed that rendre is inserted after PR has formed one V-node over faire devenir (make become). If this assumption is not made, the generalization is lost that it is always the subject of an embedded verb which forms an obstacle. That loss would be regrettable, since semantically Jean is the subject of an embedded devenir. Moreover, the verb rendre would, without that assumption, be syntactically anomalous in that it takes an NP followed by a predicative adjective without that adjective originating as an embedded Predicate Nominal, as in Il a les yeux bleus. (lit.: He has the eyes blue.) or Servez la viande bien chaude. (Serve the meat hot.). (In these cases the predicative adjective does not pronominalize either.)

(70c) can only be derived from preclitic (70d), and not (70e):

- (70) d. Je ferai devenir le mon fils.
  - e. Je ferai devenir mon fils le.

In (71c), which is the preclite form of (70b), the original subjects of <u>responsables</u>, i.e. <u>les acteurs</u>, stands between the cliticattracting verb <u>rendrai</u> and <u>a lui</u>. But in the preclitic version of (72b):

(72) c. Je rendrai responsables à lui les acteurs qui se sont montrés mécontents.

the original subject has been moved to the right, due to its being "heavy", assuming that Heavy-NP-Shift precedes Clitic Movement.

However, moving the offending NP away from its position after the verb by wh-Fronting does not allow cliticization to take place. Such movement does not save structures from ungrammaticality. My informants rejected:

- (73) a. Ce sont les acteurs que je lui rendrai responsables.
  (It is the actors whom I'll make responsible to him.)
  - b. Il y a aussi une fille que je le ferai devenir. (There is also a girl whom I'll make become so (it).)
  - c. Vous voilà que je lui ferai parler!
    (There you are, whom I'll get to speak to him!)
  - d. "Ce n'est pas vous que je veux faire penser à elle.
    (It isn't you whom I want to make think of her.)
  - e. \*C'est Paul que je lui ferai parler.
    (It is Paul whom I'll get to speak to him.)

The offending NP can only be the <u>original</u> deep structure subject of the embedded S, not a subject derived, for example, through Passive. The following is good French:

(74) a. Je lui ferai payer l'argent par Jacques.
(I'11 see to it that the money gets paid by Jacques.)

In fact

b. Je lui ferai payer l'argent.

is ambiguous between:

- (i) je ferai [il payer l'argent]
  "I'll make him pay the money"
- and (ii) je ferai [payer à lui l'argent par Ø]
  "I'll see to it that the money is paid to him".

Apparently, there is a rule which rejects any structure in which, at some particular stage, there is an original deep structure subject between the verb and the pronouns. We can call such a rule a Zero Output Rule. A Zero Output Rule is an extreme case of transformation. If a transformation is taken to be a filter separating the range of possible output trees from the total set of possible trees, a Zero Output Rule defines the range of possible output trees as the empty set. The rule in question, let us call it "NP-Baulk", will be ordered after Heavy-NP-Shift, but before wh-Movement.

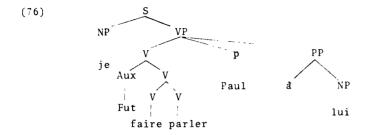
One might be tempted to think that NP-Baulk should have as a global condition of applicability, roughly in the sense of Lakoff (1970), the requirement that the NP between verb and pronoun must be the original deep structure subject. One might then quote this case as evidence for Lakoff's theory of global rules. It does not, however, seem necessary to resort to a global condition here. Given the rules as sketched so far, one simple addition will automatically ensure the correct results: we stipulate that DM does not apply when the dative is a pronoun, but \(\frac{a}{2}\)-Ins does apply. NP-Baulk can now be formulated as a simple transformation, without global conditions of applicability:

(75) 
$$\frac{\text{NP-Baulk}}{\text{X - V - NP - }} \left\{ \underbrace{\text{acc.pron.}}_{\underline{a}+\text{dat.pron}} \right\} - \text{Y - } \emptyset$$

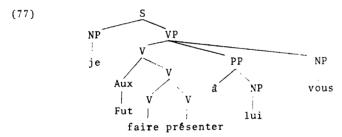
where "  $\emptyset$  " stands for the empty set of output trees.

To recapitulate, starting from a VSO-structure we have Predicate Raising, a-Insertion and Dative Movement in the cycle, as in (45). DM does not apply when the dative is a pronoun, or when the subject is followed by another dative already there, or when the object is an embedded S (see note 6). Subject Rasing and Aux-Lowering are also in the cycle, the former resulting in the embedded S losing its subject so that it is relabelled "VP" at the end of the cycle. The sentence now has an NP-VP structure. If Heavy-NP-Shift is lastcyclic, rather than postcyclic, and wh-Movement is postcyclic, then NP-Baulk can be seen as a wellformedness constraint on French shallow structure. The rules of wh-Movement and Clitic Movement follow, in that order. By the latter, accusative pronouns are first to move to clitic position (in front of V within the same VP). Then dative pronouns are cliticized, except when a 1st or 2nd person accusative (or a reflexive se) is already in clitic position; in that case DCM is blocked and the pronoun remains uncliticized. 15

It now follows that both (54) and (62) must be ungrammatical. The shallow structure looks like:



Now, NP-Baulk causes the entire structure to be rejected. Exactly the same applies to (67a and b) and (68b), whose ungrammaticality is thereby explained. (68a), however, has a different derivation. The embedded S [présenter Ø à lui vous] is passivized into [présenter à lui vous], so that the shallow structure is:



Here NP-Baulk does not apply. The accusative pronoun  $\underline{\text{vous}}$  is cliticised, thereby blocking DCM for  $\underline{\text{à lui}}$ , which is left behind. The result is (68a).

Notice that for this explanation to work it must be assumed that the dative of <u>présenter</u> has an origin similar to that of the <u>faire</u>-construction. It must have originated as a bare NP preceding the object, to which <u>a</u>-Ins, but, in this case, not DCM, applies. We shall give arguments below to show that this is indeed the standard origin of the dative in French, despite the appearances. It is, in fact, reasonable to assume that <u>présenter</u> is a lexical replacement of "cause to know", after PR.

The explanation of (69c) and ("Oc) should now be clear. Here again, one is struck by a remarkable parallelism between semantic and syntactic structure. Rendre can be analysed as "cause to become" <sup>16</sup>. Under this analysis, its complements behave exactly

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like those of the not so densely lexicalized  $\underline{faire\ devenir}$  as in (70).

b. The dative and prelexical syntax.

The rule of Predicate Raising seems fairly well-established for French. So far, however, it has hardly become clear that <u>a</u>-Ins and DM do more than just accommodate the facts of the <u>faire-construction</u>. We wish to find out whether they are independently motivated for French. It seems that they are. There is evidence that, normally, a dative in French originates as a bare NP preceding the object, even though the dative never appears in that form at the surface, <u>ā</u>-Ins and DM being obligatory rules.

We have already seen, while discussing (77), that an otherwise troublesome set of data can be explained by assuming that DM does not apply when the dative is a pronoun, not only in the <u>faire</u>-construction, but generally. This assumption enabled us to formulate NP-Baulk. If it is assumed that in ordinary cases the dative originates as  $\frac{a}{2}$  + NP following the direct object (i.e., as in surface structure), then, if NP-Baulk is to be saved, we must have a rule moving  $\frac{a}{2}$  + NP to the left, across the object, when the NP is a pronoun. Such a rule would be odd in view of the rightward movement of datives required by the <u>faire</u>-construction. It is obviously simpler to prevent DM for pronouns in all cases.

More evidence for the theory that the dative originates as a bare NP in front of an object is found in the lexicon. There are a number of verbs which take either two complements or one. When they take two, one is dative, the other accusative; when they take one, no matter which, that NP-complement is accusative. These verbs include:

- (78) a. enseigner le français à l'étudiant (teach French to the student)
  enseigner le français (teach French)
  enseigner l'étudiant (teach the student)
  - b. servir le potage au client (serve the soup to the client)
    servir le potage (serve the soup)
    servir le client (serve the client)

- c. fournir de la marchandise au magasin (stock the shop with goods) fournir de la merchandise (provide goods) fournir le magasin (stock the shop)
- e. payer cent francs au médecin (pay the doctor 100 francs)

  payer cent francs (pay 100 francs)

  payer le médecin (pay the doctor)
- g. refuser une cigarette aux enfants (refuse the children a cigarette)
  refuser une cigarette (refuse a cigarette)
  refuser les enfants (refuse children)
- h. déléguer une tâche au secrétaire (delegate a task
  to the secretary)
  déléguer une tâche (delegate a task)
  déléguer le secrétaire (delegate the secretary)

Sometimes a specialised meaning is involved: 17

- (79) a. demander une faveur au garçon (ask the waiter for a favour)

  demander une faveur (ask for a favour)

  demander le garçon (ask to see the waiter)
  - b. interdire l'entrée aux jeunes (forbid entrance to the young)
    interdire l'entrée (forbid entrance)
    interdire un prêtre (suspend a priest from

- c. jouer un tour à Paul (play a trick on Paul)
  jouer un tour (play a trick)
  jouer Paul (fool Paul)
- d. couper la parole à Paul (interrupt Paul; i.e. cut the word)

  couper la bourse & Paul (steal Paul's purse)

  couper la parole (interrupt)

  couper l'orateur (interrupt the speaker)

  couper le cochon (castrate the pig)
- e. subtiliser la bourse à Paul(pinch Paul's purse;

  popular)

  subtiliser la bourse (pinch the purse)

  subtiliser Paul (fool Paul)
- f. défendre le vin à l'enfant (forbid wine to the child défendre le vin (forbid wine, or: defend the wine)
  défendre l'enfant (defend the child)

Sometimes the paradigm is incomplete:

- (80) a. épargner cette humiliation aux femmes (spare the women this humiliation) épargner les femmes (spare the women) but not: épargner cette humiliation
- b. persuader son innocence au juge (persuade the judge of one's innocence; arch.)

  persuader le juge (persuade the judge)

  but not: \*persuader son innocence.

One might be tempted to regard a recent proposal by Jackendoff and Culicover (19<sup>-</sup>1) as a possible explanation of the regularity observed here. They propose an optional rule:

(81) a. PP-Shift: (p. 402)  

$$X = V = {NP \choose pp} = PP = Y \rightarrow 1 2 4 5 \% 5$$
  
1 2 5 4 5

and an obligatory rule of P-Deletion, whereby the preposition immediately following the verb is deleted:

(81) b. P-Deletion:

$$X - V - P - Y \rightarrow 1 \ 2 \ \emptyset \ 4$$
  
1 2 3 4

Thus:

- (82) a. Bill gave a book to Mary ⇒ Bill gave to Mary a book ⇒ Bill gave Mary a book.
  - b. Bill bought a book for Mary → Bill bought for Mary a book → Bill bought Mary a book.
  - c. He credited to Bill with the discovery ⇒ He credited with the discovery to Bill ⇒ He credited the discovery to Bill.

or, by P-Deletion alone:  $\rightarrow$  He credited Bill with the discovery.

d. He blamed for the fiasco on Jack  $\Rightarrow$  He blamed on Jack for the fiasco  $\Rightarrow$  He blamed Jack for the fiasco.

or, by P-Deletion alone:  $\rightarrow$  He blamed the fiasco on Jack.

For French this would mean that the preposition à is deleted when it follows immediately after the verb.

It is essential to this proposal that the <u>to-dative</u> and the <u>for-dative</u> originate in deep structure with their prepositions, and that some surface structure objects also occur with a preposition in deep structure, but others do not. What objects are assigned what prepositions depends entirely on the occurrence of alternatives such as:

- (83) a. provide the shop with goods
  - b. provide goods to the shop.

Now the object of (83a) will be assigned the preposition to in deep structure, and the object of (83b) the preposition with. Having thus first introduced such prepositions by way of hypothesis, the authors then speak of "the generalization that it is always the preposition next to the verb that is deleted" (p. 402). This "generalization", however, is largely of their own making:

it is not a generalization over the data, - such as the fact that the surface object is never separated from the verb by a prepositional phrase, but can only be separated from it by a dative. The rule of P-Deletion does not capture that. Nor does it explain why, in  $V - NP_1 - NP_2$ , it is  $NP_2$  which is the object, not  $NP_1$ , whereas in other cases it is the NP whose preposition is 'supposedly' deleted which becomes the object.

The status of the two rules (81) is doubtful since they reflect no significant generalization or regularity. Many verbs do not allow for PP-Shift:

- (84) a. I'll notify John of your arrival.
  - b. \*I'll notify your arrival (to?) John.

Then, there is no evidence that if a verb does allow for PP-Shift the preposition immediately after the verb is, or tends to be, lost. There would be some evidence for that if alternations such as in (83) were found regularly, and alternations such as in:

- (85) a. write on the paper with ink
  - b. write with ink on the paper

were regularly ungrammatical. This, however, is not so. Variations such as in (85) are found regularly, and those of the type (85) are exceptional. There are also mixed forms:

- (86) a. sail the ocean with a yacht
  - b. sail a yacht across the ocean
  - c. sail across the ocean with a vacht.

It makes no sense, therefore, to say that P-Deletion is obligatory. Nor does it make sense to say that it is optional. That would make sense if alternations such as between (86a) and (86c), or attend a conference and attend to a customer, or ride a horse and ride on a horse, or get the money and get at the money were found regularly. Again, however, this is not so.

The rules (81) do not nearly have the degree of generality their authors claim they have. If they are restricted to to- and for-datives, they will be virtually correct from an observational point of view. But they will have lost all explanatory power,

since they no longer extend to other cases such as (82c and d), but have become nothing more than the inverse of Dative Movement and  $\underline{to}$ -Insertion as discussed earlier. Nothing is gained, therefore, with Jackendoff and Culicover's proposal.

In French grammar, a restricted rule (81a), FP-Shift, would have no place at all, since datives do not occur as bare NP's preceding the object. Yet, cases such as (83) do occur in French. The two constructions of fournir (provide):

(87) a. fournir le magasin de marchandise b. fournir de la marchandise au magasin

run exactly parallel with (83).

One might think that P-Deletion could be a rule in French, even if PP-Shift is not. P-Deletion would then be called in to accommodate the disappearance of the preposition  $\underline{a}$  in every third case of (78) and (79). But that rule would have no explanatory value: it would simply be a way of stating the observed facts, and it would not interlace in any significant way with other rules and facts.

It is true that it is not possible to predict the behaviour of lexical items in other than very general ways. This is not to say, however, that the lexicon is nothing but a list of irregularities. Although whatever is irregular can reasonably be thought to be stored in the lexicon, there are still a great many regularities left in it, as was pointed out by Gruber (196°a; 1967b). In order to detect these lexical principles one will minimize the number of ad hoc rules introduced solely for the purpose of accommodating isolated facts, while maximizing the number of rules which are either found elsewhere in the grammar or link up with the rest of the grammar. One will, moreover, attempt to formulate universal restrictions on the semantic analyses corresponding to semantically complex items. In other words, one will try to define the notion possible meaning of a lexical item.

Thus, for example, a morphologically simple lexical item may stand for "make beer": <a href="mailto:brew">brew</a>; <a href="pay">pay</a> stands for "give due compensation"; in Italian, <a href="mailto:uccellare">uccellare</a> means "hunt birds". But, <a href="presumably">presumably</a>,

no morphologically simple lexical item in any language will mean, for example, "sing for two minutes", or "arrive half an hour later", or "talk to that man". Since it is part of our knowledge of the language to know that brew means "make beer", any adequate description of linglish will have to contain a rule mapping the one onto the other. Such a rule will be part of the rules relating surface structures to semantic representations. General linguistic theory will have to allow for a mapping of a verb plus a non-referring type-description of its object into a single lexical item, but it will have to disallow mappings of a verb plus a Time Adverbial into a lexical morpheme.

Furthermore, semantic mapping rules will have to specify that when a verb such as brew or pay has an overt object, that object maps onto the internal object of the verb as a further specification: to brew lager is something like "to make beer, which is lager" 18; to pay a dollar corresponds to "to give due compensation, which is a dollar". We can thus say that it is natural, in a technical sense, for a language to have a rule relating a semantic representation in which a verb has a certain kind of object (with our without further specification) to a surface structure where the semantic verb plus the head noun of the semantic object are represented as one surface verb, while any further specification of the semantic object surfaces as object. Let us call this rule Object Attraction.

This rule finds further semantic confirmation in the fact that, e.g. <u>fournir le magasin</u>, or <u>stock the shop</u>, means "provide goods to the shop": no other object will be appropriate. Likewise, <u>déléguer le secrétaire</u>, as in (78h), implies the giving of official authority; <u>souffler l'acteur</u> (78i) implies the whispering of a text. Highly specific objects have been deleted or incorporated into the verbs of (79a-e). Euphemistic object deletion (or incorporation: in the case of (79) it is not quite clear which is involved) is often found, as in <u>couper les cochons</u> (castrate; lit.: cut (the genitals of) the pigs) 19.

Likewise, any full description of English or French will have to contain a rule analysing certain lexical verbs into "cause to V", and another, similar, rule analysing certain verbs as

"let V" or "allow to V". Thus, English <u>raise</u> is to be analysed as "cause to rise", or <u>darken</u> as either "become dark" or "cause to become dark". <u>Release</u> stands for "allow to go". In French, <u>montrer</u> will be either "cause to see" or "allow to see", just like English <u>show</u>. That this is a regular analysis is borne out not only by the semantic prominence and frequency of causative and permissive elements, but also by the obvious fact that there are certain morphological correspondences between the composite forms and the root V, as in <u>fill</u> or <u>raise</u>. Sometimes there is morphological identity, as in <u>drop</u> ("let drop"), or <u>start</u> ("cause to start"), or French <u>monter</u> ("faire monter"; cause to go up), <u>descendre</u> ("faire descendre"; cause to go down).

Since <u>montrer</u> is to be analysed as "cause to see" (or "allow to see"), the grammar of French will also have to contain rules to relate a sentence such as:

(88) Je montrerai le livre à Jules. (I'll show the book to Jules.)

to some appropriate semantic representation in which, anyhow, Jules will be the subject of see, and le livre its object. The question arises whether such rules will be purely semantic or will also be syntactic. This question has a certain importance, since if rules of this kind cannot reasonably be assumed to be required for a definition of grammatical wellformedness in the language, they will constitute a counterexample to the theory of semantic syntax, which holds that there are no rules of semantic mapping which are not also required in syntax. They would, accordingly, lend support to the theory of autonomous syntax. 20

For (88) it is clear that the rules in question will be precisely identical to those required for the <u>faire-construction</u><sup>21</sup>, except that an extra rule will establish a mapping relation between <u>faire voir</u> or <u>laisser voir</u> and <u>montrer</u>. This is sufficient to show that the semantic mapping relating (88) to its semantic representation must be part of syntax, since this mapping consists of the syntactic rules of the <u>faire-construction</u> plus the lexical mapping rule. This last rule must be syntactic since it establishes a relation between two kinds of objects both defined in syntax:

faire voir/laisser voir and montrer. It is also proved that the verb montrer cannot be part of the syntactic deep structure of (88), since certain transformations have applied before the rule mapping faire voir (or laisser voir) onto montrer can be assumed to apply. Chomsky's theory that all lexical items are contained in syntactic deep structure (1970; 1971) must therefore, according to accepted standards of linguistic argument, be considered false. And McCawley's theory (1968; 1971) that there is prelexical syntax is supported.

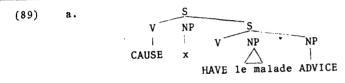
Further support for the theory of prelexical syntax is found in the data of (78)-(80). For many of the verbs given there it can be shown that they involve the rule of Object Attraction. Thus, for example, in (78d) conseiller le malade means "give advice to the patient": no other object will do. If the rules relating conseiller le malade to "give advice to the patient", or rather, "cause the patient to have advice", were not part of the syntax of French but were purely semantic mappings, the fact that le malade as direct object in conseiller le malade and as indirect object in conseiller du repos au malade have exactly the same function, i.e. subject of "have", would basically remain an arbitrary property which this verb had in common with a category of other verbs. This property could then equally well have been different. There would be no reason why, for example, French could not have had \*conseiller du repos du malade and \*conseiller du malade.

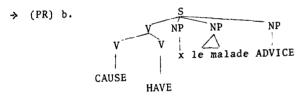
It is clear that the theory of the dative as given here implies a rejection of Fillmore's well-known Case Grammar: in such a grammar it would be an anomaly, repeated for many verbs, that the same NP occurs sometimes as accusative (object) and sometimes as dative (beneficiary). The view is taken here that Case Grammar, while providing a convenient frame for listing data, precludes many possible explanations.

In Chomsky's theory of subcategorization of verbs (1965), according to which the lexicon simply states the kinds of arguments a verb may take, the facts observed above, especially in (78)-(80), would, again, be arbitrary. A lexicon in this sense is nothing more than a taxonomy of observed data, without an ex-

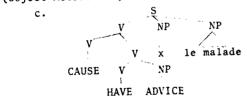
planation being given or even implied. Exactly the same objection applies to Chapter 5 in Seuren (1969), where possible arguments of verbs are simply listed.

If, however, the rules relating the surface verb to its semantic analysis are made part of the syntax, the alternation of dative and accusative as actually found in French (and English) is no longer an arbitrary fact but follows from rules which are independently supported in the syntax of the language. Thus, conseiller le malade will have, in principle, the following syntactic derivation (I follow the convention of using capital letters to indicate semantic elements which will be replaced by a lexical item):





→ (Object Attraction)



-> (Lexical Insertion)

Object Attraction takes place before  $\underline{\hat{a}}$ -Ins and DM. This is so in the great majority of cases, but not always. Although French has:

(90) a. pardonner une gaffe à Jules (forgive Jules a blunder)

the expected

b. pardonner Jules (forgive Jules)

is, though often found, rejected in favour of:

c. pardonner à Jules.

Yet, the passive:

is accepted as correct (Grevisse, pp. 544, 563).

If <u>pardonner</u> is analysed as "allow not to have guilt (for)" it can be assigned the same derivation as <u>conseiller</u> in (89), except that optional <u>a</u>-Ins applies after PR; if <u>a</u> is not inserted Passive has to apply after lexical insertion of pardonner. The same

d. Jules a été pardonné. (Jules has been forgiven.)

is true for obeir (obey: "give obeyance to"), which takes obligatory <u>a</u> in the active, but allows for the passive:

(91) a. Il obeit <u>a</u> Jules. (He obeys Jules.)

b. Jules est obéi par lui. (Jules is obeyed by him.)

There is an intersting anomaly connected with the verb <u>penser</u>. Although (92a) is ungrammatical because of NP-Obstacle (cf.(67)), (92b) is accepted as perfectly grammatical by all informants:

- (92) a. \*Cela le fera penser à elle. (That will make him think of her.)
  - b. Cela lui fera penser à elle.

Likewise, they accept:

c. Cela lui fera penser à sa femme.

which they prefer to:

d. Cela le fera penser à sa femme.<sup>22</sup> (That will make him think of his wife.)

The dative in (92b and c) cannot be explained in terms of of the rules of PR and <u>a</u>-Ins discussed above in connection with the <u>faire</u>-construction. These rules predict that (92d) is fully grammatical, (92a) fully ungrammatical (NP-Obstacle), and (92b and c) fully ungrammatical. In fact,

(92) e. \*Cela fera penser à Jules à sa femme.

is fully ungrammatical, which makes the origin of the dative <u>lus</u> even more mysterious (see also note 2).

It is not unthinkable that this troublesome dative has an origin similar to that of (90c). Let us tentatively analyse penser a as "cause the thought to go to". This has the advantage that it shows why cliticisation with penser a behaves as it does with verbs of going (see (66) above). (92c) may be thought to have something like the following derivation:

Object Attraction and Lexical Insertion of penser could now be thought to apply in  $S_1$ , giving rise to:

Let us assume, however, that the cyclic rules move on to the next cycle without inserting <u>penser</u>. (It is, of course, totally unknown at present what conditions direct the application of the rules in question.) The result would be:

If Object Attraction and Lexical Insertion apply now, we get (92d). Had the second NP been Jules, rather than 11, this would be the only course left open at this stage. We may, however, speculate that when the second NP is pronominal there is optional allow before Object Attraction and Lexical Insertion (cf. note 2). This would give rise to a dative lui, as in (92c). NP-Obstacle will then not apply. That the dative lui could be a reflection of an underlying object "thought" is confirmed by the fact that verbs of going, which otherwise behave like penser, but do not appear to have an internal object, do not take this dative under faire:

- (92) f. Cela le fera retourner à sa femme. (That will make him go back to his wife.)
  - g. \*Cela lui fera retourner & sa femme.

Alternatively, one might think of accepting (93c) for non-pronominal subjects and considering a condition that, for reasons unknown, the rules are allowed to move on to the next cycle just in case—the subject of  $S_1$  is pronominal. There must then be obligatory  $\underline{a}$ -Ins on the  $S_0$ -cycle.

No doubt there is a great deal more to this than can possibly be dealt with here in any satisfactory way. But tentative and speculative though the suggestion given here may be, it seems nevertheless that there is a great deal to be gained from a systematic study of the differences in behaviour between pronominal and non-pronominal NF's in French.

In (78g) the word <u>refuser</u> is, like the English <u>refuse</u>, ambiguous between "not accept" and "not give". This difference is syntactically expressible as "not allow oneself to have", with attraction, after PR, of what would have been a reflexive dative, and "not allow to have", with an ordinary dative.

<u>Défendre</u> in (79f) is interesting in that it invites the hypothesis that Passive has applied prelexically in <u>défendre</u> <u>l'enfant</u>. Whereas <u>défendre le vin (à l'enfant</u>) can be analysed as "not allow (the child) to take wine", <u>défendre l'enfant (de ses parents</u>) can be seen as "not allow the child to be taken (by his parents)".

Recapitulating, we have seen that the rules of \(\frac{1}{2}\)-Ins and DM, or more precisely, mappings relating surface datives to semantic embedded subjects, are needed not only for sentences involving the <a href="faire">faire</a>-construction, i.e. in postlexical syntax, but also for verbs such as <a href="montto">montrer</a>, <a href="montto">enseigner</a>, etc. Significant generalizations can be gained with respect to certain categories of lexical verbs if the mapping rules relating them to their semantic analyses are considered part of syntax: the semantic structure of lexical verbs has a certain predictive power vis-\(\frac{1}{2}\) vis their syntactic properties.

It is thus no longer an idiosyncrasy that, on the one hand, if an S embedded under faire contains not a subject and an object but a subject and a predicate nominal, as in:

- (94) Je ferai devenir Jules un bon musicien.
  (I'11 make Jules become a good musician.)
- then <u>Jules</u> does not become a dative (see note 13) and that, on the other hand, verbs which are analysable as "cause to be" or "cause to become" do not develop a dative either (cf. note 16 and (69a)):
  - (95) Je rendrai Jules fou. (I'll make Jules mad.)

It follows from the theory developed here that, in general, in French the dative originates as the subject of an embedded transitive S. It turns into a dative when it finds itself between two NP's as a result of PR. The S tends to be embedded under a verb containing a semantic element of causing or letting. If this is correct for French, it is likely to be correct for other languages, too. For English no sufficient evidence has been found to determine the deep structure of the dative. According to some it is a bare NP preceding the object; according to others it originates as a to-phrase following the object. French provides

an argument for the former theory, the force of the argument being that the Predicate Raising theory of the dative provides for the only unified account available to date of the facts of French and English datives. <sup>23</sup> If one theory fits in better than another with what is known about other languages, then, ceteris paribus, the former is to be preferred because it brings us nearer to a unified theory of human language. It enables us to formulate a possible linguistic universal, which is then open to testing. Let us restrict the form of possible grammars of natural languages by stipulating that datives arise through PR, prelexically or postlexically, under a verb of causing or letting, as subjects of embedded transitive S's. The following sections will be devoted to showing that PR, and in particular analogs of the faire-construction, are found in otherwise very different languages.

#### 7. Predicate Raising and dative in Dutch and German

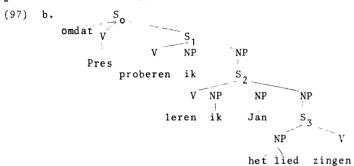
There is evidence that Predicate Raising also occurs in Germanic languages. It is argued by Evers (1971) that both German and Dutch have this rule. The evidence for Dutch seems stronger than that for German. The following proposals regarding the treatment of certain facts of Dutch and German are, although inspired by Evers, far from identical to his. I shall indicate here and there where I am in agreement or disagreement with him.

PR clearly occurs in embedded clauses which take the rule Verb Final.  $^{24}$  Take the clause:

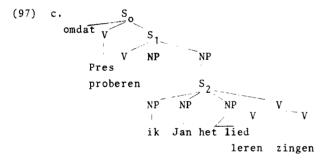
(96) a. omdat ik Jan het lied probeer te leren zingen (lit.: because I Jan the song try to teach to sing; i.e. because I try to teach Jan to sing the song)

Let the underlying structure be represented as:

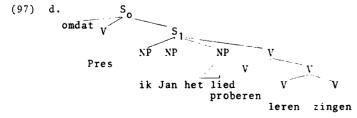
We can formulate a simple device for genrating (96a) by letting Equi-NP-Deletion, Predicate Raising and Verb Final apply cyclically in that order. Verb Final will then apply on  $\mathrm{S}_3$ . On the  $\mathrm{S}_2$ -cycle the lower NP  $\underline{Jan}$  is deleted:



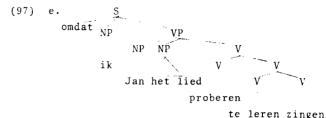
Predicate Raising now Chomsky-adjoints the lower verb  $\underline{\text{zingen}}$  to the right of  $\underline{\text{leren}}$  (a V<sub>1</sub> of S<sub>n</sub> attracts a V<sub>2</sub> of S<sub>n+1</sub> and immediately dominated by S<sub>n+1</sub>)<sup>25</sup>, after which Verb Final moves  $\underline{\text{leren zingen}}$  to the right:



The same operation on the  $S_1$ -cycle will result in:



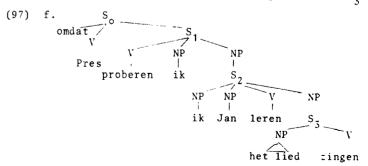
After Subject Raising and Aux-Lowering on  $S_0$  and further morphological trimming, we will ultimately get:



PR must be optional here, since we also have, synonymously:

- (96) b. omdat ik probeer Jan het lied te leren zingen
  - c. omdat ik probeer Jan te leren het lied te zingen
  - d. omdat ik Jan probeer te leren het lied te zingen.

These variants are accounted for by letting PR apply optionally and by formulating Verb Final in such a way that V never moves across an embedded S, but stops just in front of any embedded S it might encounter. This is necessary anyway, on independent grounds; it also makes Verb Final conform to Ross's Internal S Constraint (1967a, 33), by which an internal NP exhaustively dominating an S is not allowed in surface structure. On the S2-cycle, after (97b), we now proceed either to (97c) by PR and Verb Final, or PR does not apply and Verb Final stops short of S3:



Now PR does or does not apply on  $S_1$ . If it does it raises <u>leren</u> to the right of <u>proberen</u>. The new complex V is now moved to the right by Verb Final, but stops before  $S_3$ . The result is (96d).

If PR does not apply on  $S_1$ , (96c) results. If, on the other hand, PR has applied on  $S_2$ , as in (97c), then repeated PR leads to (96a), as we have seen, but non-application of PR yields (96b).

It is of interest to note that the ungrammatical:

(96) e. \*omdat ik Jan probeer het lied te leren zingen

is indeed excluded by these rules.

Evers' treatment differs slightly from the one given above. He proposes to have Verb Final as a postcyclic rule ( an issue on which I can remain neutral here), formulated without the "internal S restriction". He then adds a postcyclic rule of Extraposition which moves internal S's to the far right of the next S up. This would imply, however, that weet in: omdat ik weet dat Jan ziek is (because I know that Jan is ill) would first move to the far right, after which the internal clause would in its turn be shifted to the far right. The eventual word order after all this shifting would then be exactly the same as before, but the surface constituent structure would have changed in that the complement S dat Jan ziek is would now be directly attached to the next S up as a sisterconstituent to the VP. I know, however, of no evidence that the surface structure of ik weet dat Jan ziek is should differ according to whether it occurs in a main clause or a subordinate clause. It seems simpler, therefore, to do without the rule of Extraposition proposed by Evers.

The German equivalents for (96) are:

- (98) a. weil ich Johann das Lied singen zu lehren versuche
  - b. weil ich versuche Johann das Lied singen zu lehren
  - c. weil ich versuche Johann zu lehren das Lied zu singen
  - d. weil ich Johann zu lehren versuche das Lied zu singen

Evers proposes, correctly I believe, that the derivations of (98) differ from those of (96) only in that PR makes the lower verbs adjoin to the left of the higher verb, so that the verbs of (98a) turn up as the mirror image of those of (96a).

One might object that PR simply does not apply in German, but only Verb Final (without the "internal S restriction"). That would give us the correct word order in (98a). But it would fail

to give (b), (c) and (d). Evers points out, moreover, that this would complicate  $Gapping^{26}$ , whereby, under certain conditions, the second verb in a conjunction can be deleted. Take the clause:

(99) a. weil Johann Gedichte zu schreiben beginnen will<sup>27</sup> (because John wants to start writing poems).

If PR were not a rule of German, the V of this clause would be will, and we would expect a possible follow-up:

(99) b. "und Cecilia Arien anstimmen dürfen (and Cecilia (wants to) be allowed to intone arias)

with deleted will. This, however, is ungrammatical, whereas:

(99) c. und Cecilia Arien (and Cecilia (wants to start writing) arias)

is perfectly grammatical. This would suggest that the verb of (99a) is zu schreiben beginnen will, so that PR must have applied.

He does not consider datives which might be expected to arise from the application of PR in German or Dutch. <u>Jan</u> in (96) is a dative belonging to <u>leren</u> (teach), which is a causative verb. But this dative does not result from the processes described in (97), i.e. postlexical PR. It is noteworthy, however, that no dative arises, in either German or Dutch, in, for example:

- (100) a. weil ich sie Mozart spielen hörte
  - omdat ik haar Mozart hoorde spelen (because I heard her playing Mozart)

although two consecutive NP's follow the subject ich/ik and sie/haar is the original subject of the most deeply embedded S. (Sie is morphologically marked as an accusative; haar is not a dative in Dutch since optional insertion of the preposition aan (to) is not possible.)

German is quite consistent in that it never allows a dative to arise postlexically: all German datives come with a particular lexical item, not with the application of a rule in postlexical syntax. Dutch, however, does allow for the dative in some postlexical cases. Whereas both German and Dutch still have an accusative in:

- (101) a. weil ich sie Mozart spielen liess
  - b. omdat ik haar Mozart liet spelen (because I let her play Mozart)

Dutch has a dative in the following case:

- (102) a. weil ich sie den Brief sehen liess
  - b. omdat ik haar de brief liet zien
  - c. omdat ik de brief aan haar liet zien (because I let her see the letter).

The form <u>haar</u> in (102b) does not tell us on morphological grounds whether it is dative or accusative; the possibility of the syntactic variant (102c), however, justifies the assumption that it is a dative, unlike (100b) or (101b), since we do not have:

- (100) c. \*omdat ik Mozart aan haar hoorde spelen
- (101) c. \*omdat ik Mozart aan haar liet spelen.

Note that French allows for both the dative and the accusative in its equivalents of (100) and (101):

- (100) d. puisque je l'ai entendue jouer Mozart
  - e. puisque je lui ai entendu jouer Mozart
- (101) d. puisque je l'ai laissée jouer Mozart
  - e. puisque je lui ai laissée jouer Mozart.

It will be remembered from Section 1 and Section 2 ((25)-(31)) that entendre and laisser take, at least optionally, PR.

The Dutch dative as in (102b and c) seems to occur with the same verbs which, in French, want to remain active when embedded under faire or laisser. It was observed in Section 2, in connection with (22), that certain verbs must be passivized under faire and others cannot. Those which cannot under faire, cannot be passivized either under Dutch laten (let) and give rise to a dative. They include, apart from zien (see), also horen (hear), voelen (feel), ruiken (smell), weten (know), leren kennen (get to know) 18, i.e. largely verbs of cognition and perception. Whereas (100b) and (101b), which have the accusative haar, allow for a passivized embedded S, reflected in, respectively:

- (100) f. omdat ik Mozart door haar hoorde spelen (because I heard Mozart being played by her)

this is not possible for (102b):

(102) d. \*omdat ik de brief door haar liet zien
(because I let the letter be seen by her).

The correspondence between Dutch datives under <u>laten</u> and French obligatory actives under <u>faire</u> is, however, not absolute. Dutch has both:

- (102) e. omdat ik de brief aan haar liet lezen (because I let her read the letter)
- and f. omdat ik de brief door haar liet lezen (because I let the letter be read by her).

French <u>lire</u> (read) occurs in the active as well as in the passive under <u>faire</u>, although, if passive, it means "check on mistakes" or the like, rather than "take cognizance of", which is what the active means.

No explanation of these limitations and correspondences can be given at this moment. But it appears that the conditions under which we have seen datives emerge in French may be necessary conditions for that to happen in any language, but are not sufficient. In German or English, no datives seem to arise postlexically. In Dutch, we find postlexical datives only under <u>laten</u> and, with rare exceptions such as <u>lezen</u>, only for those verbs whose French equivalents do not allow for the passive under <u>faire</u>. French has a dative in all cases, prelexically and postlexically, where an original lower subject comes to stand between a higher subject and an original lower object. But French does not allow this situation to arise in all cases where it could: sometimes the dative is avoided through obligatory passivization of the embedded S.

A further word is needed about Dutch datives, as in (102b or c), in main clauses. So far, PR has been discussed only for embedded clauses. However, the <u>haar</u> of (102b and c) does appear in

main clauses in the same way:

- (103) a. Ik liet haar de brief zien. (I let her see the letter.)
  - b. Ik liet de brief aan haar zien.
  - c. \*Ik liet de brief door haar zien.

This raises the question of PR in main clauses. Evers implies that PR is obligatory for modal verbs and auxiliaries throughout. Assuming that Verb Final does not apply to main clauses, Evers' proposal makes it necessary to formulate a rule shifting all but the finite part of V to the far right (Non-Finite Verb Shift):

(104) ik liet-zien haar de brief → ik liet haar de brief zien.

Such a rule is needed on independent grounds: past participles are shifted towards the end of the main clause.

If neither Verb Final nor PR were to apply on the main clause, the right word order would ensue in all cases except those with <u>aan</u> + dative, as in (103b). The surface structure, however, would then be:

(105) ik liet [ haar de brif zien  $\frac{1}{S}$ 

This cannot be correct for a variety of reasons. It would not explain the reflexive in:

(106) Ik liet mezelf de brief zien. (I let myself see the letter.)

It would predict the pseudo-cleft:

(107) a. \*Wat ik liet was haar de brief zien. (\*What I let was her see the letter.)

and other reasons could be given. From the variation between (103a and b) one tends to infer that the surface structure of (103a) is:

The matter is more complex, however. Pseudocleft allows for the singling out of the VP, of the object NP de brief, and of haar, as in:

- (107) b. Wat ik deed was haar de brief laten zien.
  (What I did was let her see the letter.)
  - c. Wat ik haar liet zien was de brief. (What I let her see was the letter.)
  - d. Wie ik de brief liet zien was zij. (Whom I let see the letter was she.)

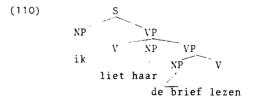
respectively, and:

e. \*Wat ik haar liet doen was de brief zien.
(\*What I let her do was see the letter.)

is ungrammatical, - all of which might make one think that de brief zien is not a constituent. However, the ungrammaticality of (107e) must be due to the verb zien (see) not containing an element "do" in its semantic representation, needed for singling out VP's. We do have:

- (109) a. Wat ik haar liet doen was de vloer schrobben.
  (What I let her do was scrub the floor.)
  - b. Wat ik haar liet doen was de brief lezen.
    (What I let her do was read the letter.)

but not the corresponding forms with <u>aan haar</u>. This suggests that, like French <u>laisser</u>, Dutch <u>laten</u> takes either PR or Subject Raising. The latter gives rise to a surface structure:



which does not allow for a dative <u>haar</u>, but does allow for the pseudocleft (109b). PR and Non-Finite Verb Shift yield a structure analogous to (108).

#### 8. Uto-Aztecan, Sre and Tagalog

In a paper "Predicate Raising: some Uto-Aztecan evidence", of 1970, Langacker presents data from Aztec, Yaqui and Luiseňo, confirming the existence of PR for these languages. Assuming that these are SOV-languages, the Aztec sentence:

(111) Tewa
$$\lambda$$
 ti-miki. (You die.) (you(sg) SM-die)

where the pronoun  $\underline{\text{tewa}}$  is optional, the 2nd person sg. being expressed also by the subject marker  $\underline{\text{ti}}$ , will have a deep structure representation:

Aztec has a productive causative construction with the suffix -tia (cause):

representable at deep structure level as:

The subject of  $S_1$  appears in surface structure as a morphological object marker. This, together with the fact that  $\underline{\text{mik-tia}}$  acts as a verb stem (meaning "kill") in the morphology of the language, shows that  $\underline{\text{miki}}$  and  $\underline{\text{tia}}$  must have come under one V-node in surface structure and the  $S_1$ -node must have disappeared. This means that the verb  $\underline{\text{miki}}$  has been raised to link up with  $\underline{\text{tia}}$ . The internal structure of the complex V-node cannot be determined from the data provided. But it is reasonable to assume that  $\underline{\text{miki}}$  is Chomsky-adjoined to the left of  $\underline{\text{tia}}$ , even though  $\underline{\text{tia}}$  may later change its V-label into some kind of suffix label.

Langacker quotes the following two Yaqui sentences:

From the surface structure of (115b), which is one composite word, "it is apparent that the underlying predicates KILL and WANT must be clumped into a constituent of the form ((KILL)WANT), which is lexicalized as the stem m?e-bae."

From Luiseño he quotes:

- It is clear that both <u>viču</u> (want) and <u>ni</u> (cause) can be described naturally as predicate raisers. Langacker assumes, without any comment, that the present tense verb -q. too. takes PR. If this

( I him walk-want-cause-present)

comment, that the present tense verb <u>q</u>, too, takes PR. If this is indeed so, which is suggested by the data given, then we face the interesting corollary that the sentences of Luiseño do not have NP-VP surface structures, but rather, for (116c):

(leaving open the question of the labelling of  $\underline{viču}$ ,  $\underline{ni}$  and  $\underline{q}$ .) If this is so - and it must be possible to establish this on independent grounds - this will provide considerable support for McCawley's VSO-hypothesis, and also for PR as a universal rule (if that still needed support). If this is not so, the VSO-theory is not disproved:  $\underline{q}$  can still take Subject Raising, as tenses do

in other languages, and be lowered to to the lower V. We shall see in a moment that Tagalog provides stronger evidence of its sentences not having a NP-VP structure.

Langacker is quite explicit on the universal character of PR:

"Predicate Raising would be included in the inventory of rules with which human children are innately endowed. It will not necessarily be the case that every language will make use of every rule in this inventory; a given language will select a subset of these rules." (note 18)

"Consequently, the rule postulated by generative semanticists to make their view of lexical insertion tenable for English verbs loses its ad hoc character when viewed in cross-linguistic terms." (p. 17)

No data is provided by Langacker on the possible emergence of datives under causative constructions in Uto-Aztecan languages. Starosta (1971), however, gives data on Sre, a Mon Khmer language spoken around the town Di Linh in the higlands about 100 miles NE of Saigon, and Tagalog, where the dative does arise in causative constructions. Starosta explicitly rejects PR as a solution to his data, and proposes instead a new type of rules, "derivational rules", which derive new lexical items from given ones, very much in the lexicalist vein. I shall first discuss his data and then his theory. He draws his data from Manley (1972), which originated as a doctoral dissertation under hin supervision.

In Sre, the prefix tan-, which is productive in the language (Manley, p. 47), makes a verb causative:

- pů? ?аñ. (People beat me.) (118) a. caw ( people beat me )
  - ?añ. (He caused me to be beaten.) b. khav tanpů? ( he caused-to-beat me )
- (That child is swimming.) (119) a. kɔn nɛ ré. ( child that swim )
  - ne. (I caused that child b. <sup>?</sup>añ tenra k≎n to swim.) ( I cause-to-swim child that )

The dative is seen to emerge in:

(120) a. khay git ga. ( he know it ) (I made him tangit ga te khay / khay?in. know it. ( I cause-to-know it to him / him (dative) ) (121) a. khay kān <sup>2</sup>ay. (He likes vou (feminine).) ( he like you ) (I made him

(He knows it.)

b. ?añ t∂nkåñ ?ay te khay / khay?in. like vou. ( I cause-to-like you to him / him (dative) )

It is clear that Sre is a VSO-language; it seems to follow exactly the rules of the French faire-construction: PR. insertion of te or -?in, and obligatory Dative Movement. As in the Uto-Aztecan examples, the higher causative verb is reduced to a morphological affix.

In (118b), Starosta says (p.88), "the person actually administering the beating cannot be grammatically expressed at all", thereby repeating Manley (p. 64):

"in (2) [i.e., mpon go par "the door (was) opened" there is no way the noun indicating the person who did the opening can be reintroduced into the sentence in another position (as is possible, say, in English -- "the door was opened by him"); if it is displaced, it simply disappears. Similarly, in sentence (4) [ = (118b) it is not possible to indicate the person(s) doing the beating: the  $\underline{caw}$  of (3) [= (118a) is not identified grammatically at all in (4)."

If (118b) is taken to contain a passivized pu?, the absence of the agent NP is seen to be due to Sre not having a way for expressing an underlying animate subject in the passive. It does have an instrumental phrase for non-animate underlying subjects: mpon ga pa? ma cal ("the door was opened by the wind").

It looks as though French and Sre are very similar from the point of view of causative constructions. Judging by the examples given, the Sre verbs which lose their original subject when embedded under the causative seem to coincide pretty well with the French verbs which take an obligatory passive under faire. And those verbs whose subject becomes a dative in the Sre causative construction seem to correspond closely to the French verbs

which do the same under <u>faire</u>. Intransitive verbs never have their subject deleted.

Similar data is found in Tagalog:

- (122) a. kumain ang lalaki ng adobo. (The man ate the adobo.)

  ( ate the man the adobo )
  - b. nagpakain ang nanay ng adobo sa lalaki. ( cause-to-eat the mother the adobo to the man )

(122a) contains the verb <u>kain</u> (eat) which takes an infix -um-; (122b) has the causative verb <u>pakain</u> (feed), which takes the prefix <u>nag</u>. The former belongs to the <u>-um-paradigm</u>; the latter to the <u>mag-paradigm</u>: "in its grammatical and morphological properties it is completely identical to such underived verbs as <u>bigay</u> 'to give'." (p.92)

From the verb-first word order in the Tagalog sentences one is inclined to infer that Tense, in Tagalog, does not take Subject Raising, but either takes PR or is lowered into its complement-S and attached to the lower verb. In neither case will a NP-VP surface structure come about, since this structure, in the VSO-hypothesis, depends crucially on the subject being raised by the Auxiliary (tense). In fact, the very word order of (122a and b) makes it clear that they cannot have a NP-VP structure. It would not make sense to posit an <u>underlying NP-VP</u> structure, - unless it could be shown that VP must, at some stage, have been a constituent. It thus appears that the VSO-hypothesis for deep structure (with SOV as a variant) is a possible universal, whereas the NP-VP hypothesis is not.

Starosta's theory is very different from what is proposed here. As regards the data quoted from Sre, he (and, following him, also Manley) attempts to account for the difference between those verbs, as in (118), whose subjects cannot be expressed when these verbs are made causative and those whose subjects can be expressed, either as an object, as in (119b), or as a dative, as in (120b) and (121b), in terms of Fillmore-type "case relations" (Fillmore, 1968). When a verb takes an "agent subject" this is lost in the causative; intransitive verbs, whose subject is not lost but becomes an object, are said to have an "object subject", whereas transitive verbs

whose subject becomes a dative are given a "dative subject". No independent evidence is given to show that this is more than merely a way of classifying observed data. Manley (p.63) gives as his evidence for establishing the various case relations:

"The principle method used has been to observe the differences in the syntactic behavior of actants when they are transposed by such processes as passivization and causativization."

But he does not go beyond giving a few isolated examples of that syntactic behaviour. Critical examples or counterexamples are not given. (In fact, his work is highly taxonomical.) Yet it would be interesting to see, for example, whether in Sre there are equivalents of "I made him eat", or "I made him wash", of the form:

(123) a. 'añ tənsaw khay. ("I made him eat")
b. 'añ tənpih khay. ("I made him wash")

If there are, one would wish to know whether those sentences are ambiguous in that they could also mean "I caused him to be eaten/washed". One further wonders if Sre also has a sentence of the form:

(124) 'an tansaw ga te khay / khay'in.

( I cause-to-eat it to him / him (dative) )

If the answers to these questions are positive (as I expect them to be: neither Manley nor Starosta provide this information), then the Sre verb <u>eat</u> would have to be given an agent subject, an object subject, and a dative subject.

Judging by the fact that Manley gives them an "agentive subject", one infers that the following verbs (or their Sre equivalents) passivize under the causative tan: give, beat, visit, make, build, study, throw, help, open, send, encounter, say, tell, read, speak. A "dative subject" is assigned to: watch, look, see, hear, listen, smell, know, like, fear, so that their subjects must be taken to become datives under Causative. An "object subject" is found with: sleep, go, wake up, live, be located. There is a complication inasmuch as the verbs for read, speak, listen and fear are listed as taking an optional object. The same may perhaps be assumed for, e.g., the verb saw (eat), since in these cases, "optionality is handled lexically rather than by transformational

deletion" (p.175). Manley does not indicate, however, how the underlying subject behaves under Causative when these verbs occur without an object. All in all, the information given is far from complete.

Having thus established "case relations", Starosta and Manley propose lexical derivational rules which, with concomitant morphophonemic rules, allow for the regular morphological derivation of causative verbs from their root-verbs. One such rule (Starosta, p. 88) "states that for every transitive verb with an agent subject, there is another transitive verb taking the same object but a new agent subject." Another rule (Starosta, p.90) gives for every verb with an object subject (as in (119)) another verb with a new agent subject and the old object subject as an object object. Starosta explicitly claims that these rules are not syntactic (transformational) but purely lexical. Starosta rejects (p.92) "such syntactically unmotivated rules as predicate raising".

Against Starosta, who applies the same theory to Tagalog, it can be said that, again, no evidence is given that such lexical derivational rules are anything but a way of ordering data. No explanation is given, for example, for the complete syntactic parallelism between the Tagalog verbs <u>pakain</u> (feed), which is morphologically analysable as causative <u>pa</u> and <u>kain</u> (eat), and <u>bigay</u> (give), which is not morphologically, but only semantically analysable as "cause to have". Starosta's rules make this an idiosyncrasy, since there is no principle in his grammar which makes both <u>pakain</u> and <u>bigay</u> take a direct as well as an indirect object and belong to the same morphological paradigm.

The overriding objection to his theory is, however, that it makes it impossible to formulate in universal linguistic theory the obvious generalizations which can be made over causative constructions in various languages. In French, the causative faire-construction is very clearly syntactic, not lexical, and requires Predicate Raising. Taking into account the differences between French, Sre and Tagalog elsewhere in their grammars, the causative construction appears similar, if not identical, in these languages. To account for this construction in Sre and Tagalog, but not in French, by means of lexical derivational rules means

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a serious loss to any theory of linguistic universals, and thus to any attempt "to construct a general theory of language that is so richly structured and so restricted in the conditions it imposes that, while meeting the conditions of descriptive adequacy, it can sufficiently narrow the class of possible grammars so that the problem of choice of grammar (and explanation, in some serious sense) can be approached." (Chomsky, 1972, 125).

#### NOTES

- I am indebted to Constance Fisher, whose MA-thesis on French clitic pronouns I helped supervising during my stays at Sidney University in 1971 and 1972, for providing me with criticisms and material. I am also grateful to the native speakers of French in the French Departments of Sidney University and the University of New South Wales for patiently submitting to frequent questioning by Miss Fisher and me. R.P.G. de Rijk provided useful comment and criticism.
- I use " # " to indicate that a sentence, though grammatical, cannot have a particular reading. This symbol is thus used for what is sometimes called "ungrammatical on a reading".
- The matter is further complicated by the fact that an active complement-S is fully grammatical when the subject is a pronoun. Thus, although (22b) is ungrammatical, all informants accept Je lui ferai tuer les prisonniers. (I'll get him to kill the prisoners.) This is not the only case where a sentence with a dative pronoun lacks a counterpart with a full noun: Il lui faut y aller vite. (He must go there quickly.), but \*Il faut y aller d Jean. Below, cases will be discussed where the converse is true, where a full dative noun is grammatical but not a pronoun.
- In modern standard Italian, as well as in 17th Century French,
  the restriction of Clitic Movement to the same VP is optional. In

17th Century French one finds not only (2) but also <u>Je le veux faire</u>. as a grammatical sentence. Italians has <u>Lo voglio vedere</u>. (lit.: "It I-want to-see") besides <u>Voglio vederlo</u>. (lit.: "I-want to-see-it"), which is derived from <u>voglio lo vedere</u>. Italian <u>fare</u> behaves in all details like its French counterpart <u>faire</u>. Thus, Italian has <u>Lo farò vedere a Giovanni</u>. (lit.: "It I-will-make see to Giovanni") but not \*Farò vederlo a Giovanni.

- Faire takes Subject Raising only very exceptionally. Grevisse notes (p.1064, § 1008b) that one does, though rarely, find an accusative instead of the expected dative. He cites, for example, "... ces quelques mots qu'il fait Nisus adresser à son Euryale..." ( ... those few words which he makes Nisus speak to his Euryalus...) taken from Gide, Journal 1942-1949, p. 306. Here Nisus occurs between fait and adresser; i.e. faire here behaves like laisser in (29). Subject Raising also explains the accusative pronoun les. instead of the dative leur, in Des nouvelles un peu moins bonnes les firent précipiter leur départ. (Slightly less good news made them hasten their departure.) from Gide, La Porte étroite, p.129. In some cases we find the dative instead of an expected accusative: J'aurais fait changer d'avis à Lucile. (I would have made Lucile change her mind.) from Marinaux, Les Serments indiscrets, III,5 (Grevisse p.1064). The traditional explanation is that d'avis "really" is an object, so that the dative is regular. This explanation may well be correct within a theory of prelexical syntax. See the end of Section 6.
- It makes no difference for the argument whether deep structure is taken as NP-VP or as VSO, as in McCawley (1970).
- This rule is called COMP-ORDER by Kayne. Kayne does not mention that DM does not apply when the embedded S already contains a dative:
  - (i) Je ferai écrire à Jean une lettre au directeur.
    (I'll get Jean to write a letter to the director.)
  - (ii) \*Je ferai écrire une lettre à Jean au directeur.

Note that this is not a matter of "euphony", as some informants were quick to assert: a succession of **a-phrases** should be avoided, they said. They must be wrong, however, since if Y contains a

locative with a, DM applies normally:

(iii) Je ferai prendre un billet à Jean au guichet.(I'll get Jean to take a ticket at the box-office.)

Or if the object of (i) is removed, as in a cleft sentence, one gets two successive datives without trouble:

(iv) C'est une lettre en anglais que je ferai écrire au petit Robert au Père Noël. (It is a letter in English that I'll get little Robert to write to Father Christmas.

The blocking of DM in these cases also provides Kayne's DM-rule with a welcome escape from the difficulty that the pruning conventions stated for it would not specify the derived structure after DM if the rule did apply.

A further condition preventing DM from applying is the object being an embedded S:

(v) Je ferai voir à Jean que sa conclusion est incorrecte. (I'll make Jean see that his conclusion is incorrect.)

It is not necessary to let Extraposition apply obligatorily here.

The only pronoun which can find itself between faire and the following infinitive is the reflexive (except in questions such as (47) or where faire is a non-negative imperative: this will be discussed below). Kayne quotes (p.180): Paul fera se laver les mains à mon ami. (Paul will get my friend to wash his (friend's) hands.) and Voilà ce qui a fait se tuer votre ami. (That is what made your friend kill himself.) His thesis that Reflexive Placement is cyclic and precedes Passive (p.181), whereas Clitic Movement is postcyclic, appears to be correct. But native speakers of French do feel a certain strain when a reflexive pronoun is used this way. In fact, there is a rule of grammar deleting the reflexive under faire with "true" reflexive verbs: Je ferai asseoir Jean. (I'll make Jean sit down.), although the verb is the reflexive s'asseoir. Martinon remarks (p.302): "Malheureusement cette syntaxe se réduit de plus en plus, et on préfère aujourd'hui je l'ai fait s'enfuir ou nous les ferons se retirer d'ici, qui sont bien peu élégants et qu'on ferait mieux d'éviter; on commence même à dire je l'en ai fait se souvenir ou nous l'avons fait

<u>s'échapper</u>, qui autrefois auraient paru barbares." (Unfortunately, this syntax is becoming more and more obsolescent; people prefer, these days, (I made him get away.) or (We will make them withdraw from here.), which are quite unelegant: one had better avoid them; one even begins to hear (I made him remember it.) or (We made him escape.), which in the old days would have seemed barbarous.)

- R. Huddleston, of the University of Queensland in Brisbane, suggested this in private conversation.
- Not all authors agree on the precise conditions under which S is pruned, but it has been beyond doubt since Ross's paper on tree pruning (1969) that S-pruning is anyhow an essential corollary of transformational rules.
- We shall see below that Kayne's way of dealing with VP-pruning is inconsistent.
- In order to express what (54) is meant to convey, one will have to use a different construction, such as: <u>Je ferai en sorte</u> que Paul lui parle.
- For all informants except one. I fear that he persuaded himself that it should be grammatical, given his idea of the rules involved. See also note 22.
- A-Insertion and DM do not apply here, apparently because un bon professeur is an original predicate nominal, and not object.
- Interestingly, <u>Ce n'est pas vous que je veux faire penser à Lucienne</u>. was judged much better, which is precisely what our rules predict.
- <sup>15</sup> I do not take into account the pronouns  $\underline{y}$  and  $\underline{en}$ : a full treatment of Clitic Movement rules would take us too far afield.
- With the restriction that the predicate complement must be an adjective.
- I am grateful to Mr. J. Cardyn of the Institute M. Haps of Brussels for providing me with most of the examples of (79).
- Hence worn metaphors, such as to brew tea.
- Postal spoke of a rule of Genital Deletion in the context of the conference on the goals of linguistic theory, held at Austin,

Texas, in October 1969, when defending Subject Raising. He did not specify, however, whether that rule was only semantic or also syntactic.

- 20 See Seuren (1972).
- Of course, this regular correspondence has been noted by many linguists. See, for example, Lyons (1968, 368-9). But its impact on questions of general theory has never been spelled out.
- Martinon (p.455) takes a similar attitude. He expresses doubt on sentences such as: J'ai fait renoncer son fils & la succession. (I made his son waive his claim to succession.) or J'ai fait penser mon frère à cette affaire. (I made my brother think of that business.) He speaks of "rather mediocre syntax" and advises us to "seek another means of expression".
- As was pointed out to me by Geoffrey Sampson at Oxford, it will be necessary to formulate a general restriction on English grammar to the effect that PR can only be governed by prelexical verbs, since no lexical verb in English is known to take PR. Thus, prelexical CAUSE takes PR, but lexical cause takes Subject Raising.
- Term taken from Ross (1967b); Ross introduces the rule for German.
- This formulation rules out PR for tensed embedded S's, as in:
  - (i) omdat ik wilde dat Jan wegging.(because I wanted that Jan left)
  - (ii) <sup>\*</sup>omdat ik Jan wilde weggaan.

since after Subject Raising and Aux-Lowering the V will be separated from the S which is an argument of the predicate raising verb by another S, which is later to become a VP.  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left$ 

- See Ross (1970).
- There seem to be some complicated restrictions on the conditions of applicability of PR in one clause. While it was seen to be optional in (96) and (98), it is not optional in the same way in (99). If will is the verb of  $S_0$ , beginnen of  $S_1$  and schreiben of  $S_2$ , then non-application of PR on both  $S_1$  and  $S_0$  yields the correct:
  - (i) weil Johann beginnen will Gedichte zu schreiben.

- But PR on  $S_1$  and no PR on  $S_0$  gives the ungrammatical:
- (ii) \*weil Johann will Gedichte zu schreiben beginnen
  The same holds for Dutch. Evers points out that "PR is obligatory
  for modal verbs and auxiliaries". This does not seem correct.
  Cp. also Dutch:
- 🛶 (iii) omdat ik wil zingen (because I want to sing)
  - (iv) omdat ik zingen wil
- which are synonymous and both correct. In (iv) only Verb Final, but not PR, has occurred. There may well be a correlation between the absence of  $\underline{zu}$  (Dutch  $\underline{te}$ ) when PR has not applied or in main clauses and maximization of PR in embedded clauses.
- Leren kennen, though obviously a combination of two lexical verbs, is idiomatic and felt by native speakers to be equivalent to a single verb. It clearly is the product of PR.

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