# THE TRANSFORMAT!ONAL CYCLE IN FRENCH SYNTAX <br> by <br> RICHARD STANLEY KAYNE 

A.B., Columbia College (1964)

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY at the MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SEPTEMBER, 1969

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# THE TRANSFORMATIONAL CYCLE IN FRENCH SYNTAX 

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#### Abstract

Evidence from French syntax is presented in favor of the cyclic application of transformational rules. It is argued that the highly assymmetrical distribution of the clitic 'se' in the 'faire' + infinitive construction follows directly from the principle of the transformationa! cycle. Certain properties of the clitic-piacement transformation are studied, and it is shown that the clitic 'se' should be introduced independentiy of the other clitics. The surface structure distribution of the quantifiers 'tous' and 'chacun' is shown to be best described by transformational, rather than interpretive, rules. A set of transformations is developed to account for the syntax of the 'faire' + infinitive construction; it is argued that the central rule in this set must be considered a verb-raising transformation.


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## ACKÑOWLEDGEMENTS

This thesis owes much to many people - to my teachers: Haj Ross, Morris Halle, Noam Chomsky, Kenneth Hale, Paul Kiparsky, Hugh Matthews, and Edward Ḱlima; to fellow students: Mike Helke, Dave Perlmutter, Dave Vetter, Ray Dougherty, François Dell, Lyle Jenkins, Joe Emonds, and Wayles Browne; to my informants: Evelyne Delorme, Françoise Gresser, François Dell, Michèle Piemme, Jean-Marie Piemme, and Nicolas Ruwet; and for invaluable help with the manuscript, to Cynthia Pyle. I should especially like to thank Nicolas Ruwet, from whom 1 have learned much about French syntax, and who read and commented upon an earlier draft of this thesis.

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## PREFACE

The central topic of this thesis is the distribution of the French clitic pronouns in the 'faire'/"laisser' + infinitive construction. It is argued that the assymmetry of this distribution can be accounted for by an extremely simpie set of rules applied in a cyclic fashion. In the sense that a complicated distribution of data can be demonstrated to follow from the principie of the transformational cycle, we may claim to have achieved the level of explanatory adequacy.

The crucial facts and the way in which the cyclic application of previously introduced transformations accounts for them are presented in chapter six. The earlier chapters serve to prepare the way for this final chapter. Cnapter two, for example, treats the question of the syntax of the clitic pronouns. A rule of clitic placement (CL-PL) is motivated and several rather particular aspects of its operation are considered, including the derived constituent structure assigned by it (directly relevant to chapter six) and a number of properties relevant to the argument presented in chapter five.

In chapter five, it is argued that the clitic 'se' should not be introduced in the same manner as the other clitics, but should rather be inserted by a transformation distinct from that of c!itic placement. This result correlates with the fact that the assymmetry discussed in chapter six is in part one between 'se' and the other clitics.

The 'faire'/'laisser' + infinitive construction itself is discussed in chapters three and four. In chapter three, we develop a number of transformations to account for the distinctive properties of this construction, and in chapter four we consider the interaction of these transformations and that of clitic placement.

Chapter one consists of a discussion of the quantifiers 'tous' and 'chacun'; it is argued that their surface structure distribution must be described by means of two transformations, L-TOUS and R-TOUS. The importance of this chapter with respect
to the rest of the thesis lies primarily in motivating the rule L-TCUS, which interacts in very instructive ways with both CL-PL (chapter two) and the rule of 'faire'attraction (FA - chapier three).

## CHAPTER I

## Section 1

In this chapter we discuss the distribution of the quantifier "tous" (fem. "toutes")." In many ways, "tous" acts like English "all," e.g., it occurs as the leítmost determiner of a plural NP: "tous les garçons," "toutes ces femmes," "tous mes vieux livres," etc. ${ }^{2}$ In addition, if associated with a subject NP, it may appear not only as part of that NP, but also in one of several other positions in the sentence:
(1) Tous les garçons sont partis à la guerre.
(2) Les garçons sont tous partis à la guerre.
(3) Les garçons sont partis tous à la guerre.

It may not, however, appear in more than one of these positions: ${ }^{3}$
(4) *? Tous les garçons sont tous partis a la guerre.
(5) *? Tous les garçons sont partis tous a la guerre.
(6) * Les garcons sont tous partis tous à la guerre.

Within the framework of a generative grammar, it is an important question how this l:ind of "global constraint" is to be accounted for. One possibility would be to have "tous" generated as part of the determiner structure of plural NP's, and to postulate a transformation optionally moving it to the right. The alternative is to allow "tous" to be generated in various positions in the sentence and to have some kind of interpretive principle which would formally associate a "free" "tous" with the subject NP. If the subject NP were not plural, or if it in this way became associated with more than one "tous," the derivation would block. Let us call the above alternatives the "transformational hypothesis," and the "interpretive hypothesis," respectively.

Under the transiormational hypothesis, the "tous" in sentence (1) would have been generated in its surface position by the phrase-structure rules. Sentences (2) and (3) would be derived from a structure resembling sentence (1) through application of a transformation which we shall call R-TOUS (rightward "tous"-movement).

Under the interpretive hypothesis, on the other hand, sentences (1), (2), and (3) would all be characterizable as having had "tous" generated by the PS-rules in its surface position.

There is no sense in which we can choose between these two hypotheses on the basis of a priori notions of simplicity. Interpretive rules have been proposed to account for various other phenomena in language; ${ }^{4}$ it may be that they are the appropriate mechanism here. The choice must be made on empirical grounds.

In French, the constructions relevant to deciding between these two hypotheses are more varied than in English. In English there are no cases where "all" appears to move to the left:
(A) The men may all have left.
(B) The men may have all left.
but
(C) * I may have all seen the men.
(D) * I may all have seen the men.

However, in French, there are cases in which "tous" has cleariy been moved to the left, for example when the object NP is a clitic: ${ }^{5}$
(7) Je voudrais les lire tous.
(8) Je les ai tous lus.
(9) Je voudrais tous te les lire.
(10) J'ai tous voulu les lire.

Again, "tous" may not occur more than once: 6
(11) * Je voudrais tous te les lire tous.
(12) * J'ai tous voulu les lire tous.
(13) * J'ai tous voulu tous les lire.
etc. These facts are similar to those discussed previously; there is again a global constraint on the distribution of "tous." In the case of objects, however, in order for "tous" to have this freedom of occurrence, the NP must have been cliticized. Otherwise, "tous" can only appear attached to the NP:
(14) Je voudrais lire tous les livres.
(15) * J'ai tous lu les livres.
(16) * Je voudrais tous lire les livres.
(17) * J'ai tous voulu lire les livres.

It is natural to ask how the two hypotheses considered earlier could be extended to cover this additional data. The transformational hypothesis required a rule, R-TOUS, which optionally moved "tous" off subject NP's to the right. We might now postulate another transformation, L-TOUS (leftward "tous"-movement),
which moves "tous" from object position to the left, just in case the object NP has been cliticized. Sentences ( 8 )-(10), but not (7), would be derived through application of L-TOUS. Correspondingly, under the interpretive hypothesis, we could add a rule which formally associates an appropriate "tous" with an object clitic, although not, in general, with an object NP. In this way, in none of sentences (7)-(10) would "tous" have been moved from its deep structure position. As in the case of subject NP's, the interpretive hypothesis would have to include a provision blocking any sentence, e.g., (11)-(13), in which an object clitic was linked to more than one "tous." Association of a "tous" to a singular object clitic would similarly be disallowed.

We have as yet presented no evidence that would choose between the transformational and interpretive hypotheses. Both seemingly require an ad-hoc reference to clitics, but are nonetheless capable of accounting for the kind of giobal constraint in question. We shall now proceed to argue in favor of the transformational and against the interpretive hypothesis.?

There is a second context in which "tous" associated with an object NP may occur displaced from object position, and that is in non-restrictive relatives, e.g.:
(18) Les amis de Pierre, que j'ai tous connus à l'âge de 7 ans, . . .
(19) Mes fruits, que tu as tous mangés, . . .
(20) Les films de Godiard, que tu peux tous voir, . . .

Under the transformational hypothesis, we could postulate a rule moving "tous" to the left if the NP has been removed by wh-preposing. But in fact there is clearly a generalization being missed. The rule L-TOUS, discussed earlier, moved "tous" to the left from object position just in case the NP had been removed by clitic-placement. We can now generalize L-TOUS so that it applies to any "tous" from which the NP has been removed, in other words to any "bare" 'tous.'

Within the interpretive theory, there is no natural way to capture this generalization. If one tried to say, e.g., that 'tous' could be formally associated with a plural object NP that had been displaced from object position (i.e., clitics and relative pronouns), ore would need an otherwise unnecessary, complicated mechanismi to determine if a particular NP had been moved, since linear order is insufficient. That is, one could not assume that object NP's directly to the right of verbs had not been moved, because of:
(10) J'ai tous voulu les lire.
vs. (21) * J'ai tous voulu ses livres.
!n order to know that the plural NP in (10) (but not in (21!) had been moved, one would need, in effect, to make reference to the derived structure of clitics, which is virtually giving up the generalization. The advantage of the transformational hypothesis is precisely that no mention need be made, in the SD of L-TOUS, of either clitics or relative pronouns. One ccuild, in an interpretive theory, simplify the process of determining whether a particular NP has moved, by allowing reference to deep structure information. 8 The transiormational theory is superior in that it accounts for the same facts while excluding the use of deep structure information; it is thus making the stronger claim.

Furthermore, there is a second generalization about these constructions that only the transformational hypothesis can capture. In transformational terms, the distance over which L-TOUS can operate is limited; i.e., whereas sentence (10) is grammatical:
(10) J'ai tous voulu les lire.
cf.
(22) J'ai voulu lire tous les livres.
we have, corresponding to:
(23) II est important de lire tous les livres.
the following contrast:
(24) Il est important de tous les lire.
(25) * I! est tous important de les lire.

Similarly, many speakers accept:
(26) Il faut que tu lises tous les livres.
(27) II faut que tu les lises tous.
but not: (28) * If faut tous que tu les lises.

In general, 'tous' may not be moved out of an adjectival complement, as in (25), and for many speakers may not be moved out of lower sentences, as in (28). Moreover, these restrictions are mirrored in non-restrictive relatives:
(29) * Les livies de Jean, qu'il est tous important de lire, . . . and for those speakers who reject (28):
(30) * Les livres de Jean, qu'il faut tous que tu lises, . . .

Under the transformational hypothesis these restrictions need be stated only once, i.e., with respect to L-TOUS. Sentences (29) and (30) will be excluded exactly as
(25) and (28).

In an interpretive theory, however, sentence (29) is a problem. Comparing it to:
(31) Les livres de Jean, qu'il est important de lire tous . . . we see that after wh-preposing has applied, the 'tous' in the same clause as the relative pronoun, as in (29), may not be associated with it, whereas the 'tous' in a more deeply embedded clause, as in (31), may. Even worse, comparing (29) to:
(18) Les amis de Pierre, que j'ai tous connus, . . .
we see that the ungrammaticalness of (29) depends on the existence of an embedded clause. It is difficult to imagine how an interpretive theory could account for these facts; it has in effect been led astray by the difference in scope between L-TOUS and wh-preposing, a non-probiem in the transformational theory.

We have shown that only a theory including a movement transformation, LTOUS, is capable of expressing certain generalizations about the distribution of 'tous' coming from object position. We now argue that this transformation itself reflects a still deeper generalization about the structure of French sentences. Consider the word 'tout' (='everything'), which is morphologically related to 'tous,' and which patterns just like it. Thus, parallel to sentences (7)-(10), we have:
(32) Je voudrais lire tout.
(33) J'ai tout lu.
(34) Je voudrais tout lire.
(35) J'ai tout voula lire.

The transformational hypothesis allows us to express the obvious generalization by collapsing L-TOUS, which we recall referred to "bare"9 'tous,' with the rule otherwise needed to account for the distribution of 'tout.' 10 We will now have a single rule (which we shall continue to refer to as L-TOUS) which moves 'tout' $i$ 'tous' from object position to the left. In an interpretive theory, on the other hand, there would be no way of expressing the similarity in distribution between 'tout' and 'tous'. A rule very much like L-TOUS would be needed for 'tout', quite apart from the interpretive rules for 'tous.' We conclude that the transformational hypothesis is the correct one.

Give: a rule L-TOUS, we can immediately deduce the ordering relationship between it and the rules of clitic-placement and wh-preposing. L-TOUS n n:st clearly
follow both these rules if the above-noted generalization about 'bare' 'tcus', as well as that between 'tous' and 'toui', is to be captured. 11

Section il
All the evidence we have so far presented in favor of the transformational hypothesis has been drawn from instances of 'tous' associated with objects. In other words, we have not given any direct argument for a rule R-TOUS, but only for a rule L-TOUS. There is, moreover, no a priori reason why all occurrences of 'tous' need be handled by the same mechanism. It would not be impossible for the grammar of French to contain both a rule L-TOUS and an interpretive rule associating certain occurrences of 'tous' with plural subject NP's. We shall, nonetheless, argue against such a position and in favor of a rule R-TOUS.

We note that such an interpretive rule would have to be ordered after the passive transformation, because of the following paradigm:
(36) Les garçons ont tous embrassé la fiile.
(37) * La fiile a tous été embrassée par les garçons.
(38) * La fille a tous embrassé les garçons.
(39) Les garçons ont tous été embrassés par la fille.

Sentence (37) shows that a deep structure subject that has been displaced by the passive transformation may not be associated with a 'free' 'tous'. Sentence (39) shows that a deep structure object (full) NP, which normally may not be associated with such a 'tous', can be if it has become the surface subject via the passive transformation. This implies that the interpretive rule in question must make reference to 'subject $N P^{\prime}$ at a point in the derivation subsequent to the application of the passive rule. ${ }^{12}$

We note furthermore that these facts hold as well for 'chacun:'
(40) Les garçons ont chacun embrassé la fille.
(41) * La fille a chacun été embrassée par les garçons.
(42) * La fille a chacun embrassé les garçons.
(43) Les garçons ont chacun été embrassés par ia fille.

This suggests, not unnaturally, that the interpretive rule for 'tous' should be generalized to 'chacun.' ${ }^{13}$ We would thus have an interpretive rule associating a 'free' 'tous' or 'chacun'14 with a subject NP and applying after Passive. This ordering, however, gives rise to various difficuities. ${ }^{15}$

Consider the following paradigm:
(44) Paul a comparé ces deux auteurs.
(45) * Paul a comparé chacun de ces deux auteurs.

Paul a calomnié ces deux auteurs.
(47) Paul a calomnié chacun de ces deux auteurs.

Sentence (45) shows that certain verbs are restricted as to the nature of the direct object NP they may occur with. ${ }^{i 0}$ These restrictions are mirrored in the passive:
(48) Ces deux auteurs ont été comparés par Paul.
(49) * Chacuin de ces deux auteurs a été comparé par Paul.
(50) Chacun de ces deux auteurs a été calomnié par Paul.

Significantly, the paradigm remains unchanged if 'chacun' is placed elsewhere than at the head of the subject NP:
(51) * Ces deux auteurs ont chacun été comparés par Paul.
(52) Ces deux auteurs ont chacun été calomniés par Paul. ${ }^{17}$

Under the transformational hypothesis, the contrast between (51) and (52) is easily accounted for. Sentence (45) will be ruled out by a kind of selection restriction associated with the verib 'comparer' and depending on the feature composition of the object NP, ${ }^{18}$ i.e., will be ruled out at the level of deep structure. Sentence (49) will therefore be excluded automatically, as the passive of an impossible deep structure. Finally, sentence (51) is excluded since it could only have come about through application of R-TOUS to the structure underlying the ungrammatical (49), but such a structure would already have been designated as ungrammatical at the time of lexical insertion. On the other hand, sentence (52), derived parallel to (51), but from intermediate structures resembling sentences (50) and (47\%, wiil never have been marked as ungrammatical: in particular, the verb 'calomnier' will not be subject to the same restrictions as 'comparer.'

Under the interpretive hypothesis, however, there is no natural way of ruling out (51). We recall that the interpretive rule associating 'chacun' (or 'tous') with a subject NP must follow the passive transformation. Consequently, at the time of application of this rule, the NP 'ces deux auteurs' in (51) is no longer the object of 'comparer.' This implies that the interpretive hypothesis cannot straightforwardly exclude (51) and (45) in the same way. There are two possibilities: On the one hand, the interpretive rule in question could be compiicated to prevent 'chacun' from being associated either with a NP-object of 'comparer' in the active (but see footnote 16) or with a NP-subject of 'comparer' in the passive construction. ${ }^{19}$ The undesirability of such a solution is evident.

On the other hand, a more plausible attempt to salvage the interpretive hypothesis could be made by allowing the interpretive rule 20 for 'chacun' to refer tc deep structure information. For example, one could claim that after the interpretive rule has applied, associating 'chacun' with a particular NP, a check is made of the deep structure of the sentence to see if that NP is not also the deep structure object of a verb like 'comparer.' If it is, the derivation is blocked. ${ }^{21}$

There are, however, a number of objections that can be raised against such a proposal. For example, checking to see whether a particular NP is the object of a particular verb in deep structure is a non-trivial problem. Consider the following sentences, which make much the same point as (51), (52):
(53) * Ces deux auteurs sont chacun faciles à comparer.
(54) Ces deux auteurs sont chacun faciles à calomnier.

The difference between (53) and (54) is clearly due to the difference in embedded verb. Furthermore, 'chacun' could not have been associated with 'ces deux auteurs' in (54) if that NP had not been moved ${ }^{22}$ to subject position:
(55) * II est chacun facile de calomnier :es deux auteurs.

This implies that an interpretive rule would have to apply after such movement had taken place. In addition, it would have to be able to tell that the subject NP in (53) is the deep structure object of 'comparer.' We note that, in deep structure, 'facile' and 'comparer' are in distinct sen...r.ces. Compare now sentence (53) with:
(56) Nous sommes : ortil disposes à ce qu'on nous compare.

Here, 'nous' is the deep structure object of 'comparer', yet it can have 'chacun' associated with it in a higher sentence. This suggests that not only must the interpretive rule make reference to deep structure information, but it must also be able to keep track of particular NP's. ${ }^{23}$ Under the transformational hypothesis, no such difficulties ever arise; all the sentences discussed in thic section follow from a simple statement of the selectional restrictions on verbs like 'comparer.' We conclude that there is a movement transformation R-TOUS, which moves the quantifiers 'tous' and 'chacun' off subject NP's to the right.

## Section III

In this section, we will briefly consider two questions related to the transformations L-TOUS and R-TOUS. Both of these transformations can place 'tous' (or 'tout', 'chacun', 'rien' as the case may be) in one of a number of positions. Neither transformation, however, can place 'tous' before the finite verb:
(60) * Mes amis tous partiront. ${ }^{24}$
(61) * Mes amis tout feront.

This is part of the more general fact that the elements subject to R-TOUS and L TOUS can occupy certain specifiable positions - independently of their origin:
(62) Mes amis partiront tous. Mes amis feront tout. Mes amis ne feront rien. Jean les déteste tous.
(63) Mes amis sont tous partis. Mes amis ont tout fait. Jean n'a rien fait. Jean les a tous lus.
and, parallel to (60), (61):
(64) * Jean tous te les donnera.
(65a) * Jean rien ne fera. 25
(65b) * Jean ne rien fera. 25
We note that within the present theory there is no way to state such a generalization. ${ }^{26}$

There is nonetheless no motivation for trying to combine R-TOUS and L TOUS. We recall that R-TOUS, but not L-TOUS, can apply to a 'tous' associated with a fu!! NP:
(66) Mes amis ont tous dit que. . .
(67) * Jean a tous vu mes amis.

In addition, L-TOUS, but net R-TOUS, can apply to a 'bare' 'tout':
(68) Jean a tout mangé.
(69) Tout a disparu.

* II a tout disparu. 27
(70) Paul laissera tout lui tomber dessus.
* Paul laissera lui tomber tout dessus. 28

A second problem related to these rules is posed by the foilowing:
(71) Jean les connaít tous.

Mes amis, qu'il connaît tous, sont là.
If the 'les' and 'que' in (71) are extracted from object position by the rules of CL-PL
and wi-preposing ${ }^{29}$ respectively, then these sentences are violations of the A-over-A principle (discussed in more detail in chapter two). This difficulty would disappear if it could be shown that there was a rule, applying before CL-PL or wh-preposing, which detached 'tous' from its NP, e.g.: $\underset{V P r}{[V} \underset{N P}{\text { [tous Pro] ] }}$
$\rightarrow \quad \mathrm{VP}^{[\mathrm{V}}$ tous [Pro]] 30

There is in fact sume evidence in favor of such a rule. Some speakers accept sentences like:
(72) Mes amis, à qui j'ai tous donné des livres, . . .

If no 'detaching' rule existed, then wh-preposing would have to apply to a structure of the form: ${ }^{31}$


The important point is that wh-preposing would then have to move 'a qui'. But not only is 'à qui' not a constituent, it is broken up by an intervening NP-node. Moreover, postulating a 'detaching' rule may allow us to explain the fact that speakers vary radically in their judgments concerning sentences such as (72). Assume, for example, that the rule in question attaches 'tous' to the next highest node up. Then, for (72), we would have:

still not a constituent and might therefore not be expected to move. For those speakers who accept (72), we could say that 'tous' was moved out of the prepositional phrase entirely:


This, then, would permit wh-preposing to apply to the constituent 'a qui'. 32

## Footnotes to Chapter I

1. 'Tous' is pronounced itus/ if it is not foliowed by another word belonging to the same 'phrase':
(a) Les garcons sont tous partis.
(b) Les garçons partiront tous.
(c) Il parlera de nous tous à sa petite amie.

Compare:
(d) Touß les garçons sont partis.
(e) Tous nos amis sont là.
(f) Les garçons partiront tous deux.
(g) Les garçons partiront touś les trois.
'Tous' is apparently an exception to the rule of Final Consonant Deletion, although not to the Truncation rule, and in that respect is similar to 'six' and 'dix'. (For discussion of these rules, see Schane (1968) and Milner (1967)).
2. 'Tous' differs from 'all' in that it may not be followed by 'de' ('of'):
(h) Tous ces garçons

* Tous de ces garçons
(i) All those boys

All of those boys
(See also fn. 57, chapter 2).
3. For some speakers, sentences (4) and (5), although not grammatical, are less bad that sentence (6). The significance of this fact is unclear.
4. See, e.g., Chomsky (forthcoming-b) and Jackendoff (1969).
5. The examples here are of direct object clitics, which provide the simplest paradigm. We return below and in chapter 2 to consideration of dative clitics, ' $y$ ', and 'en', with respect to their interaction with 'tous.'
6. This is, of course, only true in general of several 'tous' associated with the same NP. Thus contrasting with (12) we can have:
(j) Les garcons ont tous voulu les lire tous.
where the first 'tous' is associated with 'les garcons' and the second with 'les'.

Nonetheless, there do seem to be some constraints on the occurrence of more than one 'tous' associated with distinct NP's. For example, parallel to (j), we do not get
(k) * Les garçons les ont tous tous lus.
alongside of
(I) Tous les garçons les ont tous lus.

Many speakers do, however, accept:
(m) ? Les filles les ont chacune tous embrassés.

We expect that sentences like (k) will be excluded on the basis of some kind of output constraint, perhaps analogous to those discussed in Ross (1967a). We leave this question open.
7. The argument in the text is in no way a demonstration of the incorrectness of interpretive rules in general (see fn. 4). The question is rather to determine which areas of the syntax are best described by which kinds of mechanisms. For more detailed discussion of this problem, see Chomsky (forthcoming-a) and Dougherty (forthcominis).

We note further that we are arguing against interpretive rules being used to account for the surface structure distribution of quantifiers. It is still entirely pcssible that aspects of the semantic interpretation of quantifiers should be handled by interpretive rules. This position is in fact taken by Dougherty (1968) for English. We have no comparable evidence that would bear on this question in French, except to note that there is a difference in focus between, e.g., (1) and (2).
8. Actually, it is not clear that the interpretive hypothesis is salvageable even in this manner. Many speakers reject sentences in which 'tous' is associated with a preposed relative pronoun which is itself preceded by a preposition. For these speakers, (18) and (19) contrast sharply with
(n) * Les amis de Pierre, à qui j'ai tous parlé, . . .
(o) * Les amis de Pierre, contre qui je me suis tous fâché, . . .

It is difficult to see how these facts could be accounted for under the interpretive hypothesis. We return to this problem below. (See also fn. 21, chapter 3.)

Somewhat similar, for many speakers, is the distinction between:
(p) Je les lirai tous.
(q) *? Je leur parlerai tous.

The interpretive hypothesis would seem to be incapable of motivating this difference between ( $p$ ) and ( $q$ ), since at the time of application of the interpretive rule, both 'les' and 'leur' are preposed NP's, differing only in case-marking. The transformational hypothesis, however, (see chap. 2, section C, I) correctly predicts that parallel to $(\mathrm{p})$, one should rather get:
(r) Je leur parlerai à tous.

Sentences such as (q) could presumably be derived only by applying a further transformation (cf. fn. 22, chapter 5) deleting the 'à' under certain conditions.

Example ( r ), in fact, poses a problem for the interpretive hypothesis in still other ways. The 'tous' in ( $r$ ), as well as that in:
(s) Je leur ai à tous parlé.
(see fn. 15, chapter 2) must be subject to an interpretive rule associating it with the dative clitic 'leur.' A 'tous' preceded by 'a' could not, however, have been associated with an accusative clitic:
(t) Je les verrai tous. Je les ai tous vus.
(u) * Je les verrai à tous.

* Je les ai à tous vus.
(v) Je vais vous les montrer à tous.
(w) * Je vais vous les montrer à tous.

Under the interpretive hypothesis, this constraint would necessitate a special statement. Under the transformational hypothesis, this difficulty never arises.

We recall that the interpretive hypothesis implies that 'tous' is always generated in its surface position by the PS-rules, let us assume under some node called Q (quantifier). Sentence ( $s$ ) shows that one possible expansion of this node must be 'Prep. + Quantifier.' We would therefore expect to have, parallel to (s), the following non-restrictive relatives:
(x) * Vos amis, à qui j'ai à tous parlé, . . .

* Vos amis, à qui j'ai à tous donné des livres, . . .
(see chapter 2, section C, 1). These are ungrammatical, however, for all speakers, and thus contrast with sentence ( n ), which is grammatical for some speakers. it is difficult to imagine how these facts could be accounted for in an interpretive theory.

Under the transformational iypothesis, 'tous' is aiways generated as part of
some NP. Underlying both ( n ) and ( r ) will be a sub-string of the form: 'a tous Pro'. If the pronoun is a personal pronoun, clitic-placement (see chapter two) will apply to it, leaving behind 'à tous'. Sentence ( $r$ ), and derivatively ( $s$ ), are derived in this manner. If the pronou:) is a relative pronoun, wh-preposing will apply. In French, unlike English, wh-preposing must move the preposition along with the pronoun (see fn. 28, chapter 3). Application of wh-preposing will move 'a qui' and leave behind 'tous', as in ( $n$ ). There is consequently no way in which ( $x$ ) couid have been derived. An independent constraint will exclude ( $n$ ) for many spee:. ers (see text). In addition, we note that 'tous' may not be moved along with 'a qui':
(y) * V'ns amis, à qui tous j'ai parlé, . . . * Vos amis, à tous qui j'ai parlé, . . .
9. Although L-TOUS cannot appiy to a 'tous' which is still part of the original NP (e.g., (15)-(17)), it can apply to a 'modified' 'tous' (or 'tout'): (cf. chapter 2, section A, III).
(z) Paul les a presque tous lus.
(aa) Paul a presque tout mangé.
(ab) Paul n'a presque rien foutu.
Sentence (ab) indicates that L-TOUS is also applicable to 'rien' (cf. fn. 10, chapter 3 ).
10. For an extensive and relevant study of the word 'tout' within a non-generative framework, see Andersson (1954).
11. Notice that the ordering: CL-PL - L-TOUS would not be immediately apparer' if one were considering only the distribution of 'tout' (or 'rien') (to the exclusion of 'tous'). In fact, sentences such as:
(ac) J'ai envie de tout lui dire.
J'ai envie de ne rien lui dire.
might suggest just the opposite ordering (see Gross (1968, p. 61)) if both CL-PL and L-TOUS are considered rules which flip something around the verb. We show in chapter two, however, that the derived structure assigned by CL-PL to the sequence 'clitic+verb' is that of a verb. This insures that application of L-TOUS subsequent to CL-PL could not yield:
(ad) * J'ai envie de lui tout dire.

* J'ai envie de ne lui rien dire.
(see also fn. 14, chapter 2). The fact that L-TOUS must be ordered after CL-PL and wh-preposing will turn out to be relevant to certain arguments in chapters two and three.

12. Under the transformational hypothesis, these facts would imply the ordering: Passive —— R-TOUS.
13. Transformationally speaking, this means that R-TOUS will apply to 'chacun' as well as to 'tous'.
14. Parallel to sentences (1)-(6), we have:
(ae) Chacun des garçons a embrassé la fille.
(40) Les garçons ont chacun embrassé la fille.
(af) * Chacun des garçons a chacun embrassé la fille.
See also fn. 57, chapter 2. For an extensive discussion of the quantifiers 'each' and 'all' in English, see Dougherty (1968).
15. See Dougherty (forthcoming), to whom the following argument is due, for an extremely convincing and much more detailed argument in favor of the transformational hypothesis with respect to the distribution of quantifiers in English.
16. See Dougherty (1968) for more detailed discussion. We note that, irrelevantly, this is true of 'comparer' only if there is no indirect object:
(ag) Paul a comparé chacun de ces deux auteurs à son frère.
17. Similarly, although with some loss of acceptability, 'chacun' could be placed to the right of 'été:'
(ah) Ces deux auteurs ont été chacun calomniés par Paul.
Again, we have:
(ai) * Ces deux auteurs ont été chacun comparés par Paul.
18. See Dougherty (1968) for further details. We note that nothing depends on
the exact nature of this mechanism. Sentence (45) will presumably be excluded for the same reason as:
(aj) * Paul a comparé son ami.
19. Subjects of 'comparer' in the active can of course be associated with 'chacun:'
(ak) Ces deux auteurs ont chacun comparé Marx et Lenin.
We assume here that sentence (45), under the interpretive hypothesis, is not ruled out in deep structure. If it was, then sentence (51) would have to be excluded by some totally different mechanism, since, under this hypothesis, 'chacun' in (51) is not generated as part of the object NP at all.
20. We note that such an interpretive rule could not apply at the level of surface structure, since it may not associate with a subject NP a 'free' 'tous' (or 'chacun') that has been created in the course of the derivation. For instance, it would have to apply before L-TOUS to prevent the quantifier in:
(al) Vos amis nous ont tous mis à la porte. Vos amis nous ont chacun mis à la porte.
from being associated with 'vos amis.' If the interpretive rule followed L-TOUS, then an ad-hoc mechanism would be needed to determine when a particular 'free' quantifier had originated in deep structure as part of some NP. Similarly, sentences such as:
(am) Ils nous mettront tous à la porte.
(an) Nos amis, gu'ils mettront tous à la porte, . . .
suggest that the interpretive ruie in question would have to be ordered before CL-PL and wh-preposing.
21. Notice that the interpretive hypothesis would allow equally well the formulation of a similar rule that did not refer to deep structure information. In other words, it would predict that there might be a language such that 'chacun' could not be associated with the object of a verb like 'comparer', unless that object had been moved to subject position $\mathfrak{a r}^{t}$ some point prior to the application of the interpretive rule.

Insofar as no such language is possible, it is a strong argument against the interpretive hypothesis. The transformational hypothesis, which uses selection restrictions to account for this kind of data, would, justifiably, have great difficulty in describing such a language.
22. See chapter four for some evidence in favor of a movement rule for this construction.
23. For more detailed discussion of this entire question, see Dougherty iforthcoming).
24. The following sentence is not an example of the application of R-TOUS: (ba) Eux rrus partiron:
the inversion in (ba) takes place rather within the NP, with pronouns only, and is obligatory:
(bb) Tous eux partiront.
That (ba) is not an instance of R-TOUS is suggested by the following paradigm:
(bc) Mes amis partiront presque tous. Mes amis partiront tous les deux.
(ba) * Eux presque tous partiront.

* Eux tous les deux partiront.

The inversion in (ba) should instead be related to that in:
(be) Eux deux partiront bientôt. Il vient de parler de nous autres.
Further evidence for distinguishing the inversion in (ba) from R-TOUS comes from consideration of 'chacun':
(bf) Ils sont chacun partis à la guerre.
(bg) * Eux chacun sont partis à la guerre.
(bh) Chacun d'eux est parti à la guerre.
25. The sentences in (65) may be excluded for more than one reason - (65a) parallel to:
(bi) * J'ai envie de rien ne faire.
and (65b) because ' $n e^{\prime}$ is a clitic with finite verbs (see chapter two).
26. See Emonds (1969) for a framework in which such generalizations might be expressible. Notice that the positions capable of being filled by elements subject to L-TOUS and R-TOUS are those in which adverbs can occur naturally:
(bj) Jean chante souvent.
Jean a souvent chante.

* Jean souvent chante.

We omit from consideration cases of extra-long pauses:
(bk) Jean, souvent, va à Paris.
27. If R-TOUS did apply to 'tout', we might expect 'il' to show up in the vacated subject position. The following sentence is not a case of R-TOUS:
(bl) II ne se passera rien.
but of a ruic which we cal! IL-E\%, ine= chaprer $\dot{\sim}$, il).
28. See chapters three and four for a discussion of this construction. It will become apparent there that in:
(bm) Paul lui laissera tomber tout dessus.
the 'tout' and 'tomber' have been inverted via a different rule (FA) than R-TOUS. The position of the clitic in (70) indicates that there FA has not applied.
29. It is unclear why in English we do not have:
(bn) * My friends, who he knows all, are here.
30. We leave open the question of where the 'tous' would be just prior to this rule (see footnote 24 ).
31. Again, the argument is unchanged if the structure is

32. Notice that this analysis will also account for the difference between (72) and (71), which is grammaticai for all speakers, since in the case of a direct object, attaching 'tous' to the next highest node insures its being removed from the NP
do'ñinating 'que'.
In addition, we can now account for the fact that the A/A pripsip!e is not violated in:
(bo) Paul mangera tout le sucre. * Paul le mangera tout.
since the 'detaching' rule leaves the $A / A$ principle intact.
We leave open a number of questions; e.g., we do not discuss $\because$ expression 'tout entier', nor the use of 'tout' in:
(bp) Tu l'as toute frossée.
Nor do we consider how one might account for the following paradiz:
(bq) Tous mes amis partiront.
Mes amis partiront tous.
(br) Mes amis partiront tous les trois. * Tous les trois mes amis partiront.
(bs) Mes amis partiront tous deux. * Tous deux mes amis partiront.

## CHAPTER !I

## Section A

Part I
Direct object NP's in French normally follow the verb:
(1) Marie connaît mon frère.

If the object is a personal pronoun, however, the correspoinring sentence is ungrammatical:
(2) * Marie connaît nous.

Rather, the pronoun appears to the left of the verb:
(3) Marie nous connaît.

In this section we shall consider how such facts might best be accounted for within a transfo.,itational grammar. We shall argue in favor of a movement transrormation, to be called "clitic-placement," which would prepose object pronouns to the verb under certain conditions. One environment in which such a rule would be inapplicable is the "ne. . .que" construction. If the direct object pronoun is the "focus" of "ne. . .que," it remains in the usual object position and may not precede the verb:
(4) Marie ne connaît que nous.
(5) $\quad$ Marie ne nous connaît que.

What interests us here is the fact that many personal pronouns have a different shape in a sentence like (3) than in one like (4):
(6) Marie les connaît.
(7) Marie ne connait qu'eux.

The form of the pronoun in the "ne. . .que" construction is exactly the same as that occurring in a host of other environments, e.g.:
(8) Marie parle d'eux.

Eux n'auraient pas fait ça.
Ils sont intelligents, eux.
J'ai fait ga pour eux.
J'ai un portrait d'eux à la maison.

These can all be characterized as environments in which full NP's are allowed:
(E) Marie ne connait que mes amis.

Marie parle de mes amis.
Mes amis n'auraient pas fait ça.
Ils sont intelligents, mes amis.
J'ai fait ça pour mes amis.
J'ai un portrait de mes amis à la maison.
Let us call the form of the pronoun which occurs in these environments its "strong" form. In this class will fall "eux," "nous," "moi," "toi," "lui," "elle," "vous," "elles." Conversely, let us call the form of the pronoun which sucurs in sentences like (6), i.e., preposed to the verb, its "weak" or "clitic" form, or simply "clitic." The direct object clitics corresponding to the above strong forms are "les," "nous," "me," "te," "le," "la," "vous," "les." 1 These do not pattern at all like $N P^{\prime}$; e.g.:
(10) * Marie ne connait que les. In particular, they occur only pre-verbally, except in positive imperatives; neither of these positions can be occupied by a NP:
(6) Marie les connait.
(11) Présentez-les-moi.
(12) * Marie mes amis connaît.
(13) * Présentez-tes amis-moi.

The French pronominal paradigm thus consists of at least two parts (with some morphological overlapping): the NP-like strong forms, and the non-NP-like direct object clitics. We can further distinguish, parallel to the direct object clitics, a class of indirect object, or dative, clitics, which also occur either pre-verbally or in positive imperatives, and nowhere else. They are, corresponding to the strong forms listed above, "leur," "nous," "me," "te," "lui," "lui," "vous," "leur"1 (again with some morphological overlapping), as in, e.g.:
(14) Marie leur parie.
(15) Donnez-leur-en.

As before, full NP's could not occur in these positions:
(16) * Marie mes amis parie.

* Marie à mes amis parle.
(17) * Donnez-mes amis-en.
* Donnez-à mes amis-en.

Conversely, these clitics do not occur in NP position:
(18) Marie ne parle qu'à mes amis.
(19) * Marie ne parle qu'à leur.

We see that both direct and indirect object clitics are in complementary distribution with full NP's, and therefore also in complementary distribution with the NP-like strong forms:
(7) Marie ne connaît qu'eux.
(10) * Marie ne connait que les.
(20) Marie les connaît.
(21) * Marie eux connaít.
(22) Marie ne parle qu'à eux.
(19) * Marie ne parle qu'à leur.
(14) Marie leur parle.
(23) * Marie eux parle.

* Marie à eux parle.

Consequently, we would like to say that, e.g., "eux," "les," and "leur," derive from a single abstract lexical item which is spelled out differently depending on its position in the sentence (and on case-marking). In sorne cases, e.g., "nous," "vous," the pronoun will have a unique spelling:
(4) Niarie ne connaît que nous.
(3) Marie nous connaît.
(24) Marie nous parle.

If we make the minimal assumption that pronouns are introduced as an expansion of NP, ${ }^{2}$ we can generate in a straightforward manner those sentences containing the pronominal "strong" forms, as in (8). The clitics, on the other hand, appear uniquely in positions that cannot be filled by a NP; sentences containing them can therefore not be generated without additional mechanisms.

## Section A

## Part II

Broadly speaking, we have the choice of complicating either the phrasestructure rules or the transformational component, or both. One possibility would be to say that sentences containing clitics are generated as such in the base, i.e., that the PS-ru!es should be extended so as to allow the clitic pronouns to be generated in their surface positions. We could then claim that sentence (3), e.g., had a deep structure essentially identical to its surface structure, i.e., a NP object appeared at neither level. An obvious difficulty with this analysis is the problem of stating subcategorization restrictions, ${ }^{3}$ since, restricting ourselves to the simplest cases, direct-object clitics cooccur only with verbs that also take direct object NP's. Thus, "connaitre," but not "partir," must be assigned the subcategorization, " $\qquad$ $N P^{\prime \prime}:$
(25) Marie connait Paul.
(26) * Marie part Paul.

Consequently "connaître," but not "partir," may be preceded by a direct-object clitic:
(27) Marie le connaít.
(28) * Marie le part.

Now in the analysis at issue, clitics are being introduced distinct from NP's; therefore a feature " $\qquad$ NP' will say nothing abcut what, if any, clitics may co-occur with the verb. One could, however, postulate a kind of lexical redundancy rule which assigned the subcategorization feature "dir. obj. cl. $\qquad$ " to all verbs already having the feature " $\qquad$ NP," and similarly for indirect objects. In this way, "connaître," but not "partir," would be assigned the feature "dir. obj. cl. $\qquad$ ," thereby allowing (27) while excluding (28).

A solution involving a lexical redundancy rule of the form described above fails, however, in the case . titics which do not correspond to any object of the verb they precede in surface streture, i.e., in the case of clitics "moving up" from some "lower" deep structure constituent. Consider, e.g.:
(29) Jean est fidèle à ses parents.
(30) Jean leur est fidèle.

The clitic "leur" in surface structure precedes the verb "être," but clearly corresponds to a deep structure complement of the adjective "fidèle." Moreover,
"être" cannot be preceded by "leur" if followed by an adjective which does not take a "dative" complement:
(31) * Jean est capable à ses parents.
(32) * Jean leur ast capable.
or if followed by a place adverbial:
(33) Jean est à Paris.
(34) * Jean leur est à Paris.

The clitics cooccurring with "être" are clearly dependent on the choice of complement: sentence (34) cannot be excluded in the same way as sentence (28).

Several other constructions illustrate the same point:
(35) Je croyais Jean fidèle à ses principes.
(36) J'y croyais Jean fidèle.

The clitic " $y$ " which precedes the verb "croire" corresponds to a deep structure complement of the adjective "fidèle." Similarly, in the "faire. . .par" construction:
(37) Je leur ferai porter les velises par mon domestique.
the clitic "leur" corresponds to a deep structure complement of "porter": 5
(38) Mon domestique leur portera les valises.

These examples show that there is in general no way to determine in the lexicon the cooccurrence restrictions between verb and clitic. These restrictions depend not only on the choice of complement, but also on the particular lexical item chosen inside the complement. Compare, e.g., (37)-(38) with:
(39) * Je leur ferai tuer par mon domestique.
(40) * Mon domestique leur tuera.

The verb "faire" can be preceded by a dative clitic in (37), but not in (39), precisely because the verb in the complement sentence in (37) happens to take dative complements. At the very least, verb-clitic restrictions cannot be determined until after lexical insertion.

An even more serious problem derives from cases in which a clitic corresponds to a complement formed by transformation. Consider the somewhat literary: (41) Jean n'est pas aimé de ses enfants mais il n'en est pas détesté non plus.

The ciitic "en" corresponds to a complement formed through application of the passive transformation. Similarly, we will show in chapters 3 and 4 that the dative complement in:
(42) Je ferai lire ce livre à Jean.
is detived transiormationally from the underlying subject of the sentence embedded under "faire." This complement, if a pronoun, appears as a clitic preceding "faire":
(43) Je lui ferai lire ce livre.

Moreover, the relevant transformation is sensitive to the presence of a direct object in the embadded sentence:
(44) Je lui ferai boire du vin.
(45) Je le ferai boire.

We conclude that verb-clitic restrictions cannot in general be determined until sometime in the course of the derivation. These facts are inconsistent with an analysis in which sentences like:
(3) Minarie nous connaît.
are derived from structures not containing an object NP; in more complicated structures, lexical redundancy rules cannot provide the necessary information to predict which clitics, if any, can occur with a particular verb.

A second kind of argument involves the word "tous," which was discussed in the previous chapter; there we argued that the distribution of "tous" in surface structure could best be described by postulating movement transformations, R-TOUS and L-TOUS. Specifically, having a transformation L-TOUS allowed us to capture the generalization about the distribution of "tous" vs. "tout," and obviated the need for making any ad-hoc reference to clitics, or to relative pronouns. Furthermore, it made entirely unnecessary any kind of interpretive principle formally associating "tous" with an NP or a clitic. The transformation L-TOUS, however, depends crucially on quantifiers being generated as part of object NP's; in particular as part of object NP's which are subsequently subject to CL-PL (or wh-preposing), and is therefore inconsistent with an analysis in which sentences such as (3) are generated directly as deep structures. We consequently reject such an analysis of clitics.

We note in addition that an analysis which generated both (3) and:
(49) Marie connaît mes amis.
as deep structures would have difficulty excluding:
(50) * Marie la connait mes amis.
since "connaitre" would be subcategorized both with respect to following direct object NP's and preceding direct object clitics. In particular, the sequence 'clitic +
verb + object $\cdot N P^{\prime}$ is permissible if the clitic is dative:
(51) Marie leur donnera mes livres.

Some ad-hoc convention would be needed to avoid this difficulty.
None of the above problems arises in a theory which has clitics derived transformationally from pronouns introduced in NP-position. Assume that pronouns can occur freely under the node NP. This assumption is independently necessary to generate sentences containing the strong forms of the pronouns, as in (8). Let us further assume that there is a transformation called clitic-placement (CL-PL) which moves direct and indirect object pronouns to pre-verbal position under certain conditions. Thus sentence (3) would be derived from a structure resembling:
(2) * Marie connaît nous. ${ }^{4}$
CL.PL would apply, moving the object pronoun to the left of the verb. CL-PL would be applicable only to pronouns, thereby excluding sentence (12). Sentence (50) is no longer a problem; it could only have arisen if "connaitre" could be followed by two direct object NP's, which is impossible. In addition, such a theory is completely consistent with the transformation L-TOUS, as outlined in chapter one.

Finally, the various difficulties involving the statement of subcategorization features disappear, given that the pronouns are now being introduced parallel to NP's; in fact, there will no longer be any reason to speak of verb-clitic cooccurrence restrictions in any of the cases discussed above.

For example, in the case of:
(30) Jean leur est fidèle.
nothing need be said in the lexicon about clitics appearing before "être;" (30) will be derived from a structure resembling:
(52) *? Jean est fidèle à eux.

CL-PL will apply, moving the pronoun to the left of "être;" the occurrence of the sequence clitic + "être" will be a derivational fact. Sentence (28):
(28) * Jean le part.
will be ruled out automatically. It could only have come from '*Jean part lui,' which will never be generated, since "partir" will not have the subcategorization feature " $\qquad$ NP." We conclude that a theory containing a movement transformation, CL-PL, is superior to one in which sentences of the form 'subject + objectclitic + verb' are generated in the base. ${ }^{6}$
. There is, however, an intermediate possibility. The difficulties with the analysis just rejected were really due to the idea of generating sentences containing clitics instead of full NP's. The lack of the object NP prevented the optimal statement of subcategorization restrictions and did not allow full advantage to be taken of the rule L-TOUS. Might it not be possible to generate clitics in the base, in addition to, rather than instead of, object NP's?

In the first analysis we discussed, and rejected, the sentence:
(3) Marie nous connait.
corresponded directly to a deep structure. In the CL-PL analysis, the deep structure of (3) is essentially
(2) * Marie connaît nous.

The third possibility is to generate deep structures of the form ${ }^{* *}$ Marie nous connait nous. ${ }^{7}$ Then, rather than having a movement rule, we could postulate a pronoun-deletion rule (PRO-DEL), which deleted the NP-dominated pronoun just in case there was an identical one in clitic-position. The derivation of (3) would be: Marie nous connaît nous $\longrightarrow$ PRO-DEL $\longrightarrow$ Marie nous connaît. Within this framework, the problem of subcategorization does not arise. The deep structure of (37) would be approximately:

Je leur ferai -mon domestique portera les valises à eux par $\boldsymbol{\Delta}$ ——. The presence of "à eux" in the DS eliminates the subcategorization problems. PRODEL would apply at the appropriate time to delete "eux." In fact, this example suggests that PRO-DEL could be formulated as a kind of inverse of CL-PL that would apply at the same point in the sequence of rules. Assume, e.g., that CL-PL is last-cyclic, and contains a variable that is restricted in specified ways:

Then PRO-DEL could be written:
where $\mathbf{Y}$ in both cases has the same restrictions.
This suggests that the CL-PL analysis and the PRO-DEL analysis might be notational variants, and in fact we know of no empirical differences between them. ${ }^{12}$ There are, however, several considerations which argue in favor of the CL.PL analysis
on formal grounds. First, the PRO-DEL hypothesis is in some sense a more powerful one. For instance, since the PS-rules will be freely generating clitics preverbally, there is no reason why verbs could not be subcategorized with respect to them. In the CL-PL analysis, this is an impossibility; the CL-PL analysis is therefore making the stronger claim. Insofar as this extra power is never used, it is an argument against the PRO-DEL analysis.

There is one case which is instructive in this respect. Dative clitics can usually occur with any verb taking a complement of the form: a $+N P ;$ e.g.: 8
(53) Marie parle à mes amis.
(54) Marie leur parle.

There are a small number of verbs which are exceptions to this statement, e.g.:
(55) Marie pense à mes amis.
(56) * Marie leur pense.

Under the PRO-DEL hypothesis, one could state this in the lexicon in terms of subcategorization. However, we give arguments elsewhere ${ }^{9}$ which are equivalent to saying that such an approach would cause one to miss certain other generalizations about such verbs. Indirectly, then, this argues against the PRO-DEL hypothesis.

A second consideration is that although the PRO-DEL hypothesis allows the correct statement of subcategorization facts, ${ }^{10}$ it requires a complicated filtering mechanism to make things come out right. Since one is generating both clitics and NP-objects, one will generate sentences like:
(50) * Marie la connait mes amis.
and also
(28) * Marie le part.
(57) * Marie leur connait.

To rule these out, one would need a filtering rule saying that all sentences with clitics are thrown out either if the clitic cooccurs with an NP object of the same type, as in (50), or if the clitic occurs alone. ${ }^{11}$ In effect, one would have to say that if the structural description of PRO-DEL is not met for every clitic in the sentence, the sentence blocks. No such mechanism is needed in the CL-PL analysis.

Given the desirability of introducing pronouns into clitic position by transformation, we can begin to ask various questions about the form of the rule. For instance, does CL-PL leave a copy of the pronoun behind, later to be deleted, or
is the outp: ${ }^{*}$ of the rule distinct from the input in both clitic and iNP positions? The former alternative is meaningful only if we have some way of deleting the original bronoun; i.e., if the output of CL-PL as applied to * Marie connait nous is * $M^{n}$. a nous connaft nous , the second "nous" must be deleted.

Oric possibility ${ }^{13}$ would be to make use of the feature [+ DOOiV], as used Ey Postal (1968a). CL-PL would then be stated as:

The use of such a feature is however a powerful mechanism which would need to be justified here. We know of no arguments comparable to Postal's showing that the feature $[+$ DOOM ] does any work at all in this case. We conclude that CL-PL should be considered purely as a movement transformation.

## Section A

Part III
We have argued in favor of a transformation CL-PL which moves certain pronouns to the left. The transformation L-TOUS discussed in chapter one also moves certain elements to the left. One might suppose that this similarity is reason to attempt to combine the two rules. We claim the contrary, namely that the two rules are different in a number of other ways, to the extent that it would clearly be undesirable to try to relate them.

First, the surface positions of clitics and 'tout'/'tous' are not identical.
Clitics can appear jefore finite verbs; "tout" cannot:
(58) Paui le lira.
(59) * Paul tout lira.
"Tout" can appear after a finite verb or precede a past participle; clitics cannot:
(60) Paul lira tout.
(61) * Paul lira le.
(62) Paul a tout lu.
(63) * Paul a le lu.

Furthermore, although both can precede infinitives:
(64) Paul va tout faire.
(65) Paul va le faire.
"Tout" has a freedom of position which clitics never do:
(66) Paul va tout vouloir faire.
(67) Paul va vouloir tout faire.
(68) Paul va vouloir le faire.
(69) * Paul va le vouloir faire.
(70) Paul va tout faire lire à son fils.
(71) Paul va faire tout lire à son fils.
(72) * Paul va faire le lire à son fils.
(73) Paul va le faire lire à son fils.

Second, the derived structure of clitic + verb is different from that of 'tout'/'tous'. Nothing can intervene between clitic and verb: ${ }^{14}$
(74) * Paul lui, paraît-il, parlera.
but:
(75) Pau! les a tous, paraît-il, donnés aux pauvres. Paul les a, parait-ii, tous donnés aux pauvres.

Third, 'tout'/'tous', but not clitics, can be moved along witti miódifiers:
(76) Paul les a presque tous vus.

Paul les a tous deux mis à la porte.
(77) Paul a parlé de nous deux.

Paul a parlé de nous autres.
but:
(78) * Paul nous deux connaît.

* Paul nous autres connaît.

Fourth, "tous," but not clitics, can be moved along with a preposition: ${ }^{15}$
(79) Je leur ai à tous parlé.
(80) * Paul à lui parlera.

Fifth, the placement of "tout," but not that of clitics, depends in part on the presence of other adverbs:
(81) Je l'aurais trouvé.

Je l'aurais certainement trouvé.
(82) il voudrait certainement tout lire.

II a tout voulu lire.
*? Il a tout voulu certainement lire.
We conclude that CL-PL and L-TOUS are distinct rules. In order to maintain the parallelism between "tout" and "tous," and to successfully distinguish:
(83) je les ai tous lus.
(84) * J'ai tcus lu les livres.
we must have CL-PL precede L-TOUS, as indicated in chapter one. This ordering is also suggested by the above-mentioned facts about adverbs.

Section B

## Part I

In this section we shall be concerned with the derived structure assigned by the CL-PL transformation. We shall argue that the pronoun is not attached as a sister to the verb, both then dominated by VP, but rather that the pronoun and verb are more closely bound together. In particular, we shall argue that the sequence 'clitic + verb' is itself dominated by the node V .

We have already noticed, in the previous section, certain properties of the sequence 'clitic + verb,' e.g., that nothing (except other clitics) could intervene between the two elements, and that the clitic could not be modified nor preceded by a preposition. In this context we can mention a further fact about ciitics, namely that they cannot be contrastively stressed. Thus one cannot say, with stress on the clitic:
(85) * Jean la' préfère.

One would instead say something like:
(86) C'est elle que Jean préfère.

This is true even if the clitic is phonologically identical to the corresponding strong form:
(87) * Je lui' parlerai.
(88) Lui/ n'aurait pas fait ça.
(89) Je l'ai acheté pour luil', pas pour toi. ${ }^{16}$

These observations suggest that the sequence 'clitic+verb' does not have the same status as, e.g., 'subject NP + verb' or 'verb + object NP.' In the latter constructions, the nominal element can be contrastively stressed (e.g., (88)), and the sequence can be broken up:
(90) Jean, parait-il, est amateur de boxe.
(91) Jean voit souvent Marie.

If clitic and verb were sisters under a VP node, we would not expect them to act differently.

Another characteristic of clitics is that they cannot be conjoined:
(92) * Jean la et le voit.

Furthermore, thev occur in a fixed order ${ }^{22}$ which is in certain cases the opposite of the natural order of complements:
(93) Jean me le donnera.
(94) * Jean le me donnera.
(95) Jean donnera ça à Marie.
(96) ? Jean donnera à Marie ça.

The above, while far from conclusive, does suggest that the sequence 'clitic + verb' has some speciial svntactic status. We shall not, however, be able to propose a theory capable ot explaining these facts. Instead, we shall try to strengthen the plausibility of our clai!. by considering subject pronouns, which provide a more striking contrast with rege ?r NP's than do the object clitics. Then we will try to show that certain transformations treat the sequence 'clitic + verb' as a constituent, in fact, as a verb. Such a result wouid of course imply that 'clitic + verb' was not immediately dominated by VP, even in the absence of any explanation for the facts about conjunction, modificaticn, etc.

## Section B

Part II
Up to this point, we have been concentrating our attention on what we have been calling object clitics. We have argued that their unique position in surface structure is to be accounted ior by a transformation CL-PL, and we have noted several interesting properties that they possess. We recall that French pronouns have a strong form which patterns like true NP's; and that the object clitics for the most part were morphologically distinguishable from them.

There is still another class of pronouns in French that are morphologically distinct from both the strong forms and the object clitics; these occur in what is apparently subject-position and are as follows: "je," "tu," "il," "elle," "nous," "vous," "ils," "elles" (again we notice a certain morphological overlapping with the strong forms). ${ }^{17}$ These subject pronouns seem to occupy the same position in surface structure as full NP subjects:
(97) Jean partira bientôt.
(98) II partira bientôt.

However, these subject clitics, as we shall cati them, for reasons which will become clear, share all the significant characteristic behavior of the object clitics. ${ }^{18}$

Nothing can intervene between subject-clitic and verb:
(99) * II, parait-iI, est fou.

* II, souvent, mange du fromage.
(100) Jean, parait-il, est fou.

Jean, souvent, mange du fromage.
Nor may the subject clitics be modified:
(101) * Ils tous partiront bientôt.

* Ils deux partiront bientôt.
(102) Tous les garçons partiront bientôt.

Eux tous partiront bientôt.
Eux deux partiront bientôt.
or conjoined:
(103) * Jean et il partiront bientôt.

* Il et Jean partiront bientôt.
* !l et elle partiront bientôt.
vs:
(104) Jean et lui partiront bientôt.

Lui et Jean partiront bientôt.

Furthermore, they may not be contrastively stressed: ${ }^{18}$
(105) * 11 / partira le premier.
(106) Lui/ partira le premier.

Finally, they act differently from full NP's with respect to the phonological rule of truncation. In general, the plural morpheme " $s$ " of a subject NP is always truncated, even before •re: ginning with a vowel. The sentence:
(107) Mes amis aiment nager.
is pronounced /mezamíॄmnaže/ and not */mezamizémnaže/.
The " s " of a plural subject clitic, on the other hand, is not truncated. The sentence:
(108) Ils aiment nager.
is pronounced /i(1)zદmnaže/ and not */iľmnažéf. 19 We note that truncation is likewise impossible for object clitics. The sentence:
(108a) Paul vous aime.
is pronounced /pכlvuz\&m/ and not */pJlvųm/ . 20
In various ways, then, the subject clitics behave much more like object clitics than like true subject NP's. This suggests that at some point they cease to be dominated by NP and become syntactically more closely bound to the verb. Again, we point out that assigning a derived structure to the sequence 'subject-clitic + verb', such that they are sisters dominated by VP is unlikely to lead to a satisfying explanation for these phenomena, since other pairs of VP-dominated nodes share none of the clitic-like properties. What we propose, rather, is that the sequence 'subjectclitic + verb' $^{\prime}$ is itself dominated by the node $V$. We leave aside for the moment the question of Chomsky-adjunction vs. daughter-adjunction. ${ }^{20}$

In effect, we are claiming that the French pronominal system contains a linguistically significant distinction between clitics (subject and object) and nonclitics (strong forms). Interesting confirmation of the relationship between subject and object clitics comes from consideration of pronouns referring to inanimate things. There is a restriction in French such that the strong form of the pronoun cannot refer to such inanimates, ${ }^{21}$ e.g.:
(109) J'ai parlé de la table.
(110) *? J'ai parlé d'elle.
(111) Je ne vois que ce livre-là.
(112) *? Je ne vois que lui.
(113) Je vais le brûler, ton livre.
(114) *? Je vais le brûler, lui.
(The starred sentences are grammatical if the pronoun is understood as referring to a person.) Significantly, neither subject nor object clitics are subject to this restriction:
(115) II n'est pas mal, ton livre.
(116) Je leur ferai prendre l'air, à mes vêtements.
(117) Je le lirai tout de suite, ce livre-là.

In light of the other similarities between the two kinds of clitics, we claim this to be a significant generalization. One way to make such a generalization statable would be to say they had a similar derived constituent structure, e.g., were not dominated by a major category ( $\mathrm{S}, \mathrm{NP}, \mathrm{VP}$ ).

Siinilarly, we note that clitics are also the only kinds of pronouns which are morphological!y distinguished for case:
(117a) Ils sont partis.
Je les vois.
Je leur parle.
(117b) Eux ${ }^{\prime}$ ne seraient pas partis.
Je ne vois qu'eux.
Je me suis présenté à eux.
Although we have no explanation for this fact, it again points up the naturainess of the class [subject clitics, object clitics].

Returning to the problem of the derived structure of subject clitics, ${ }^{24}$ we find evidence supporting their distinct character in the consideration of two syntactic transformations. First, for some speakers, L-TOUS can raise "tous" into a higher sentence:
(118) II faut tous que tu les voies.

As expected, L-TOUS is inapplicable if the object NP is still in object position:
(119) * Il faut tous que tu voies ces films.

For such speakers, the following contrast can be observed:
(120) II faut tous qu'ils partent.
(121) * I! faut tous que ces garçons partent.

L-TOUS is applicable to a "tous" associated with a subject clitic but not to one associated with a subject NP. The parallelism with sentences (118), (119) is .king.

There, L-TOUS wa. applicable to a "tous" associated with an object clitic but not to cine associated with an object NP. We can reduce these two facts about L-TOUS to one by admitting that the subject clitic in (120) is no longer in subject-NP position.

A second transformation which distinguishes subject clitics from subject NP's is one we shall call stylistic inversion (STYL-INV). This transformation will account for the inversion of subject and verb in sentences such as:
(122) Je me demande quand partira ton frère?
(123) Voilà ce que dira mon père.

It is, however, inapplicable to subject clitics:
(124) * Je me demande quand partira-t-il?
(125) * Voilà ce que dira-t-il.
(126) Je me demande quand il partira?
(127) Voilà ce qu'il dira.

One could of course place an ad-hoc restriction on the rule STYL-iNV to exclude (124), (125), but it would be far more desirable to say that the ungrammaticalness of such sentences follows automatically from the fact that subject clitics are not NF's. This would be true if we assumed that STYL-INV is stated as: X wh NP 123 $\vee Y \longrightarrow 124335$, which would be necessary in any case (term 4 45 needs to be changed in some unclear but irrelevant way - cf. sentences (143), (145)).

STYL-!NV applies in the presence of a wh-word, both in embedded and nonembedded sentences, e.g.:
(128) Quand partira Jean?

There is another inversion rule in French which accounts for sentences such as:
(129) Part-il?

This rule, which we shall call subject-clitic inversion (SUBJ-CL-INV) does not apply to NP's:
(130) * Part Jean?

Before going on to discuss the relevance of this rule to the question of derived structure, we point out that there are certain contexts in which both it and STYL. INV are applicable, e.g.:
(128) Quand partira Jean?
(131) Quand partira-t-il?

SUBJ-CL-INV applies only in non-embedded sentences, in the presence of interrogation and various kinds of adverbs (and in this way is very much like subject-Aux inversion in Englishi. Sentence (131) is an instance of SUBJ-CL-INV having applied, sentence (128) of STYL-INV. This is the case, since, as (129)-(130) show, SUBJ-CL-INV applies only to clitics, and as (124)-(125) show, STYL-INV applies only to full NP's. And, in fact, there are a number of other arguments which suggest that it would be undesirable to try to combine the two rules. ${ }^{25}$

As ciready noted, the environments of the two rules differ with respect to embedding and the presence of an overt wh-word. Particularly interesting is that "si" ("whether") doesn't count when present:
(132) Je me demande si Jean partira.
(133) * Je me demande si partira Jean.
just like:
(130) * Part Jean?
vs:
(129) Part-il?

Secondly, there is a restriction on inversion with "pourquoi," 26 but only with respect to STYL-iNV:
(134) * Pourquoi part Jean?
(135) * Je me demande pourquoi part Jean.
(136) Pourquoi part-il?

Third, only STYL-INV is affected by following complements:
(137) Je me demande quand Jean mangera la soupe.
(138) * Je me demande quand mangera Jean la soupe.
(139) * Je me demande quand mangera la soupe Jean.
(140) * Quand mangera Jean la soupe?
but:
(141) Quand mangera-t-i! la soupe?

Alternatively, if these facts were to be handled by an output constraint on sequences of NP's, they could be used as a further argument against NP-status for the subject clitics.

Fourth, and most important, the two inversion rules do not in general place the subject in the same position:
(142) Que voulait-il faire?
(143) Que voulait faire Jean?
(144) * Que voulait faire-( t )-il?
(145) * Que voulait Jean faire?

Finally, we note the difference between:
(146) Quand partira-t-elle?

* Quand partira elle?
and:
(147) Quand partira Evelyne?
* Quand partira-t-Evelyne?

Phonologically, the sequence 'verb+subject clitic' differs from the sequence 'verb + subject NP' precisely as the sequence 'subject clitic + verb' differs from the sequence 'subject NP + verb:'
(108) Ils aiment nager.
vs:
(107) Mes amis aiment nager.

In other words, the postposed subject clitic retains the same extra degree of attachment to the verb that it had when preposed. This observation is borne out by consideration of the other kinds of evidence previously cited. i:r example, the postposed subject clitic can neither be modified:
(148) * Partiront-ils deux?
nor separated from the verb:
(149) Quand partira donc Jean?
(150) * Quand partira-donc-il?
nor conjoined:
(151) * Partiront-il et elle?
nor contrastively stressed:
(152) * Partira-t-il/?
(Sentence (152) is grammatical with normal phrase-final stress on "il;" i.e., the inability of clitics to be stressed is not a phonetic fact.)

Very similar to these observations abol: postposed subject clitics are the following: French also has, in positive irferatives, postposed object clitics:
(152a) Fais-le.
Parle-leur.
which possess all the properties of clitics so far discussed. Truncation is impossible:
(153) Vas-y.

* Va-y.
as is modification:
(154) * Tue-les deux.

Ne tue qu'eux deux.
separation from the verb:
(155) Lave bien la voiture.

Lave-la bien.

* Lave-bien-la.

Parlez souvent à votre prof.
Parlez-lui souvent.

* Parlez-souvent-lui.
conjunction:
(156) * Tue-le et la.
and contrastive stress:
(157) * Parle-lui,' pas à Paul.
(Again, normal phrase-final stress falls on the clitic with no difficulty.) This implies that the sequence 'verb + object clitic' is different in kind from the sequence 'verb + object NP'. But 'verb + object $N P^{\prime}$ is a string presumably dominated by the node VP; therefore, 'verb + object clitic' must not be dominated directly by VP. Consequently, the string 'object-clitic + verb' , which possesses all the same properties, must not be dominated by VP. Given the kinds of adjunction availabie to us, we conclude that the sequence 'object clitic + verb' is itself a verb.

Section B
Part III
Another possible type of argument that would bear on the question of the derived constituent structure of 'object clitic + verb' sequences would consist in showing that 'object clitic + verb' acted as a verb with respect to some transformation. Consider the transformation SUBJ-CL-INV discussed earlier. This transformation has the effect of inverting subject clitic and verb; its structural description will certainly mention the node V , and also must in some way be able to refer to subject clitic (as distinct from subject NPP). Let us assume for the purposes of exposition that the appropriate symbol is SCL. Then we can at least say that the rule contains some sub-part . . SCL V. . . and has the effect of producing the string . . . $Y_{j}$ SCiL. . . .

The operation of SUBJ-CL-INV is unaffected by intervening object clitics:
(158) Le feras-tu?

Leur parleras-tu?
Me le donneras-tu?
If these object clitics were already in pre-verbal position at the time of the application of SUBJ-CL-INV, then the rule as stated above should apparently fail to apply, unless the string of object clitics ${ }^{28}$ plus verb was itself dominated by the node $V$, in which case the SD would be met. Another possibility would be to include a variable in the rule:


This variable could never be anything but object clitics (or "ne"), however, ${ }^{28}$ ' and would require imposing otherwise unnecessary restrictions on the rule to block sentences like:
(159) * Va partir-il?
or
(160) * Partir-il va?
depending on whether it is the clitic or verb which is actually moved. In the latter case, one would also need to block:

* Est-il dit que tout bon?
from
(162) II dit que tout est bon.

A third possibility would involve adding 'optional object clitic' to the SD of the rule: . . .SCL (OBJ-CL) V. . . . This would be equivalent to making the dubious claim that French would be simpler if subject-clitic inversion were restricted to sentences not containing "ne" or object-clitics.

We recall that this discussion was predicated on the assumption that SUBJ-CL-INV applied at a point in the derivation where object clitics were already in preverbal position, i.e., that it follows CL-PL. Actually, it would be sufficient to show that this was true of some object clitics. We argue on the basis of certain idioms containing clitics that this is so. Consider sentences like:
(163) II y a deux livres sur la table.
(164) Il y a eu une révolution voilà dix ans.
(165) Il y en a sur la table.

We claim that "il $y$ " ${ }^{\prime}$ is a set expression, in the sense that the " $y$ " corresponds to no complement, ${ }^{29}$ and therefore should not be considered ever to have occupied any other position. Sentences (164), (165) show that " y " is a clitic, since it precedes the auxiliary in compound tenses 30 and can occur between the clitics "il" and "en." On the other hand, it can cooccur with place adiverbials, as in (163), unlike other instances of " $y$ " which are felt to be related to place adverbials:
(166) J'y ai trouvé deux livres.
(167) J'ai trouvé deux livres dans le tiroir.
(168) *? J'y ai trouvé deux livres dans le tiroir. ${ }^{30 \prime}$

In addition, it cannot be omitted:
(169) * II a . . . . (in same meaning),
and has a unique behavior in that it can cooccur with "en," as in (165); this is generally impossible: ${ }^{30}$
(170) * J'y en ai trouvé deux.

Other examples of what we would claim are "lexical" clitics can be found in idioms like "en vouloir à quelqu'un," and in inherent reflexives like "s'évanouir," both of which will be discussed in more detail in later chapters. In all these cases, SUBJ-CL-INV applies freely:
(171) Y-a-t-il des livres sur la table?
(172) Pourquoi m'en veux-tu?
(173) A quelle heures'évanouira-t-elle?

We conclude that SUBJ-CL-INV is in fact a rule with respect to which 'object clitic + verb' acts as a verb.

A second example of such a rule is one we shall call Aux-deletion, and which will account for sentences such as:
(174) Paul m'a bousculé et poussé contre Marie.
(175) Paul l'a insulté et mis à la porte.

The derivation of these sentences must involve a deletion transformation; ${ }^{31}$ i.e., they could not be deep structures, for three reasons: first, the appearance of the past-participle in verbal uses is always triggered by an auxiliary; 32 second, a verb such as "mettre" normally requires a direct object, i.e., has the sub-categorization
$\qquad$ $N P ;$ " therefore the sequence "mis à la porte" would not be possible as an output of the lexical insertion rules. Sentence (175) must have been generated with a direct object, which was subsequently cliticized and then deleted. Finally, there are comparable sentences with passives:
(176) La fille me sera présentée par son frère et confiée par sa mère.
(177) Ce livre m'a été recommandé par Jean et offert par sa famille.

PS-generation of these as such is incompatible with the determination of grammatical relations in deep structure. ("Sa mère" is the subject of "confier," "sa famille" of "offrir.")

We are claiming, then, that sentence (174) is derived from a structure resembling:
(178) Paul m'a bousculé et m'a poussé contre Marie.
via deletion of the clitic and auxiliary "avoir."33 An important question is whether the deletion is effected in one or two steps, i.e., whether the clitic is deleted independently of the auxiliary. The answer seems to be negative. In sentences containing simple tenses, i.e., without an auxiliary, the second of two identical object clitics across a conjunction cannot be deleted:
(179) Paul la déteste et la considère comme fort bête.
(180) * Paul la déteste et considère comme fort bête.
(181) Paul te bousculera et te poussera contre Marie.
(182) * Paul te bousculera et poussera contre Marie.
(183) Jean vous parlera et vous pardonnera.
(184) * Jean vous parlera et pardonnera.

That is, there is no general rule of clitic-deletion across conjunctions. Nor can the
clitic alone be deleted in sentences with auxiliaries:
(185) * Paul l'a frappé et a mis à la porte.

There is a slight equivocation here, since the sequence 'conjunction + auxiliary' is not perfect: 34
(186) ? Paul a frappé Georges et a mis Jean à la porte.

But there is nonetheless a clear difference between (185) and (186). We conclude that the clitic is deleted along with the auxiliary in sentences like (174), (175).

Furthermore, the auxiliary in such sentences cannot be deleted independently of the clitic:
(187) * Paul l'a frappé et le mis à la porte.

It might appear that this sentence could be excluded on independent grounds, e.g., because of the impossibility of the sequence: 'clitic + past participie'. This looks less plausible, however, upon consideration of sentences like:
(188) Je le ferai lire à Jean et je le ferai déchirer par Paul.
(189) Je le ferai lire à Jean et déchirer par Paul.
where by the same reasoning as above, we conclude that "le ferai" has been deleted by some rule, probably the same one as in (174)-(177). Again, the clitic may not be left behind:
(190) * Je le ferai lire à Jean et le déchirer par Paul.

Here, though, the sequence "le + déchirer" cannot be excluded on any general grounds:
(191) Je vais le déchirer.

Apparently, then, clitic and auxiliary are deleted together, and neither can be deleted independently of the other. This strongly suggests that the sequence:
'clitic+verb' is itself dominated by the node V. (There is no evidence in French for saying auxiliaries are not verbs. $)^{34^{\prime}}$ Given the derived structure:

and a rule deleting a verb under identity with another verb across conjunction, the A/A principle would predict that in the environment:

the "maximal" $V$ is subject to deletion, thus explaining why sentences (187) and (190) are impossible. Furthermore, this analysis accounts for the deletion of the clitic in the absence of a clitic-deletion rule.

Even more strikingly, the derived structure:

combined with
the A/A principle, accounts for the impossibility of:
(192) * Paul l'a frappé et mis sa soeur à la porte.
(193) * Je lui ai parlé et écrit à sa femme.
(194) * Je lui suis dévoué et respectueux avec sa femme.
(195) * Elle s'est habillée et partie au travail.
in which a bare auxiliary has been deleted under identity with an auxiliary itself preceded by a clitic. Compare, e.g.:
(196) Je suis dévoué à mon ami et respectueux avec sa femme.
(197) Paul a frappé son ami et mis sa soeur à la porte.

Sentences (192)-(195) are excluded because a $V$ identical to the lower $V$ in the configuration
 could not be deleted by virtue of the $A / A$ principle.

The deletion rule we have been considering has, in fact, significant implications for linguistic theory. The examples we have given of the clitic deleting along with the verb were all cases in which the two clitics in question were identical in all respects, as in (174), (175). Consider now the problem of what happens if the two clitics differ in case; e.g.:
(198) Paul l'a frappé et lui a donné des coups de pied.

On the left of the conjunction is the accusative clitic "le," on the right the dative "lui;" they have all other syntactic features in common. In this case, deletion may not take place:
(199) * Paul l'a frappé et donné des coups de pied.

If we change the clitics to first or second person or reflexive, however, the resulting sentence is, for most speakers, grammatical: 35
(200) Paul nous a frappés et donné des coups de pied.
(201) On sait que la police t'a frappé et donné des coups de pied.
(202) * Paul la fera gifler par Georges et donner des coups de pied par Jean.
(203) Paul te fera gifler par Georges ;:t donner des coups de pied par Jean.
(204) Paul s'est fait gifler par Marie et donner des coups de pied par Pierrette.
The difference between first and second person and reflexive clitics on the one hand, and third person clitics on the other, is exactly that the former happen to
have the same phonological shape in both accusative and dative, i.e., that 'me,' 'te,' 'nous,' 'vous:' 'se'-- serve both functions. Third-person clitics, however, have distinct phonological shapes, e.g., "le" (accusative), "lui" (dative), which is sufficient to prevent deletion.

This implies, first, that this deletion rule, for the purposes of determining identity, disregards case ${ }^{36}$ (because of (200), (201), (203)), and more significantly, that it takes into consideration phonological identity. ${ }^{37}$ That is, in order to distinglish (199) from (200), this syntactic rule must be sensitive to whether there is any difference in phonological representation between the two case forms of the pronoun in question. This means that linguistic theory must countenance syntactic rules having the power to refer to phonological information. 38

## Section C

Part 1
Having considered the rule of CL-PL from the point of view of derived structure, we turn to the question of what exactly it moves. We saw earlier that modified pronouns could not occur in clitic position, and that the dative clitic could not be preceded by the dative preposition "a". This latter fact was interpreted to mean that the preposition could not be moved along with the pronoun. However, since the preposition "à" must be deleted anyhow:
(205) Paul leur parle.

* Paul à leur parle.
* Paul leur parle à.
it would be possible to say it was moved and subsequently deleted; the alternative is that it was left behind and subsequently deleted.

Given the facts about modified pronouns, the first possibility would amount to saying that CL-PL moved only bare pronouns, with the single exception here. The alternative would necessitate finding some explanation for the non-appearance of "à" post-verbaliy, which seems somewhat more desirable, ${ }^{39}$ since there is no case in French of an "a" not part of a prepositional phrase. In particular, there are no sentences with "a" comparable to:
(206) On me court après.

If we now consider sentences like:
(207) Je leur parlerai à tous.
(208) Je leur donnerai des livres à tous. ${ }^{39}$
it is clear that the optimal formulation of CL-PL would have the dative clitic moved independently of the preposition "a." In this way, (207), (208) will be derived just as:
(209) Je les verrai tous.

The mechanism deleting the "a" in (205) will be sensitive to the presence of another morpheme within the prepositional phrase; in effect, only bare "à"s will be deleted.

Notice that this allows us to account for the following assymmetry:
(210) Je les vois tous.
(211) Mes amis, que je vois tous. . . .
(212) Je leur parle à tous.
(213) * Mes amis, à qui je parie à tous. . . .

If CL-PL moved "a'" + Pro, then it would in that way resemble wh-preposing, and it would be difficult to account for the contrast between (212) and (213).

As far as application to accusative and dative clitics is concerned, we can therefore say that CL-PL moves only bare pronouns, specifically Pro-NP's. We have yet to consider two other clitics which occur in object-clitic position, " $y$ " and "en." The clitic " y " corresponds either to verbal complements of the form: " $\mathrm{a}+\mathrm{NP}$ " or to locative adverbials:
(214) J'y répondrai, à tes questions.
(215) J'y pense, à cette fille.
(216) J'y ai rencontré Jean, à Paris.

In some cases, " $y$ " seems to be in complementary distribution with dative clitics: ${ }^{40}$

$$
\begin{aligned}
& (217) \text { * Je leur répondrai, à tes questions. } \\
& (218) \text { Je leur répondrai, à tes amis. } \\
& (219)^{*} \text { J'y répondrai, à tes amis. }
\end{aligned}
$$

with respect to animate/inanimate. However, sentence (215) shows that " $y$ " can, at least for most speakers, refer to animates, and sentences like:
(220) Je leur ferai prendre l'air. à mes vêtements.
(221) Marie lui a donné un coup de fer, à mon pantalon.
show that the dative clitics can refer to inanimates. We shall not be concerned
 shall claim is the Pro-PP quality of " y ."

The fact that " $\gamma$ " can replace locatives, as in:
(222) J'ai trouvé ton livre sur la table.

J'y ai trouvé le mien aussi.
suggests immediately that " $y$ " might be a Pro-PP rather than a Pro-NP. On the other hand, especially in cases like:
(214) J'y répondrai, à tes questions.
one might try to derive " $\gamma$ " parallel to the dative clitics, i.e., by saying it is a ProNP, but with different features from the datives. One could then handle the problem of the non-appearance of "à:"
(223) * Paul à y répondra.

* Paul y répondra à.
by deleting it arter its complement has been moved away by CL-PL. This would fail to account for the difference between:
(224) Pau! leur répondra à toutes. (aux filles) Paul leur obéira à tous. (aux officiers)
(225) * Paul y répondra à toutes. (aux questions)
* Paul y obéira à tous. (aux ordres)
vs.:
(226) Paul les comprend toutes. (les questions)

We can account for the ungrammaticalness of (225), however, if " $y$ " is a Pro-PP, since that would automatically exclude its cc-occurrence with "à."

There are, moreover, a number of other arguments in favor of this position. First, by considering " $y$ " a Pro-PP, we account for the fact that it does not vary according to singular/plural:
(227) J'y répondrai, à cette question. J'y répondrai, à ces questions.
vs. (228) Je lui répondrai, à cette fille. Je leur répondrai, à ces filles.
(229) Je la vois. Je les vois.
since we do not expect PP's to be marked for number. Similarly, if " $y$ " were just like "lui" except for some feature or features, we would have difficulty explaining why it, but not "lui," can refer to first or second person pronouns: 41
(230) Je pense à toi, et $j^{\prime} צ$ p penserai toujours.
(231) * Je pense à toi et je penserai toujours à lui.

Third-person pronouns can never refer to pronouns of another person; by calling " $y$ " a Pro-PP, we succeed in eliminating the apparently exceptional status of sentence (230), since PP's are not subject to being assigned features of person.

Similar arguments can be constructed in favor of the prepositional-phrase character of "en." In general "en" corresponds to "de"+NP :
(232) J'ai parlé de ma maison.
(232a) J'en ai parié.
(233) Je vois le toit de la maison.
(233a) J'en vois le toit.
Significantly, "en" may not cooccur with "de," even if "tous" is present:
(234) * J'en ai parlé de toutes. (mes maisons)
(235) * J'en vois les toits de toutes. (les maisons)

Sentences (234) and (235) are parallel to (225) and contrast with (224). This siggests that it would be incorrect to consider 'en' a Pro-NP. That is, the derivation of (232a) is not: J'ai parlé de Pro $\longrightarrow \quad$ CL-PL $\longrightarrow$ Je Pro ai parlé de $\longrightarrow$

Je Pro ai parlé $\longrightarrow$ J'en ai parlé , despite the fact that both the deletion of 'de' (which would presumably be parallel to the deletion of 'a' in (205)) and the spelling out of the pronoun as 'en' (e.g., some ad-hoc feature could be added to pronouns following 'de'; in clitic position such pronouns would be spelled out appropriately.) provide no special technical difficulties.

If the derivation of (232a) were as described above, then we would be unable to account for the ungrammaticality of (234), since we would expect the deletion of 'de' to be blocked in the presence of 'tous', much as the deletion of 'a' is blocked in (234). By considering 'en' a Pro-PP, we automatically exclude it from cooccurring with 'de' in this construction.

Furthermore, like " $y$," and again unlike accusative and dative clitics, "en" is invariant with respect to number:
(236) J'en ai déjà parlé, de ma maison. II en parle tout le temps, de ses problèmes.
and can refer to a non-third-person pronoun:
(237) II a parlé de toi, et il en a dit du bien.

Another use of "en" is in sentences of the following sort:
(238) Paul a deux soeurs; moi, j'en ai trois.

Paul a une grande maison; moi, j'en ai une petite.
Paul a un chat; moi, j'en ai plusieurs.
There is some evidence that there is really a "de" + Pro at a more abstract level of representation:
(239) Paul en a deux de soeurs.
(240) J'en ai plusieurs, de chats.

A complete analysis of this construction is far from clear, and there are many problems. 42 Nonetheless, we shall assume that "en" in this usage also corresponds at some level of representation to "de + Pro," noting that this is in fact the null assumption. The burder of proof would lie on anyone claiming that there happened to be a clitic not derived from "de + Pro," but spelled out as "en" also. In particular, we shall see below that all the uses of "en" are subject to the same movement constraints.

By considering "en" a Pro-PP, we can in addition account for its failure to trigger past-participle agreement:
(241) J'ai mis la fourchette sur la table.

Je l'ai mise sur la table.
(242)

J'ai mis des fourchettes sur la table.
J'en ai mis sur la table.

* J'en ai mises sur la table.

A past-participle agrees in gender with a direct-object clitic (and otherwise preceding direct objects) but not if the clitic is "en." This would follow from the assumption that PP's are not marked for gender (jusi as they were seen not to be marked for number and person above).

Most significantly, considering "en" a Pro-PP allows us to account for certain otherwise ad-hoc constraints on CL-PL in terms of a much more general restriction on the movement of prepositional phrases. Consider the following paradigm:
(243) Jean voit des filles et moi, $j$ 'en vois aussi.
(244) Jean voit les filles et moi, je les vois aussi.
(245) Jean parle aux filles et moi, je leur parle aussi.
(246) * Jean parle à des filles et moi, j'en parle aussi.

In fact, there is no way to construct a grammatical sentence parallel to (243) in the way that (245) is parallel to (244). Clearly, stating that "en" has no dative form is inadequate. The question is why? Extending ihe range of data, we see that the impossibility of (246) is part of a more general constraint on CL-PL: it cannot move "en" out of a structure in which "en" is dominated (not necessarily immediately dominated) by the node PP. Thus:
(247) J'en vois trois. (de filles) ${ }^{43}$

* J'en parle à trois.
* J'en parle de trois.
* J'en tirerai sur trois. etc.

The same is true of the "en" corresponding to a NP-complement, as in: 44
(248) J'en connais l'auteur. (du livre)

* J'en parle à l'auteur.
* J'en tirerai sur l'auteur.
* J'en jurerai contre l'auteur.

This constraint on the movement of "en" could of course be stated as an ad-hoc restriction on the rule of CL-PL, but even internal to French it is evident that that would be to miss an important generalization, namely that other movement rules, e.g., wh-preposing and cleft-formation, are subject to very similar restrictions. Compare (248) with the following sentences: 45
(249) De qui connaissez-vous le père?

* De qui penses-tu au père?
* De qui as-tu juré contre le père?
(250) Voilà la fille dont je connais le père.
* Voilà la fille dont je parlerai au père.
* Voilà la fille dont j'ai juré contre le père.
(251) C'est de ce livre-là que je connais l'auteur.
* C'est de ce livre-là que j'ai parlé à l'auteur.
* C'est de ce livre-là que j'ai juré contre l'auteur.

Evidently, there is a general restriction in French against moving "de + NP" complements out of prepositional phrases, although tney apparently can be moved from non-prepositional phrases, e.g., direct objects. As expected then, movement is also permitted from subject position and from other non-prepositional predicate positions:
(252) Le pied en est cassé. (de la table) On en a nommé Jean président. (de l'organisation) J'en croyais Jean l'auteur. (du livre) J'en croyais Jean capable. (de faire cela) ${ }^{46}$
(253) Voilà la table dont le pied cassera. C'est de ce livre-là que l'auteur est connu. De quel pays l'a-t-on nommé président?

The generalization that the same kind of movement restrictions exist for prepositional phrases with "de," with respect to wh-preposing and cleft-formation, and for "en," with respect to clitic-placement, constitutes a very strong argument that we have been correct in claiming that "en" is a Pro-PP. At the least, we can now say that these constraints need be stated only once in the grammar of French, i.e., as a general restriction on the movement of prepositional phrases.

It may be, however, that even a deeper leve! of explanation can be achieved. Specifically, this movement restriction in French would seem to be subsumed under the language-independent " $A$ over $A$ " principle proposed by Chomsky, here applied to the category PP. In this way, we might be able to explain why these prepositional phrases are subject tc movement transformations when they are complements of bare NP's, but not when complements of an NP itself embedded in a higher PP. Hence, we would be able to account for the otherwise inexplicable fact that the learner of French is capable of extracting such a constraint from the data, a feat all the more improbable given that the only relevant evidence is of the negative kind. In other words, this movement constraint need not be stated at all in the grammar of French, but would be given by linguistic theory as a particular case of the more general A/A principle.

Conversely, we note that the existence of such a constraint in French is
itself justification for the A/A principle, in particular as it is an example of a category different from the category NP, which has been the focus of previous discussions of the principle. ${ }^{47}$ We recall that earlier we discussed examples of the A/A principle holding with respect to the category V .48

Returning to the specific claim about "en" which we are making, we conclude that "en" (as well as " y ") is a Pro-PP, and therefore that CL.PL in moving them is moving only bare pronouns. Combining this result with the earlier argument that the derivation of dative clitics involves movement of the pronoun only, and with the facts about the non-cliticization of modified pronouns, we see that CL-PL never moves any but bare pronouns. In the next section we shall consider certain details concerning the environments from which these bare pronouns can be extracted.

## Section C

Part II
Up until now, we have been using examples of dative clitics clearly associated with complements of the form: "a" + NP, as in:
(257) je parle à Jean.
(258) Je lui parle.
(259) Je donnerai ces livres à Jean.
(260) Je lui donnerai ces livres.

We have argued that these clitics are placed in pre-verbal position by a movement transformation called CL-PL, and that the associated "à" is left behind and later deleted, except in the presence of another morpheme under the same PP-node. The derivation of (258) is roughly: Je parle à lui $\longrightarrow$ Je lui parle à $\longrightarrow$ Je lui parle.

We should like to raise the question: are there any cases of the dative clitic arising through movement of a pronoun directly preceded by a preposition other than "à"? There are numerous examples in which the answer is clearly no, in the sense that with another preposition, no corresponding sentence with a clitic is possible at all; e.g.:
(261) Je jure contre lui.

* Je lui jure contre.
* Je lui jure.
(262) Je remplacerai Jean par Paul.
* Je lui remplacerai Jean par.
* Je lui remplacerai Jean.
(263) Je discuterai de lui.
* Je lui discuterai de.
* Je lui discuterai.

There are, however, certain contexts in which the dative clitic might be thought not to have been derived from an "à $+N P$ " complement. We shall argue that in each case there are compelling reasons for deriving the clitic from just this kind of complement, despite any difficulties that might ensue, and that consequently the rule of CL-PL must be constrained so as not to apply to any pronoun preceded by a preposition distinct from "à." 51

For many speakers, it is the case that of the following two approximately synonymous sentences, the second is felt as "popular," the first not: 52
(264) Je construis une maison pour Jean.
(265) Je construis une maison à Jean.

The corresponding sentence with clitic, moreover:
(266) Je lui construis une maison.
is not felt as "popular;" i.e., (266), in this sense, seems to correspond more closely to (264) than to (265). One might therefore be tempted to extend CL-PL so as to derive (266) from a structure approximating:
(267) Je construis une maison pour lui.

The "pour" would presumably then be deleted in much the same way as "à." 53 Notice, however, that this analysis would still have to have (266) derivable from a structure resembling:
(268) * Je construis une maison à lui.
i.e., it would predict that (266) was structurally ambiguous. The fact that (268) is ungrammatical shows that the "à"-complement is not of thee type occurring with "penser;"
(269) Je pense à lui.
(270) * Je lui pense.

This means that CL-PL must be allowed to apply to (268), yielding (266). Thus an analysis which allows CL-PL to apply to "pour"-complements does not generate any sentence not already generable, but merely accounts for the stylistic differences among (264), (265), (256).

There is, however, a strong syntactic argument to the effect that increasing the pcwer of CL-PL in this way would be ill-conceived. Consider sentences such as:
(271) Je leur parle à tous.
(272) Je leur donnerai des livres à tous.

These are derived via CL-PL from structures containing a prepositional phrase of the form: "à" + "tous" + Pro (abstracting away from the problem of the exact position of the quantifier at the time of application of CL-PL). CL-PL removes the pronoun, leaving behind "àtous," in which case the "à" fails to delete. If CL-PL were extended to extract pronouns from PP's containing prepositions other than "a," then we would expect to find sentences with these prepositions similar to (271) or (272). In particular, we would expect to find sentences like:
(273) * Je leur construirai pour tous de très grandes maisons.
parailel to:
(274) Je construirai de très grandes maisons pour tous mes amis.
(275) Je leur construirai à tous de très grandes maisons.
(276) Je construirai de très grandes maisons à tous mes amis.

Sentence (275) is derived from a structure resembling that underlying (276), but with "mes amis" replaced by the third person plural pronoun. The pronoun is moved to clitic position by CL.PL, where it is spelied out as "leur." The preposition and quantifier are left behind; the presence of the quantifier "tous" prevents the deletion of "à." But now consider (274): if we replace "mes amis" by the same pronoun as before, and if CL-PL is in fact applicable to pronouns in the environment, "pour ___," then CL-PL should apply to the string "pour" + "tous" + Pro, extracting the pronoun, and leaving behind the string: "pour" + "tous." The "pour" should then fail to delete, just as the "a'" fails to delete in (275). The result. should be (273), which is, however, ungrammatical. This contrast between (273) and (275) is inexplicable in a theory which derives dative clitics from "pour"-complements. On the other hand, in a theory which restricts the extraction of dative clitics to "à"complements, the problem never arises. Sentence (275) is derived straightforwardly, while (273) is excluded, since "leur" could have come only from "à"+Pro, and since sentences with both types of complement are excluded with "construire."

Further evidence for not deriving dative clitics from "pour"-complements comes from semantic considerations. There seems to be a slight difference in meaning between (264) and (265). In some sense, the construction with "à" implies a kind of direct connection between the subject of the sentence and the object of "a" which is not implied by the "pour"-construction. Consequently, of the following two sentences:
(277) Je vais acheter une voiture à ma future femme.
(278) Je vais acheter une voiture pour ma future femme.
only the second is appropriate if the speaker has not yet chosen his wife-to-be. Similarly, the sentence:
(279) J'achète des jouets aux petits-fils de mes petits-fils. is very odd unless the speaker is at the head of a huge family-tree. "Pour" would be more natural. In the same vein, the sentence:
(280) J'achète cette pierre tombale à mon grand'père, qui est mort il y a 10 ans.
suggests extra-sensory capabilities in a way which the following does not:

J'achète cette pierre tombale pour mon grand'père, qui est mort il y a 10 ans.
Significantly, the corresponding sentences with dative clitics seem to have the same implications as the sentences with "a." Thus:
(282) Je vais lui acheter une voiture.
(283) Je leur achète des jouets.
(284) Je lui achète une pierre tombale.
have the same requirements for appropriateness as (277), (279) and (280), respectively, again underlining the undesirability of deriving dative clitics from "pour"complements.

We note in passing that similar distinctions seem to exist in Englisin with rather different constructions, e.g.:
(285) I'm trying to find a ring for my future wife. I'm trying to find my future wife a ring.
(286) I just bought some toys for my still-to-be-conceived grandchildren.
? I just bought my still-to-be-conceived grandchildren some toys.

A third argument against deriving dative clitics from "pour"-complements depends on sentences with the so-called "detachment" intonation:
(287) II est parti, Jean.
(288) Je l'ai déjà vu, ce film-là.
(289) Je ne lui ai jamais parlé, à ton frère.

Without providing a detailed analysis of these constructions, we point out that there is an important correlation between them and the facts we have been discussing:
(290) Je leur en construirai, à mes amis.
(291) * Je leur en construirai, nour mes amis.

If the dative clitic could be derived from either "à"- or "pour"-complements, it would be difficult to see how these two sentences could be distinguished. Given a theory in which such clitics came only from "à"-complements, however, there is a rather natural way of accounting for these facts. Let us suppose that at some point in the derivation of these sentences we have the structure: $s^{\prime} s^{1} \ldots c^{1}$ . . ${ }_{S}{ }^{C}{ }_{S}$ where " $C$ " is the constituent which appears to the right of the comma, and $C^{1}$ is identical to $C$ except that the lexical element in $C$ has been replaced by the appropriate pronoun. The inner sentence is then subject to the usual transformations, in particular to CL.PL. 54 In this way, (290) is derived from a structure
containing " . . à eux, à mes amis," to which CL-PL applies, yielding: ". . .leur . . . . à mes amis." Sentence (291) is excluded, since it would have had to come from: * ". . .à eux, pour mes amis," which violates the conditions on detachment we have set up.

This way of considering the "detachment" construction works well, too, with respect to the "faire"-construction discussed in chapters 3 and 4. We show in chapter 3, on the basis of considerations other than clitic-placement, that the following cognitively synonymous sentences are derived from distinct deep structures:
(292) Je ferai lire ce livre à Jean.
(293) Je ferai lire ce livre par Jean.

A similar sentence with a clitic is also possible:
(294) Je lui ferai lire ce livre.
and aligns with (292) as far as differences in emphasis/focus between (292) and (293) are concerned. We thus expect, and get:
(295) Je lui ferai lire ce livre, à Jean.
but not:
(296) * Je lui ferai lire ce livre, par Jean.

Sentence (296) is excluded, given the above analysis of detachment and the nonderivation of clitics from "par"-complements, which fits in perfectly with what we claimed above for "pour." Similarly, we correctly predict the contrast:
(297) Je leur ferai lire ce livre à tous.
(298) * Je leur ferai lire ce livre par tous.

Sentence (298) is impossible because dative clitics never originate in "par". complements, only in "a'"-complements. 55

The superficially most appealing case for deriving dative-clitics from prepositional complements other than "à"-complements is no doubt the following:
(299) Jean court après Marie.
(300) Jean lui court après.
(301) * Jean court après à Marie.
(302) La pierre tombera sur Jean.
(303) La pierre lui tombera dessus.
(304) * La pierre tombera dessus à Jean. ${ }^{56}$

Here we have a case in which we have verbs cooccurring with either an "après"or a "sur"-complement, and not with an "à"-complement, yet able to be preceded by a dative clitic. Thus, these verbs differ crucially from the constructions with
"pour" and "par" discussed earlier, where "à" was possible in addition to "pour"/ "par."

One might then be tempted to extend CL-PL to operate in the environments: "après. . . ," "sur. . . ," extracting the pronoun, which will be spelled out as a dative clitic, and leaving behind the preposition. In these cases, the preposition would not be deleted. This would account for the impossibility of:
(305) * Jean lui ccurt après Marie.

Nonetheless, we claim such an analysis would be incorrect, on the basis of the contrast: ${ }^{57}$
(306) Je leur parle à tous.
(307) * Jean leur court après toutes.
(308) * Les pierres leur tomberont sur tous.

If CL-PL applied equally well to all three types of complement, there would be no reason for a difference between (306) and (307)-(308). Rather, we claim that (300) must be derived from a structure resembling:
(309) * Jean court après à lui.
despite the ungrammaticality of (301). This is confirmed by the fact that many speakers accept:
(310) ? Jean leur courra après à toutes.
(311) ? Les pierres leur tomberont dessus à tous.
(312) Je leur tirerai dessus à tous.

The overt "a'" in these sentences shows that the dative-clitic was not derived directly from the "après"/"sur"-phrase. We leave open the question of how to rule out (301) and (304), as well as that of whether they are possible deep structures.

A construction which seems to us to have a lot in common with that just discussed, and which also has some properties which might suggest deriving dative clitics from other than merely "a'"-complements is that of inalienable possession, in, e.g.:
(313) Je lui ai marché sur le bras.

For most speakers, the dative clitic cannot be replaced by an "à"-phrase, but only by a "de"-phrase: ${ }^{58}$
(314) *? d'ai marché sur le bras à Paul.
(315) J'ai marché sur le bras de Paul.

Again, one could take this to suggest deriving dative clitics from certain kinds of
"de"-complements. We argue that such an inference is unjustified.
Consider first the comparable sentences with the "inalienable" as the direct obiect:
(316) Je lui ai cassé le bras.
(317) J'ai cassé le bras à Paul.
(318) J'ai cassé le bras de Paul.

Here, there is no sharp difference as in (314)-(315). Sentence (317) is somewhat less good than the others. There is, however, more than just a superficial difference in preposition between (317) and (318). The former has the structure: V - NP - PP ; the latter the structure: V - (NP de NP $)_{N P}$. This can be seen from their behavior in clefts:
(319) C'est le bras que j'ai cassé à Paul.
(320) * C'est le bras que j'ai cassé de Paul.
(321) C'est le bras de Paul que j'ai cassé.
(322) * C'est le bras à Paul que j'ai cassé.
and in pronominalization:
(323) Je le casserai à Paul.
(324) * Je le casserai de Paul.

Sentence (317) is, then, of the type one would expect CL-PL to apply to. Sentence (318), to the contrary, is not; in fact. C.L.PL applying to a pronoun in the configuration: (NP de Pro) ${ }_{N P}$ would violate the A/A principle, which we have argued is otherwise quite valid in French. Notice in particular that a Pro-PP, "en," can be extracted, as expected, from the structure: NP( . . "en") NP . We know of no counter-examples to the above claim that Pro-NP's are not extracted from within other NP's by CL-PL; ${ }^{59}$ cf.:
(325) Paul a rencontré Lirı ami à moi hier.
(326) * Paul m'a rencontré un ami.

This suggests, then, that the clitic in (316) is derived from a structure like that underlying (317) rather than (318).

There is furthermore a slight difference in meaning between (3!7) and (318), with (316) aligning not unexpectedly with (317). Related to this is the fact that the choice of "a'//"de" is inoperative with certain verbs:
(327) Je vois le bras de Paul.
(328) * Je vois le bras à Paul.

As we would predict if the clitic were derived from the "a"-complement, the following is ungrammatical:
(329) * Je lui vois le bras.

The same is true if the object is not "inalienable:"60
(330) J'ai marché sur la voiture de Paul.
(331) * Je lui ai marché sur la voiture.
(332) J'ai cassé la voiture de Paul.
(333) * J'ai cassé la voiture à Paul.
(334) * Je lui ai cassé la voiture.

Finally, we note that the two syntactic tests used for "pour," "par," "après," etc. correlate exactly with the preceding observations:
(335) Je leur casserai le nez à tous.
(336) * Je leur casserai le nez de tous.
(337) Je lui casserai le bras, à ce type-là.
(338) * Je lui casserai le bras, de ce type-là. ${ }^{61}$

We conclude that the dative clitic in these constructions comes from an "a". complement, and, more generally, that there are no cases of dative clitics extracted from the environment: Prep ___ where "Prep" does not equal "à." We shall use this result as part of an argument about reflexives in chapter 5.

Footnotes to Chapter II

1. In positive imperatives, 'me' and 'te' appear as 'moi,' 'toi,' whether accusative or dative:
(a) 11 me regarde.
Regarde-moi.
II me parie.
Parle-moi.

See Schane (1967) for further discussion. It is not clear how one should treat the contrast:
(b) Donne-m'en.

Donne-moi-z-en. (popular)
2. The precise node within the NP under which they are generated is not relevant here. See Postal (1966) for argument that pronouns in English are a kind of article.
3. See Perlmutter (1968, p. 181) for a somewhat similar argument concerning clitics in Spanish.
4. We implicitly assume throughout this thesis that CL-PL is obligatory and that the ungrammaticality of (2) is due to the non-application of CL-PL. This is an oversimplification. See Kayne (forthcoming - a) for evidence that CL-PL is in fact optional and that (2) is ruled out by an output constraint. The conclusions of the thesis remain unchanged.
5. This is true independently of any particular analysis of this construction.
6. Post-verbal clitics in such a theory would presumably be derived transformationally from pre-verbal position.
7. Such sentences are acceptable with 'comma' intonation:
(c) Marie nous connait, nous.

See Section C, II of this chapter for some discussion of this construction.
8. See Section C, I for some comment on the fate of 'à.'
9. See Kayne (forthcoming - a).
10. PRO-DEL would also obviate the problems with L-TOUS discussed earlier.
11. In addition, we show in footnote 17, chapter 6, that the clitics in idioms such as 'en vouloir à qn.' are best considered not to have originated in object position in any sense. Such clitics would have to be marked with some ad-hoc feature to exempt them from the filtering mechanism. The advantage of the CL-PL analysis is that it provides a natural way of distinguishing 'iitherent' from 'noninherent' clitics, namely by straightforwardly generating the former in the base, the latter not.
12. One might be able to find empirical differences with respect to particular theories of pronominalization in French. Consider a sentence like:
(d) Je lui donnerai un portrait de Jean.

In the PRO-DEL hypothesis, the clitic 'lui' is generated in the base to the left of the NP 'Jean.' In the CL-PL hypothesis, it is generated to the right of 'Jean:'
(e) * Je donnerai un portrait de Jean à lui.
and moved over it by CL-PL. Depending on the mechanism and ordering of the pronominalization rule one might find that it was more compatible with, e.g., the CL-PL hypothesis. In the absence of any complete analysis of French pronominalization, we leave this question open.
13. Another possibility would be to show that there was some more general principle that triggered the deletion of NP's of which a pronominal copy was attached to the verb. This does not seem likely, however, in the light of sentences like:
(e) Pourquoi Jean partira-t-il?

In this regard, we note that in Spanish, clitic placement is rather different from French. Sentences such as:
(f) Le hablo a Juan.
are grammatical without any kind of 'comma' intonation.
14. There are marginal exceptions. Many speakers accept sentences like:
(I) II vauarait mieux n'en pas parler.
(m) Craignant d'en trop dire. . . .
$(\mathrm{n}) \quad$ II prétend $\mathrm{n}^{\prime} \mathrm{y}$ rien comprendre.
This phenomenon is limited to the clitics ' $y$ ' and 'en' before infinitives, and then only if there is no other clitic present:
(o) * II vaudrait mieux n'en pas lui parler.
(p) * II vaudrait mieux ne lui en pas parler.
(q) * Craignant de lui trop dire
(r) * Il a envie de ne la plus voir.
(s) * Il a envie de ne se pas taire.

The grammatical sentences corresponding to (o) - (s) are:
( t ) II vaudrait mieux ne pas lui en parler.
Craignant de trop lui dire. . . .
II a envie de ne plus la voir.
Il a envie de ne pas se taire.
where the clitic(s) may not be separated from the verb. In addition, some speakers accept:
vs. (v) * Pourquoi ne me pas juger?
where 'mal juger' seems to be treated as a compound, although:
(w) * Il me mal jugera.
is impossible.
Similariy, the negative particle 'ne,' which usually acts like a clitic:
(x) Jean, paraît-il, ne partira pas.

* Jean ne, paraît-il, partira pas.
and positions within the clitic sequence (v. section B, II):
(y) II ne te dira rien.
can be separated from the verb in infinitive constructions (this case is not at all marginal):
(z) Il a envie de ne rien dire.

II a envie de ne tout dire qu'à sa femme.
We note that all these 'exceptions' distinguish infinitives from finite verbs. This may be related to the fact that in Old French, clitics could not appear before infinitives at all.
15. Not all speakers accept (79). This observation makes less troublesome the
fact that 'à tout' does not seem to move:
(ab) J'ai répondu à tout.
(ac) * J'ai à tout répondu.
Similarly:
(ad) Je n'aurais répondu à rien.
(ae) * Je n'aurais à rien répondu.
Compare:
(af) J'ai tout dit.
(ag) Je n'ai rien dit.
Related to this is the observation that:
(ah) J'ai dit tout.
(ai) Je les ai vu tous.
require heavier stress on 'tout'/'tous' than (af) or (83), and that:
(aj) *? Je n'ai dit rien.
is very bad, although:
(ak) Je n'ai dit absolument rien.
(al) Je n'ai absolument rien dit.
are both grammatical. Sentences (ab) and (ad), however, are good without any stress at all, exactly as is:
(am) Je leur ai répondu à tous.
The parallelism among 'tous'/'tout'/'rien,' while not exact in every detail, holds up remarkably well (see also footnote 20).
16. Although it cannot be contrastively stressed, the clitic may occur in contrastive environments:
(an) Je lui parlerai volontiers, mais pas à sa femme.
The above is acceptable, in addition to:
(ao) Je parlerai volontiers à lui , mais pas à sa femme.
17. We omit discussion of 'on' and 'ce,' whicii are also subject clitics; both have a complex distribution which sheds no light on the issues at hand.
18. A number of these characteristics of clitics are pointed out in Gross (1968) and Schane (1967), as weil as in many traditional works. In general, we will not
attempt to give references to all the grammarians who noticed a particular fact, unless some claim was made as to its linguistic reievance. This implies that most of the specific references will be to more recent works. See the bibliography for a list of more traditional works on French grammar that have touched on the topics being considered in this thesis. Especially insightful in this regard are the works of Sandfeld (1928) and of Martinon (1927), which we have consulted extensively. In addition, Bissel's (1947) chapter on 'faire' was particularly useful.

18'. Subject clitics may, however, receive heavy stress in 'extra-linguistic' environments:
(aoa) Ils prétendent que. . .
Qui ça, ils?
For additional examples of this construction, see Sandfeld (1928, p. 2).
19. Similarly for the sequence: 'subject'+'object clitic:'
(ap) Mes amiś en parleront.
(aq) Ils en parleront.
(ar) Mes amis y vont demain.
(as) Ils y vont demain.
20. Here in fact lies another difference between object clitics and 'tout' (see

Section A, III). Truncation with 'tout' is optional before vowels:
(at) Je vais tout acheter.
(au) * Je vais les acheter.
Similarly,
(av) Je ne vais rien acheter.
(awi) * Je vais en acheter.
and:
(ax) Je vais tout $y$ mettre.
(ay) je ne vais rien y mettre.
(az) * Je vais les y mettre.
Again, this suggests that the derived structure of 'clitic+verb' is different from that of 'tout'/'rien'+verb. We recall that 'tous' is idiosyncratic with respect to the truncation rule (see footnote 1, chapter 1 ).

20'. Chomsky-adjunction would involve the creation of an additional $V$-node:

21. For some discussion, see Gross (1968, p. 52) and Ruwet (1969).
22. Also, certain clitic sequences are excluded entirely. See Perlmutter (1968) for a discussion of partially similar data in Spanish.
24. Subject clitics are distinct from object clitics with respect to position in the clitic sequence. They precede 'ne;' object clitics follow 'ne:'
(bc) II ne voit rien.

* $N(e)$ il voit rien.
(bd) II ne me dit rien.
* Il me ne dit rien.

Subject clitics also undergo different rules, e.g., SUBJ-CL-INV, as we shall see. More interestingly, they do not enter into any of the clitic output constraints:
(be) * Paul vous lui présentera.
Vous lui présenterez Paul.
(bf) * Vous vous me rappelez?
Vous me rappellerez demain.
25. The difference between STYL-INV and SUBJ-CL-INV was overlooked in Langacker (1965).

We note the contrast:
(124) * Je me demande quand partira-t-il.
(bg) Je me demande quand est-ce qu'il partira. (popular)
This suggests that 'est-ce que' is at least partially being treated as a unit, and would seem to correlate with the following observation by the excellent grammarian Martinon (1927): "Est-ce que est en réalité l'inversion de c'est que, mais tandis que c'est que amène nécessairement une explication, est-ce que, qui a pu avoir le meme but à l'origine, a pris un sens beaucoup plus général. . . ." (p. 131)

We do not discuss the derivation of sentences like:
(bga) Quand Jean partira-t-il?

Quand Jean voudrait-il partir?
but point out the important parallel with SUBJ-CL-INV (Conversely, this construction should not be related to STYL-INV, as in (128)). Like SUBJ-CL-INV, but unlike STYL-INV, the construction exemplified in (bga) may not be found in embedded questions:
(bgb) * Je me demande quand Jean partira-t-il.
nor in relatives:
(bgc) * Voila ce que Jean dira-t-il.
(125) * Voila ce que dirâ-t-il.
(123) Voila ce que dira mon père.

Furthermore, it can occur with 'pourquoi':
(bgd) Pourquoi Jean partira-t-il?
(136) Pourquoi part-il?
(134) * Pourquoi part Jean?
and in 'yes-no' questions:
(bge) Jean partira-t-il?
(129) Part-il?
(130) * Part Jean?
as weil as in certain non-interrogative environments depending on the presence of particular adverbs:
(bgf) Sans doute Jean croit-il que. . .
Sans doute croit-il que. . .

* Sans doute croit Jean que. . .

Finally, we have:
(bgg) * Quand Jean voudrait partir-il?

* Quand voudrait partir-it?

Quand voudrait partir Jean?
26. It is unclear how this is related to the preceding fact about 'si,' or to the non-application of STYL-INV in conditionals:
(bgh) Si Jean partait, Marie serait contente.

* Si partait Jean, Marie serait contente.

STYL-INV is likewise inapplicable in sentences such as:
(bgi) Je sais que Jean partira.

* Je sais que partira Jean.

27. Similarly,
(bh) Mettez-les-y. Mettez-les au coin.
(bi) Donne-nous-en.
Donne-nous à boire.
Donne-nous un livre.
28. As well as 'ne:'
(bj) Ne le feras-tu pas?
See Asselin (1968) for some discussion of 'ne,' as well as subject clitic inversion.

28'. Another possibility is that SUBJ-CL-INV should be stated as a rule moving a verb-group-initial clitic to the end of the verb-group, in which case there would be no sub-sequence SCL-V in the rule. If that were true, then clitics would clearly not be immediately dominated by VP (or NP), although the specific argument in the text based on SUBJ-CL-INV would be invalid. We note that this way of looking at SUBJ-CL-INV would be inconsistent with the demonstration that the rule moves the verb rather than the clitic.
29. We thus take the same position as Gross (1968, p. 40).
30. We consistently avoid the problem of how these clitics get to pre-Aux position. It is not clear that CL-PL is the vehicle. For one thing, CL-PL does not otherwise move pronouns already in clitic position. Nor will we consider exactly how these inherent clitics are represented in the lexicon.
$30^{\prime}$. If sentence (168) is possible at all, it is felt to correspond to a sentence with two place adverbials:
(bja) Dans la chambre, j'ai trouvé deux livres dans le tiroir.
In any case, no such feeling is associated with (163). The 'set' character of 'il $y$ a' can be seen even more clearly in sentences like:
(bjb) Il y a deux ans que je le fais comme ça.

30'. Some speakers, however, accept sentences like:
(bjc) Je m'y en souviendrai.
Interestingly, ' $y$ ' added to an idiom containing a lexical 'en' does not seem to produce a grammatical sentence:

$$
\begin{aligned}
& \text { (bjd) } \quad \text { * Je m'y en vais demain. (s'en aller) } \\
& \text { * On y en viendra aux mains. (en venir aux mains) }
\end{aligned}
$$

31. One might claim instead that some kind of conjunction reduction was involved. The argument would still go through, since it is the identity conditions under which the rule can apply, rather than its operation, which are crucial.
32. However, certain idioms like 'hem and haw' in English suggest there might be a need for some kind of 'leaking-down of features' mechanism:
(bk) John hemmed and hawed.
We are indebted to R. Dougherty for this observation.
33. We do not consider the independent problem of how the deep structure subject of 'pousser' is eliminated, nor whether there need be such a subject at all in deep structure.
34. See Martinon (1927, p. 261) for discussion. A perhaps even clearer argument can be constructed on the basis of sentences with gapping (v. Ross (forthcoming)). Parallel to (17c $\mathrm{c}_{\mathrm{c}}$ ), (175), we have:
(bi) Paul nous aurait engueulés et Jean insultés.
where it is clear that clitic+Aux are being deleted. Again, and parallel to (179)(184), there is evidence that no general rule of clitic-deletion exists in such environments:
(bm) * Paul nous engueulera et Jean insultera.
etc. Parallel to (185), we have:
(bn) * Paul nous aurait engueulés et Jean aurait insultés.
where here there is no independent reasen by which (bn) could be excluded.

34'. Similarly, the distinctive behavior of moda!s in English has no direct counterpart in French.
35. See Sandfeld (1928, p. 30) for numerous examples.
36. See Chomsky (1965, chapter 4, Part 2.2) for discussion of other instances of particular features being disregarded for the purposes of deletion.
37. An interesting question is whether such a rule couid refer to phonetic identity: if there were two clitics with distinct phonological representations, but identical phonetically (there is no such case in French), could the deletion take place? On the other hand, we note that the question of phonetic vs. phonological identity never arises for those speakers who reject (200)-(204), since for them the deletion rule may not disregard differences in case-marking. Furthermore, two phonologically/ phonetically identical clitics which differ only in gender (e.g., 'lui' = masculine or feminine dative sing.) could not possibly count as identical with respect to this deletion rule, since they would necessarily fail to meet the condition of coreferentiality (presupposed in the entire discussion).
38. No doubt there will be substantial restrictions on the kinds of rules having this power. For example, we might expect only very late, non-cyclic rules with identity conditions to display this property. Phonological information may also very well play a role in the kind of output conditions on clitics discussed in Perlmutter (1968).
39. See Ruwet (1969) for argument that 'a' has in fact a different status from locative prepositions.

39'. Similarly, we have:
(bna) Paul leur est fidèle à toutes.
See also fn. 59.
40. Everything said about ' $y$ ' in this thesis is limited to the standard language. In particular, in certain kinds of non-standard French, ' $y$ ' replaces 'lui' anywhere. (In some cases it even replaces 'le.') In such dialects we would expect neither the facts nor the conclusions about ' $y$ ' given here to be valid. Never having met a
speaker of such dialects, we will have nothing to say about them.

40'. See Sandfeld (1928, p. 52) and Grevisse (1964, p. 435 ).
41. There are restrictions on ' $y$ ' (and 'en') referring to first and second persons. For example:
(bo) *? Ton père m'a demandé d'y penser.
The important point is that there exist sentences like (230), but none like (231).
42. See Langacker (1965; 1966b) and Gross (1968) for discussion. We note that even in the superficially most simple case:
(bp) Paul a du vin et moi, j'en ai aussi.
Paul a des chats et moi, j'en ai aussi.
where it seems that the 'de' in question is actually in the surface structure, there are problems:
(bq) Paul a du vin rouge; moi, j'en ai du blanc.
(br) Il y en a des qui ne sont pas bons. (popular)
43. When extraction of this type of 'en' is possible, it is obligatory:
(bs) * Je vois deux.
The status of sentences like:
(bt) ? Je parle à trois.
is unclear. This may be related to:
(bu) Je les aime tous (les) deux.

* J'aime tous (les) deux.
vs.
J'aime les deux.
(bua) Je leur parlerai à tous les deux.
? Je parlerai à tous les deux.

44. Such NP-complements may he indefinitely long:
(bv) J'en ai lu la première partie du premier chapitre.
On en peindra le bout du pied gauche.
However, each sub-part must be of similar kind:
(bw) *J'en connais l'auteur du premier chapitre.
J'en connais l'auteur.

There are similar restrictions with 'dont' (also a pro-PP):
(bx) Voilà le livre dont je lirai la $1^{\text {re }}$ partie du premier chapitre.

* Voilà le livre dont je connais l'auteur du premier chapitre.

Apparently, the underlined 'de' in (bx) does not count as forming a PP-node which would block the extraction of 'dont.' There are other cases, too, in which either overt or presumed underlying 'de' does not block extraction. For example, for most speakers:
(by) J'en ai besoin d'un.
is possible, although:
(bz) *? J'en ai besoin du premier chapitre.
is not. Similarly, for many speakers:
(ca) J'en ai beaucoup de photos.
works, and with presumed underlying 'de,' so does:
(cb) J'en ai une photo.
These exceptions do not of course invalidate the generalization at issue, but seem rather to indicate that the notion PP needs to be refined. Sentence (bx) seems to involve analyzing the first ( $n-1$ ) parts of the NP into a single NP which itself bears an appropriate relation to the $n^{\text {th }}$. We leave these problems for further research.
45. What is possible, in the cases where extraction of 'de+NP' is blocked, is:
(cc) Au père de qui penses-tu?

Contre le père de qui as-tu juré?
(cd) C'est à l'auteur de ce livre-là que j'ai parlé. C'est contre l'auteur de ce livre-là que i'ai juré.
(ce) Voilà la fille au père de qui je parlerai.
Excluded by in independent constraint is:
(cf) * Voilà la fille au père dont je parlerai.
46. But:
(cg) Je croyais Jean un bon professeur.
*? J'en croyais Jean un. (v. Gross (1968, p. 127))
Extraction of 'en' from subject position is highly restricted:
(ch) J'en ferai partir trois.

* Trois en partiront.
(ci) J'en connais le frère.
* Le frère en est intelligent.

47. For more extensive discussion see Ross (1967a) and Chomsky (1964, 1968).
48. More precisely, we have to show that the derived structure is

with two distinct V -nodes. Our arguments earlier were actually all meant to justify the upper $V$-node. But clearly 'voit,' in 'Jean me voit.' and 'Il voit,' is a V . Furthermore, consideration of SUBJ-CL-INV and the rule that accounts for the placement of clitics in positive imperatives, shows that there must be some node, dominating the clitic, to which the transformation can refer. That there must be a rule of clitic-inversion for imperatives is shown by consideration of inherent clitics:
(ej) Va-t-en. Ne t'en va pas.

Since these do not come from non-clitic position, and yet show the usual change in position, one could not claim that CL-PL itself should be complicated to place clitics directly in their surface position in all cases. Therefore, there must be a rule inverting clitic and verb. Such a rule bears some formal resemblance to SUBJ-CL-INV, not only in that both invert clitic and verb, but also in that both apply only in the highest S . We leave open the question of whether it is the verb or clitic that is moved. See Emonds (1969) for discussion of the distinction between rules that apply only on the highest $S$ and rules that apply throughout the tree.
51. Notice that we are not claiming that all dative clitics come from 'à+NP' complements. We leave open the possibility that some, e.g., ethical datives, correspond to no complement at all. Similarly, if one wanted to call the non-accusative clitic in:
(ca) Je me l'imagine.
a dative, then it would be a case of one not corresponding to an 'à NP ' complement (see chapter 5).
52. See Gross (1968, p. 35 ).
53. We certainly would not want to have CL.PL move 'pour.' Recall the
arguments in preceding sections to the effect that CL-PL moves only bare pronouns.
54. This analysis would also account for sentences like:
(ct) J'en parlerai tout de suite, de ce qui s'est passé hier. J'y pense tout le temps, à cette fille.

For further discussion of 'detachment' see Gross (1968).
55. This will be true even in cases where the dative clitic, but not the 'a'complement, is grammatical. For example, there is a restriction for most speakers on the 'faire'-construction when the object of the embedded sentence is animate, and partially depending on the verb:
(cu) Je ferai connaître Marie à Paul.
(cv) *? Je ferai embrasser Marie à Paul.
(cw) Je ferai embrasser Marie par Paul.
For many, however, the dative clitic is possible:
(cx) Je lui ferai embrasser Marie.

This suggests that (cv) must be generated and somehow ruled out if the 'à'complement is not cliticized. For those speakers who accept (cv), the restriction is limited to the embedded object being first or second person and reflexive:
(cy) * Marie se fera embrasser à Paul.

* Marie te fera embrasser à Paul.
* Paul voulait me faire embrasser à Marie.
(In each case 'par' is all right.)

56. The alternation 'sur'/'dessus' is predictable. For discussion see Ruwet (1969).
57. All the arguments involving 'tous' in this chapter work equally well with 'chacun:'
(cz) Je leur parlerai à chacun.
(da) Je leur construirai à chacun une très jolie maison.
(db) * Je leur construirai pour chacun une très jolie maison.
(dc) * Je leur tirerai sur chacun.
(dd) * Je leur courrai après chacune.
(de) Je leur casserai le nez à chacun.
(df) * Je leur casserai le nez de chacun.
(dg) Je leur répondrai à chacune. (les filles)
(dh) * J'y répondrai à chacune. (les questions)
(di) * J'en parlerai de chacune.
'Chacun,' however, is in general not as natural as 'tous' when detached from its NP. Similarly, although R-TOUS applies to 'chacun' as well, 'chacun' moves less freely than does 'each' in English. L-TOUS barely applies to 'chacun' at all for some speakers.
```
'Chacuri' provides an interesting contrast to 'tous' in other ways:
    (dj) Tous ces garçons.
    * Tous de ces garcons.
    (dk) Chacun de ces garçons.
    * Chacun ces garçons. . . .
    (dI) Paul les embrassera toutes.
    Paul les embrassera chacune.
    (dm) * Paul en embrassera toutes.
    * Paul en embrassera chacune.
```

Compare:
(dn) Aucun de ces garçons.

* Aucun ces garçons.
(do) Paul n'en voit aucun
* Paul ne les voit aucun.

58. These examples are to be understood as in standard French, where NP's of the form: 'Det-N - à - NP' as possessives are extremely limited in distribution. In dialects which have 'le bras à Paul' = 'le bras de Paul'' the arguments are still valid, but the presentation would be vastly complicated.
59. See chapter one for some discussion of the relevance of sentences like (dI) to this claim.

Pro-NP's can, however, be moved around within other NP's: The logic of the arguments in this section leads to the conclusion that possessive adjectives are derived from 'a'-complements, even in standard French, which has the following paradigm:
(dp) Le livre de Paul. . . .

* Le livre à Paul. . . .

Son livre. . . .
The argument depends on the following facts:
(dq) Je lirai son livre, à mon frère.

* Je lirai son livre, de mon frère.

Son mari est mort, à cette femme.

* Son mari est mort, de cette femme.
(dr) C'est sa mère à elle.
* C'est sa mère d'elle.
(ds) C'est votre faute à tous.
* C'est votre faute de tous.
(dt) C'est le nôtre à tous. (le tourne-disque)
* C'est le nôtre de tous.

This implies that there is a rule that is approximately:

$$
\text { Det } \cdot N \cdot \text { à }- \text { Pro } \rightarrow \underset{+ \text { Pross. }}{\text { Pro }} \cdot N
$$

(abstracting away from details about the determiner system). The 'a' will be deleted, much as in CL-PL. This rule in fact resembles CL-PL to a certain extent, perhaps significantly. This was noticed by Ruwet (1969), who furthermore points out an interesting similarity between these two rules and that involved in the derivation of 'là-dessus.' For a framework in which these formal similarities might be expressible, see Chomsky (forthcoming-a) and Dougherty (1968).

The analysis of possessives suggested above bears some resemblance to that proposed in Langacker (1968). Langacker, however, derives the possessive ' a 'complement via relative-clause reduction from the 'être à'-construction:
(du) Ce livre est à moi.
But the 'être a'-construction has a much narrower distribution than either possessive adjectives or the 'a'-complements. (It actually corresponds to 'belong to.') In particular, it is difficult to see how the following could be derived from deep structures with an embedded 'être à' clause:

```
(dv) sa santé à elle
sa mort à elle
sa grand'mère à elle
    leur ainée à toutes les deux
    vos propositions à toutes les deux
    nos relations, à mon mari et à moi
    notre sejour ici, à moi et à Roger
```

(examples taken from Sandfeld (1928, p. 190-192)). Therefore, independently of those cases in which 'être $\mathfrak{a}$ ' is semantically appropriate, we need a mechanism for generating 'a'-complements and relating them to possessive adjectives. The existence of NP's like:
(dw) un ami à moi
is support for our analysis, but not for the other, since:
(dx) *? un ami qui est à moi
is ungrammatical.
Langacker furthermore claims, as we do (see text), that sentences like:
(316) Je lui ai cassé le bras.
should be derived from structures of the form:
(317) J'ai cassé le bras à Paul.

His analysis differs from ours in that he considers (317) to be an instance of a reduced 'être à' complement. This gives rise to a number of problems: First, there is the semantic inappropriateness of:
(dy) ?? J'ai cassé le bras qui était à Paul.
Second, CL-PL would not apply to a Pro-NP within a reduced relative. In particular, it would be impossible to account for the difference between:
(326) * Paul m'a rencontré un ami.
and (dz) Paul m'a cassé un doigt.
Much worse, since a 'raising' rule could perhaps be postulated for sentences like (dz), is that CL-PL cannot apply to the 'être à' construction:
(ea) * Ce livre m'est.
More importantly, CL-PL cannot apply to the 'a + NP'-complement of 'être' if 'être' is deleted in the 'croire'-construction:
(eb) Je croyais ce livre à Jean.

* Je lui croyais ce livre.

We show elsewhere (see Kayne (forthcoming-a)) that this is a general fact about French. Those 'a + NP'-complements which are not subject to CL-PL in simple sentences are not in more complex sentences either. The cliticizable complement in ( dz ), therefore, could not have come from the 'être à' construction.

We offer no explanation for the origin of the dative in (dz), but point out that it has much in common with that in:
(300) Jean lui court après.

Finally, we note that there are problems with claiming that all possessive adjectives are derived from 'à'-complements. For example, N. Ruwet has brought to our attention the following paradigm:
(eba) La destruction de la ville
Sa destruction
*? Sa destruction, à la ville
where the nominal complement in question corresponds to a verbal object. For a discussion of this kind of nominalization, see Chomsky (forthcoming-a).
60. And where the starred sentences are interpreted parallel to (314)-(318).
61. Sentence (338) would be excluded for more than one reason, if the following were ungrammatical:
(ec) ? J'en connais le frère, de ce garçon-là.
? J'en casserai le pied, de cette table.

## CHAPTER III

In this chapter we shall consider the French verbal constructions which approximately correspond to the English "have," "make," "let," plus sentential complement, as in, e.g.:
(1) I'll have John leave immediately. That made the building collapse. Mary let her daughter play alone. Mary had John arrested.

We shall be particularly interested in a property peculiar to the French constructions, namely the possibility for the subject of the embedded sentence to appear to the right of the embedded verb:
(2) Je ferai partir Jean.

Cela a fait fordre la glace.
Je laisserai partir Jean.
To account for this, we shall postulate a transformation having the effect of inverting embedded subject and verb, and a second transformation to account for the appearance of the preposition "à" in such sentences as:
(3) Je ferai lire ce livre à Paul.

We shall then consider the derived constituent structure assigned by these transformations and the place in the paradigm of sentences containing the agentive preposition "par:"
(4) Je ferai lire ce livre par Paul.

## Section I

The verbs in question are "faire" and "laisser," the former corresponding inexactly to English "make"/"have," the latter to English "let." Both verbs have the property of allowing the "postposition" of the embedded subject, but differ in that "laisser" does not require it. The sentences:
(5) Je laisserai Jean partir. Je laisserai partir Jean.
are both possible, whereas with "faire," only the latter would be admissible:
(6) * Je ferai Jean partir.
le ferai partir Jean.
We are primarily interested in the properties of the construction with postposition, but shall use the more canonical construction as a convenient and sometimes crucial contrast with respect to various phenomena. As far as we can tell, the "postposed" construction has exactly the same properties in all relevant respects with "laisser" as with "faire," and the two will be used interchangeably as examples. 1

If the embedded sentence is intransitive, or contains only prepositional complements, the postposed embedded subject appears unchanged directly to the right of the embedded verb:
(7) Je ferai partir Jean.
je ferai parler Jean à Pierre.
Je ferai sortir Jean de ma chambre.
If, however, the embedded sentence contains a direct object, the postposed subject must be preceded by the preposition "à:"
(8a) * Je ferai lire Jean ce livre.
(8b) * Je ferai lire ce livre Jean.
(9) Je ferai lire ce livre à Jean.

In the case of intransitives, the "a'" may not appear:
(10) * Je ferai partir à Jean.

In all these cases with "faire," the embedded subject NP has to have been moved:
(11) * Je ferai Jean partir.

* Je ferai Jean parier à Pierre.
* Je ferai Jean sortir de ma chambre.
* Je ferai Jean lire ce livre.

We can account for these facts by postulating a transformation, called "faire"attraction (FA), ${ }^{2}$ which will invert the embedded subject and verb:

$$
\begin{array}{lccccccccc}
\text { FA: } & \mathrm{Y} & -\mathrm{faire}-\mathrm{NP} & -\mathrm{V} & -\mathrm{X} & -\cdots & 0 & 1 & 3 & 2
\end{array}
$$

If we make FA obligatory, ${ }^{3}$ we can rule out all the ungrammatical sentences in (11), and we correctly generate the grammatical sentences in (7), e.g.:

$$
\begin{aligned}
& \text { Je ferai - Jean - parler - à Pierre }{ }^{4} \longrightarrow \quad \text { FA } \longrightarrow \longrightarrow \\
& \text { Je ferai - parler - Jean - à Pierre. }
\end{aligned}
$$

As formulated, FA will incorrectly generate (8a) instead of the correct (9). This can be remedied by the postulation of a second transformation, called "à"insertion (A-INS), ${ }^{\prime \prime}$ which will apply after FA, and which will obligatorily insert the preposition "a" before the postposed embedded subject, just in case there is an immediately following direct object: ${ }^{5}$


The condition that A-INS apply only in the presence of a following direct object will exclude (10). A-INS will apply to a structure resembling (8a) as follows:

```
Je ferai - Jean - lire - ce livre \(\longrightarrow\) FA \(\longrightarrow\)
Je ferai - lire - Jean - ce livre \(\rightarrow\) A-INS
\(\longrightarrow\) Je ferai - lire - à Jean - ce livre.
```

In this way (8a) will be ruled out. The sentence resulting from the application of these two transformations, however, is of marginal grammaticality:
(12) ?* Je ferai lire à Jean ce livre. $^{\text {( }}$

This indicates that, given our formulation of FA and A-INS, ${ }^{6}$ we should simply add a rule rearranging the complements. This rule, which we shall call COMP-ORDER, will apply after A-INS:

```
Je ferai - lire - à Jean - ce livre \(\longrightarrow\) COMP-ORDER
    \(\longrightarrow\) Je ferai - lire - ce livre - à Jean.
```

and will be stated as follows:
COMP-ORDER: X - faire - V - à+NP - NP - Y $\rightarrow$ 1 $\quad 23546$

$$
\begin{array}{llllll}
1 & 2 & 3 & 4 & 5 & 6
\end{array}
$$

This complication arose because we formulated FA so as to place the embedded subject directly after the verb, despite the fact that its final position in (9) is after the original direct object of the embedded sentence. One might ask, why not have FA place the embedded subject to the right of such an NP immediately? We could, for example, reformulate FA as

$$
\text { FA*: } X \text { - faire }-N P-V-(N P)-Y \rightarrow \quad 1 \quad 2 \quad 4 \quad 5 \quad 3 \quad 6
$$

Then A-INS could be rewritten:

$$
\begin{aligned}
& \text { A-INS*: X - faire - V - NP - NP - Y } \longrightarrow \quad 1 \quad 2 \quad 3 \quad 4 \quad \text { à+5 } 6 \\
& \begin{array}{llllll}
1 & 2 & 3 & 4 & 5 & 6
\end{array}
\end{aligned}
$$

so that it applied to the second, rather than the first, of the two consecutive NP's. This pair of rules would apparently generate all the desired sentences and eliminate the need for a rule like COMP-ORDER. Nonetheless, such an analysis must be rejected on the basis of the following evidence: there are certain cases, e.g., predicate nominals, where A-INS is inapplicable; i.e., despite the fact that FA produces a string of two contiguous NP's, neither can be preceded by "à." Thus, if a structure corresponding to:
(17) Mon fils est devenu un bon professeur.
is embedded in "faire," the resulting sentence contains no preposition:
(18) * Voila ce qui a fait devenir un bor professeur à mon fils.

* . . . à mon fị!s un bon professeur.
* . . . mon fils à un bon professeur.
* . . . à un bon professeur mon fils.

The only possible output is:
(19) Voila ce qui a fait devenir mon fils un bon professeur. which is exactly that predicted by the original formulation of FA:
. . . faire - mon fils - devenir - un bon professeur $\rightarrow \longrightarrow$
FA $\longrightarrow$. . . faire - devenir - mon fils - un bon professeur.
Neither A-INS nor COMP-ORDER is applicable to the output of FA. The important point is that the alternative formulation $\mathrm{FA}^{*}$ would incorrectly yield: ${ }^{7}$
(20) ?* Voila ce qui a fait devenir un bon professeur mon fils.

Similarly, the sentence:
(21) Cela a fait devenir son frère ainé son meilleur ami.
is understood as related to:
(22) Son frère ainé est devenu son meilleur ami.
rather than:
(23) Con meilleur ami est devenu son frère ainé.

Up to now, we have been considering the formulation of FA only from the point of view of linear order, and have concluded that it is a rule which changes the order of subject and verb in the sentence embedded under "faire." If we examine the rule from the point of view of tree-structure, we see that specifying:
leaves open an important question. Given the structure: ${ }^{8}$

it is apparent that we can effect the inversion of embedded subject and verb in more than one way. For example, FA might either move the subject NP down into the embedded VP, yielding:

or alternatively it might raise the embedded verb out of the lower sentence, yielding: ${ }^{9}$


Further adjustments in derived structure couid follow in either case. These are, however, the two main possibilities, differing essentially in whether the movement is attributed to the subject or to the verb. We shall argue in favor of the latter; let us call this the verb-raising (VR) hypothesis, as opposed to the subject-lowering (SL) hypothesis.

Consider now the transformation L-TOUS. For almost all speakers, L-TOUS can apply across a sequence of two verbs, as in:
(24) J'ai tout voulu faire.

J'ai tous voulu les voir.
but not if there is an intervening NP:
(25) * J'ai tout laissé Jean manger.

* J'aurais tous laissé Jean les manger.

Furthermore, if the intervening NP is moved away by an earlier transformation, L-TOUS is still inapplicable:
(26) J'ai envoyé Jean tout chercher.

* J'ai tout envoyé Jean chercher.
(28) Voilà ie garçon que j'ai envoyé tout chercher.

> *? Voilà le gargon que j'ai tout envoyé chercher.
(29) Je l'ai envoyé tout chercher.
*? Je l'ai tout envoyé chercher.
However, if the intervening NP is moved away by FA, then L-TOUS may apply:
(30) J'ai laissé mon fils manger tout.

* J'ai tout laissé mon fils manger.

J'ai tout laissé manger à mon fils.
In sentence (31), the NP "mon fils" has been moved by FA (the "a" then inserted by A-INS), permitting the "tout" to appear to the left of "laisser." This contrasts strongly with the starred sentences in (27), (28), (29), where despite previous application of Passive, wh-preposing, and CL-PL respectively, the "tout" may still not appear to the left of "envoyer."

We recail that in chapter one we gave evidence for the ordering of L-TOUS after wh-preposing and CL-PL, as presupposed in the preceding paragraph. The ordering of Passive before L-TOUS can be justified as follows: Passive must precede wh-preposing because of sentences like:
(32) Par qui a-t-il été insulté?

Therefore, since wh-preposing must precede L-TOUS, so must Passive. ${ }^{10}$
The above distinction between FA and other movement rules can be illustrated in a particularly striking way with the "faire"/"laisser" construction. Consider the optionaiity involved in:
(33) Je la laisserai manger tout ce qu'elle voudra.
(34) Je lui laisserai manger tout ce qu'elle voudra.

Sentence (33) is derived via CL-PL from a structure resembling 'Je laisserai - elle manger $N P^{\prime}$ and is parallel to a sentence like:
(35) Je laisserai Marie manger tout cea.

The derivation of sentence (34), however, given the analysis of these constructions we have sketched, must involve the application of FA, since it contains a dative clitic corresponding to the underlying subject of the embedded sentence. In our analysis, datives of that origin can arise only through application of A-INS, which itself can apply only if FA has done so previously:
(36) Je laisserai manger cela à mon fils.
(37) * Je laisserai à mon fils manger cela.

The derivation of (34) is roughly:

```
Je laisserai - elle manger NP \(\longrightarrow \quad\) FA \(\longrightarrow\)
    Je laisserai - manger elle NP \(\longrightarrow\) A-INS \(\longrightarrow\)
    Je laisserai - manger à elle NP \(\longrightarrow\) CL-PL \(\longrightarrow\)
    Je lui laisserai manger NP.
```

Sentence (34) is parallel to:
(38) Je laisserai manger tout ça à Marie.

Thus, sentences (33) and (34), while apparently identical in surface structure except for the case of the clitic, differ derivationally in that one, (34), but not the other came about through application of FA. In the light of sentences (27)-(31), we might expect to find a corresponding difference with respect to the possibility of application of L-TOUS. And we do: ${ }^{11}$
(39) Je voudrais tout lui laisser manger.
(40) *? Je voudrais tout la laisser manger.
(41) J'ai tout voulu lui laisser manger.
(42) * J'ai tout voulu la laisser manger.

We interpret these facts in the following way: L-TOUS is a rule which in some way is sensitive to differences in derived structure among verb sequences. ${ }^{12}$ Verb sequences formed by the removal of an intervening NP by a movement transformation in some sense retain the previously existing structure; e.g., if the structure of (35) were:

then removal of the NP "Marie" by CL-PL (if it were a pronoun, as in (33)) would not affect the structural relationship between the two verbs--they would continue to be immediately dominated by distinct VP-nodes, e.g.:


In this context, L-TOUS would not be able to move an object "tout" over both verbs. But this is in fact an argument in favor of regarding FA as a verb-raising
rule; if it merely moved the embedded subject NP down into the lower VP, it would be difficult to see why it, but not Passive, CL-PL, and wh-preposing, should yield a derived structure permitting the more extended application of L-TOUS, as discussed above. ${ }^{13}$

Similar examples can be constructed with respect to the rule R-TOUS. Thus, in the following sentence, R-TOUS cannot move a "tous" from the subject of "laisser" to the right of the embedded verb:
(43) Tous mes amis laisseraient ce garçon manger de la salade.
(44) * Mes amis laisseraient ce gargon manger tous de la salade.

However, if the embedded subject NP is removed by FA, it can:
(45) Tous mes amis laisseraient manger de la salade à ce garçon.
(46) Mes amis laisseraient manger tous de la salade à ce garcon. Mes amis feront manger tous des pommes de terres au lard à leurs enfants.

If the NP is removed by some other movement ruie, though, it cannot:
(47) * Mes amis le laisseraient manger tous de la salade.
or with "envoyer:"
(48) * Ils enverront Jean parler tous à Marie.

Sentence (48) is parallel to (44). Previous removal of the intervening NP by whpreposing changes nothing:
(49) * Voilà le garçon qu'ils enverront parler tous à Marie.

As with L-TOUS, application of FA, but not other movement rules, seems to allow greater scope for subsequent application of R-TOUS.

Unfortunately, we cannot prove that R-TOUS must be ordered after CL-PL and wh-preposing. ${ }^{15}$ Therefore one could claim that sentences (47) and (49) are ruled out exactly as (44) and (48) simply because at the time of application of RTOUS, the relevant NP's have yet to be moved. Although lacking proof, we feel this to be implausible, if only because the nature of R-TOUS, as a rule which puts something into one of certain appropriate positions, suggests to us that it is a very late rule.

Although inconclusive with respect to demonstrating the verb-raising nature of FA, these facts are revealing in other ways. Notice that we can exclude (44) and (48) by means of Chomsky's (1965, p. 146) proposed universal prohibiting the introduction of morphological materiai into lower sentences. In other words, no
special constraint need be put on R-TOUS at all to account for the ungrammaticality of (44) and (48). This proposed universal in fact receives interesting confirmation in French, in the sense that even in dialects which permit the raising of "tous" into higher sentences, the dropping of "tous" into lower sentences is still impossible. Thus, while there are speakers who accept sentences like:
(50) II faut tous que tu les manges.

II faut tous qu'ils partent.
nobody accepts:
(51) * Ils veulent que tu ailles tous à Paris.

* Elles savent que Jean est toutes parti il y a 10 minutes. We note that the examples under (46) show that after FA has applied, there must be no intervening S-node between the two verbs. This condition is satisfied trivially under the verb-raising hypothesis.

A second type of argument in favor of FA as a verb-raising rule comes from consideration of certain peculiarities of the "faire"-construction when the embedded sentence contains ari indirect object only. Compare the following sentences, which differ radically in underiying structure, but which are superficially similar:
(52) Je ferai lire ce livre à mon ami.
(53) Je ferai parler cet homme à mon ami.

Sentence (52) is derived from a structure approximately of the form: Je ferai -
 the other hand, is derived from: Je ferai - (Cet homme parier à mon ami) via application of FA, but does not involve A-INS at all. In surface structure, the two sentences are apparently similar; the NP "mon ami" is preceded in each case by " $\mathbf{a}$ " despite the fact that in (52) it was an underlying subject.

Closer examination reveals important differences, however. First, the two sentences act unalike with respect to length-inversion. In simple sentences, although the normal word order is direct object - indirect object, the former may follow the latter if "longer," as in:
(54) Je donnerai à Jean le livre que je viens d'acheter.
vs. (55) ? Je donnerai a Jean mon livre.
The same is true of sentence (52). If "ce livre" is replaced by a "long" NP, the objects may be interchanged:
(56) Je ferai lire à mon ami le livre que tu m'as recommandé.

In (53), to the contrary, replacing "cet homme" by a long NP does not, for most speakers, permit this:
(57) *? Je ferai parler à mon ami l'homme qui vient d'arriver.

Comparing sentences (54), (56), and (57), we see that it is the last which is acting in an unusual manner. ${ }^{16}$

Another way in which the construction "faire" plus "sentence containing indirect object only" (as in (57)) acts differently from both lexical verbs and the "faire"-construction involving à-insertion involves the possibility of having a non-clitic pronoun in indirect object position. In non-contrastive environments this is generally not allowed:
(58) * Je parlerai à toi demain.
(59) * Jean voulait donner queique chose à moi.
(60) * Je vais le présenter à elle.

If, however, the verb is one that takes both direct and indirect objects and if the direct object appears as a first or second person or reflexive clitic, then an indirect object pronoun may be left in object position:
(61) Je vais te présenter à lui. Jean va me présenter à elle. Paul nous a recommandés à elle. Paul t'a recommandé à moi.
This holds true too for the "faire"-construction with a-insertion," as in:
(62) Jean va me faire connaitre à elle. Je vais te faire connaître à lui.
but:
(63) * Jean va la faire connaître à moi.
where the deep structure of (62) is roughly:

$$
\begin{aligned}
\text { Jean va faire }- & \text { (Elle connaît moi) } \\
& \text { (Lui connaît toi) }
\end{aligned}
$$

but does not hold for the "faire"-construction where the à-phrase corresponds to an underlying indirect object, as in:
(64) Jean fera parler Marie à Paul.

Thus we have:
(65) Jean te fera parler à Paul.
but (66) * Jean te fera parler à elle.

* Il voulait me faire parler à toi.
where the deep structure of (66) is roughly:

Jean fera -(Toi parler à elle).
There are two ways, then, in which sentences of the form: . . .faire - V

- NP - à+NP act differently depending on the deep-structure origin of the "a + NP." In both cases, i.e., with respect to length-inversion and with respect to the facts about indirect object pronouns, it is the construction with "à + NP" corresponding to deepstructure indirect object (as in (64)), which acts unlike sentences of the form: . . .V NP àtNP where $V$ is a lexical verb. Another way of looking at it would be to say that the two objects in:
(64) Jean fera parler Marie à Paul.
do not act like the two objects of lexical verbs such as:
(67) Jean présentera Marie à Paul.
but that the objects in:
(68) Jean fera connaître Marie à Paul.
(69) Jean fera lire ce livre à Paul.
do. In fact, this seems to correlate with the fact that sentences such as:
(61) Je vais te présenter à elle.

Jean t'a recommandé à moi.
are good only (except for sentences like (62)) if the two object pronouns are objects of one lexical verb. . Thus the following are not perfect:
(70) ? Jean me croyait fidèle à toi.
? Je me sens fidèle à elle.
? Jean me semblait fidèle à elle.
In all of the above the full pronoun is a complement of the adjective "fidele," while the clitic is a complement of "croire," "sentir," "sembler" respectively. Particularly striking is that for the minority of speakers who accept sentences like:
(71) On va jeter le bébé dans les bras à Marie.
where Marie is a cliticizable complement (v. chapter 2):
(72) On va lui jeter le bébé dans les bras.
if the direct object is made first or second person or reflexive:
(73) On va te jeter dans les bras à Marie.
the "a" may not be followed by a pronoun:
(74) *? On va te jeter dans les bras à elle.
(where the "à elle" is not, as is possible in some dialects, an NP-complement as in "un ami à moi"). The difference between (74) and (61) is that the "à +NP"
complement is not a sister-complement to the direct object. ${ }^{18}$
This suggests that in (68), (69) the two objects, although not at all "sisters" in deep-structure (that preceded by "à" being a deep-structure subject), have become so in surface-structure. Conversely, the objects in (64) must not have become "sisters" in surface structure.

Kెeturning now to the two alternative formulations of the transformation FA, we note that under the subject-lowering hypothesis, it is difficult to see why there should be a difference at all between (64) and (69). Given the relevant portion of the deep-structure of (64) as roughly:


FA, if construed as a lowering-rule, will yield:

which is correct as concerns order of constituents.
The relevant portion of the deep-structure of (69) is roughly:


FA, if, again, a lowering-rule, will yield:


In this case, A-INS will apply, yielding:


COMP-ORDER will then interchange the PP and final NP. The crucial point is that the derived structures of (64) and (69) are identical (except for order); in particular, in both cases the two object complements are sisters under the embedded VP-node. It is not clear how one could then account for the fact that only (64) has the exceptional behavior described above.

Under the verb-raising hypothesis, however, a rather natural way of approaching the problem is available. We notice immediately that the derived structure assigned to (64) by FA construed as a raising-rule does not have the two objects dominated by a single VP-node, but is rather:


While there is some evidence that the S-node dominating "Marie a Paul" should be pruned, ${ }^{19}$ there is no evidence at all that suggests pruning the VP-node which directly dominates the node PP. Retention of this node consequently insures nonsisterhood for the two object phrases. The counter-intuitiveness of the configuration:
seems in this case not to justify pruning as a means of eliminating the extra node, but rather to be reflected in subsequent syntactic behavior. In effect, a syntactically anomalous derived structure seems to be the appropriate one. Wie return in chapter 4 to this construction and show still another way in which it behaves exceptionally.

The verb-raising hypothesis allows us moreover to propose an explanation for the differences between sentences like (64) and (69). We recall that (69) acted in all ways like sentences with lexical verb + direct object + indirect object. We suggested that this might indicate that in derived structure, the two objects were both immediately dominated by the node VP. The direct result of FA is, however:


A-INS will then apply, yielding:


At this point, the derived structure is still very much like that of sentence (64). However, there is another transformation which has yet to apply: COMP-ORDER. This is in fact the crucial difference between (64) and (69). In the former, no further transformations are necessary after the application of FA, since FA yields the correct order of constituents; therefore the partially anomalous derived structure remains. In (69), to the contrary, the output of FA does not have the correct surface order of constituents. This allows us to use the extra necessary transformation, COMP-ORDER, to destroy the anomalous configuration: $\begin{gathered}\mathrm{VP} \\ \underset{N}{\mathrm{~N}} \\ \text {. Let us state this }\end{gathered}$ rule as follows:

We can now interpret this rule as adjoining the NP in question under the upper

VP-node, yielding (again pruning the S-node): 20


This produces a structure resembling that of sentences with lexical verbs, e.g.:

which is the desired result. The crucial point is that no such reordering transformation is needed in the case of (64). We note finally that this statement of COMPORDER will have the effect, in a more complicated structure based on an embedded sentence with two objects, of restructuring the first two derived objects, but of leaving the third dominated by VP. For example, given the structure:

(embedded sentence: Jean lire ce livre à Paul 1, COMP-ORDER will apply to yield:


In chapter four, we show that this "mixed" structure is in fact the appropriate one.

## Section 11

We have so far attempted to justify a set of three transformations which play a role in the "faire"-construction: FA, A-INS, COMP-ORDER, and have argued that FA is in fact a verb-raising transformation. We have furthermore described the results of embedding under "faire" a sentence with an indirect object only, and noted that the anomalous behavior ${ }^{21}$ of that construction could be accounted for within the system of rules discussed. We now turn to a question of a somewhat different nature, namely the status of the construction "faire faire quelque chose par quelqu'un," e.g.:
(75) Je ferai lire ce livre par Jean.

The appearance of the agentive preposition "par" suggests that this construction be related to the passive, and that is exactly what we shall argue. Certain linguists ${ }^{22}$ have felt, however, that the "faire faire qch. a qn." is also related to the passive. One can, furthermore, see some apparent justification for this view, even within a transformational framework.

Recall that the "á" appears only in the presence of a direct object: ${ }^{23}$
(76) * Je ferai partir à Jean.

* Je ferai sortir à Jean de la chambre. Je ferai lire ce livre à Jean.

Passives too have this property; in French there are no pseudo-passives as in English: ${ }^{24}$

* Jean a été tiré $\left\{\begin{array}{l}\text { sur par Paul. } \\ \text { dessus }\end{array}\right.$
* Jean a été parlé à par paul.
* Jean a été parlé à par Paul.

It might seem that this is a linguistically significant generalization. If it were, then the analysis of the "faire faire qch. à qn." construction proposed earlier would be incorrect, since it contains absolutely no reference to passives. We must therefore show that the correlation with respect to direct objects of passives and A-INS is in fact a spurious generalization. 25 The nature of the evidence will be such as to argue, at the same time, for relating passives to the "faire faire qch. par qn." construction.

First, there are non-passivizable idioms which occur embedded in the "faire. . .
à. . ." construction; no such idioms occur with "faire. . .par. . .:"
(78) Je ferai faire le malade à mon fils.
(79) * Le malade sera fait par mon fils.
(80) * Je ferai faire le malade par mon fils.
(81) Je ferai casser la croûte à ma famille.
(82) * La croûte sera cassée par ma famille.
(83) * Je ferai casser la croûte par ma familie.

Conversely, the only idioms which enter into the "faire. . .par. .." construction are those which can take passives, e.q.:
(84) Je te ferai prêter assistance par mon fils.
(85) Assistance te sera prêtée par mon fils.
(86) L'avocat fera porter plainte par son client.
(87) Plainte sera portée par mon client.

Second, there is a restriction on passivization if the direct object is a part of the body understood as belonging to the subject:
(88) Jean lèvera la main.
(89) * La main sera levée par Jean.

This restriction is mirrored in the "faire. . .par. . .," but not in the "faire. . . à. . .," construction:
(90) * Je ferai lever la main par Jean.
(91) Je ferai lever la main à Jean.

A similar distribution holds for overt possessives: ${ }^{26}$
(92) Jean apprendra son rôle.
(93) * Son rôle sera appris par Jean.
(94) * Je ferai apprendre son rôle par Jean.
(95) Je ferai apprendre son rôle à Jean.

Again, the passive and "faire. . .par. . ." constructions pattern together, and contrast with the "faire. . à. . ." construction.

Third, superficial direct objects which are really a kind of locative NP may not undergo passivization nor be embedded in "faire. . .par. . . ." They may, however, occur in the "faire. . .à. . ." construction:
(96) Jean quittera ma maison demain.
(97) * Ma maison sera quittée par Jean demain.
(98) * Je ferai quitter ma maison par Jean demain.
(99) Je ferai quitter ma maison à Jean demain.

Fourth, reflexive clitics are excluded from passives in sentences of the following sort:
(100) Jean m'achètera ce jouet.
(101) Ce jouet me sera acheté par Jean.
(102) Jean s'achètera ce jouet.
(103) * Ce jouet se sera acheté par Jean.

Exactly the same restriction is operative in the "faire. . .par. . ." construction:
(104) Vous me ferez acheter ce jouet par Jean.
(105) * Vous se ferez acheter ce jouet par Jean.
(106) * Vous ferez s'acheter ce jouet par Jean. * Je ferai s'acheter des chaussures par mon fils.

The reflexive clitic may, however, co-occur with "faire. . .à. . . :"27
(107) Je ferai s'acheter des chaussures à mon fils.

Thus we see that there are several ways in which the "faire. . .à. . ." construction differs crucially from passives, and that the significant generalization is rather to be found between passives and "faire. . .par. . . ." We conclude that it would be incorrect to relate passives and "faire. . .à. . . ;" consequently, the fact that both depend in some sense on the presence of a direct object is fortuitous, 28 and is in no way counterevidence to the analysis of the "faire"-construction given earlier.

Finally, we note that there is also a "faire. . .de. . ." construction corresponding to the fact that in French there is a small class of verbs which occur with "de" rather than (or in addition to) "par" in the passive:
(108) Marie est aimée de tout le monde.
(109) Marie est arrivée à se faire aimer de tout le monde.

This is, in fact, further evidence for relating the "faire. . .par. . ." construction to the passive, in that it would otherwise be coincidental that exactly the two prepositions which occur in the passive, occur with "faire"+infinitive as well. 29

We can now say that the "faire. . .par. . ." construction is the result of embedding structures containing the passive marker under the verb "faire." 30 The difference between the "faire. . .a. . ." and "faire. . .par. . ." constructions is thus due simply to the respective absence vs. presence of the passive-marker in the deep structure of the sentence embedded under "faire." This correlates nicely with the fact that the following are cognitively synonymous:
(69) Je ferai lire ce livre à Jean.
(75) Je ferai lire ce livre par Jean.

The deep structure of (75) is roughly:
Je ferai --Jean lire ce livre par $\Delta$-.
We return at the end of chapter four to a discussion of the exact nature of the derivation of (75).

## Footnotes to Chapter III

1. The "laisser" construction will nonstheless be given more frequently when a strong contrast is desired between "postposed" and "non-postposed." On the other hand, the very fact that there is a choice with "laisser" seems to lead French speakers to reject the "postposed" construction with it as too complicated (in ways to be discussed specifically below) more often than with "faire." We shall therefore tend to use examples with "faire" more frequently than ones with "laisser" when concerned with properties of the "postposed" construction in isolation. In addition, semantic factors will often make one construction more acceptable than the other.
2. We shall consistently write "faire" in the formulation of the various rules discussed in this chapter, despite their applying to "laisser" as well. This is not meant to have any systematic significance. The rules are in fact relevant to several other verbs, such as: "voir," "entendre," "écouter," "regarder," "sentir," "envoyer:"
(a) Je vois venir Jean.
(b) J'écoutais travailler Pierre.
etc. We shall not discuss the ways in which these verbs differ from "laisser" and "faire." Like "laisser," they all enter into the construction with postposition optionally:
(c) J'écoutais Pierre travailler.
etc.
In addition, we leave open the possibility that no lexical verb need be mentioned in these rules; i.e., that "faire" could be replaced by " $V$ " in the structural description of FA. The problem is in part one of distinguishing (a)-(c) from sentences like:
(d) Je veux que Jean parte.
(e) Je croyais Jean à Paris.
at the time of application of FA, and conversely of determining what common structure is shared by the complements of the several verbs subject to FA. We likewise omit any attempt to explain the difference in behavior between "faire" and all the other verbs, in particular why (11) is excluded.
3. We could equally well consider FA uniformly optional and add an output
constraint throwing out sequences of the form: . . . faire - NP - V . . . . By specifying only "faire" in the output constraint, we allow (5) and (c). The alternative, as in the text, is to make FA optional in general, but obligatory for "faire." The fact that there is a clear difference between:
(f) C'est moi qui l'ai fait t'embrasser.
(g) * C'est moi qui ai fait Marie t'embrasser.
would seem to be an argument for the output constraint. Unfortunately, there are other pairs which suggest just the opposite:
(h) * Je ferai mon fils lire ce iivre.
(i) *? Je le ferai lire ce livre.

We leave this question open.
4. We make the null assumption to the effect that the deep structure of these constructions contains exsently those elements that appear in surface structure (apart from the question of tense, which we shall not consider). Specifically, we assume the deep structure: "faire" - S rather than: "faire" - NP - S , and similarly for "laisser."

There is a fair amount of evidence that this is in fact a necessary assumption. First, there is no difference in cognitive synonymy between embedded active and passive:
(9) Je ferai lire ce livre à Jean.
(75) Je ferai lire ce livre par Jean.
(j) Je laisserai Jean embrasser ma fille.
(k) Je laisserai embrasser ma fille par Jean.

Second, although past participles of verbs conjugated with "avoir" normally agree in gender with a preceding direct object, as in:
(I) Je l'ai faite. (la robe)
(m) Je l'ai contrainte à partir. (Marie)
there is no agreement with "faire"+infinitive:
(n) * Je l'ai faite partir. (Marie)

This is the case even if FA has not applied:
(o) * C'est moi qui l'ai faite t'embrasser. (Marie)

We can account for these facts by requiring that the "preceding direct object" be the object of the verb in question in deep structure. This would seem to be
necessary anyhow to distinguish:
(p) La robe que j'ai faite. . .
(q) * La robe que j'ai dite que j'aime. . .
(r) Les choses que i'ai produites. . .
(s) * Les choses qu'il s'est produites. . .

Now ( m ) and ( n ) can be distinguished if ( m ), but not ( n , has the deep structure: V.NP.S.

A third argument in favor of the deep structure: $V-S$ in these constructions is the existence of sentences like:
( t$) \mathrm{J}$ 'entends pleuvoir.
where there would be no natural candidate for underlying object of "entendre." Notice that this sentence suggests that the "il" of:
(u) II pleut.
is not present in deep structure:
(v) * Je l'entends pleuvoir.

Compare:
(w) Il est étonnant que vous croyiez ca.
(x) Je trouve étonnant que vous croyiez ca.
(y) * Je le trouve étonnant que vous croyiez ça.

See Perlmutter (1968) for further discussion.
Crucial to a solution of this problem would be an analysis of which instances of, and under what conditions, the impersonal 'il' could be replaced by 'ça'/'ce,' e.g.:
(z) Ça pleut. (popular)
vs.
(aa) * Ça faut que. . .
Returning to the question of the deep structure of 'faire'/'laisser'+infinitive, we note that the embedded subject NP acts distinctively if not postposed; it is not subject to movement rules, except for CL-PL:
(ab) On laissera Jean lire ces livres-là.
(ac) * Jean sera laissé lire ces livres-là.
(ad) *? Voilà le garçon qu'on laissera lire ces livres-là.
(ae) *? C'est Jean qu'on laissera lire ces livres-là.
It seems more likely that an explanation for these facts could be found if the embedded subject NP were not also the deep structure object of 'laisser.' One difficulty is that similar phenomena can be observed in the case of verbs for which it is less clear that the structure: V-NP-S is entirely inappropriate (as pointed out to us by N. Ruwet):
(af) J'ai écouté Jean jouer du violon.
(ag) * Jean a été écouté jouer du violon.
(ah) *? Voilà le garçon que j'ai vu déchirer tes livres.
(v. Martinon (1927, p. 460)). Unlike 'faire' and 'laisser,' these verbs occur with following direct objects in sentences lacking verbal complements:
(ai) Je t'écoute.
(aj) Je vois ce garçon.
(ak) * Je ferai Jean.
(al) * Je laisserai Jean.
In (al), we exclude from consideration 'laisser' meaning 'leave.' Notice in particular the difference between:
(am) I let John out of the room.
(an) * J'ai laissé Jean de ia chambre.

4'. Langacker (1966a) originally proposed a rule very much like A-INS, and in addition had a rule somewhat like FA. His rules are, in fact, equivalent, over the range of data he was considering, to FA* and A-INS* (see further on in the text). He did not consider the problem of derived structure. Apparently, he envisioned extending his 'A-INS'rule to insert 'par' in the appropriate environments. This approach is incompatible with our centention that 'par,' but not 'à,' is to be related to passives. (See last part of this chapter.)
5. The problem of what constitutes a direct object is nontrivial. NP-complements of verbs like 'peser' do not act like direct objects here:
(ao) *? Je ferai peser 10 kilos à cette boite.
(ap) ? Je ferai peser cette boîte 10 kilos.
Certain prepositional complements optionally act like direct objects:
(aq) Cela fait penser Jean à sa mère.
Cela le fait penser à sa mère.
(ar) ? Cela fait penser à Jean à sa mère.
Cela lui fait penser à sa mère.
Others do not:
(as) Je ferai sortir Jean de ma chambre.
(at) * Je ferai sortir à Jean de ma chambre.

* Je lui ferai sortir de ma chambre.

Predicate nominals do not act like direct objects (see text):
(18) * Voila ce qui a fait devenir un bon professeur à mon fils.

Interestingly, the nominal components of idioms which typically fail to undergo various grammatical processes do act like 'direct objects' with respect to A-INS. For example, in the meaning 'to play sick,' the idiom 'faire le malade' does not passivize or relativize, nor can the nominal component be pronominalized:

| (au) Jean fera le malade. |  |
| :--- | :--- |
| (av) | * Le malade sera fait par Jean. |
| (aw) | * Je pense au malade que Jean fera. |
| (ax) | *? Je ferai le malade et Jean le fera aussi. |

Yet 'le malade' triggers A-INS:
(ay) Je ferai faire le malade à Jean.
Similarly, the idiom 'prendre peur' has a nominal component which acts like an NP with respect to A-INS:

|  | (az) | Jean a pris peur. |
| :--- | :--- | :--- |
|  | (ba) | $*$ Peur a été prise par Jean. |
|  | (bb) | ? Je pense à la peur que Jean prendra. |
|  | (bc) | $*$ Jean a pris peur et moi, je I'ai prise aussi. |
|  | (bd) Cela a fait prendre peur à Jean. |  |

The difference between (bb) and (ba), (bc) might be related to the possibility of modifying 'peur':
(bda) Jean a pris une peur terrible (une de ces peurs).
(bdb) Je pense à la peur terrible que Jean prendra.
We are indebted to N. Ruwet for this observation). For an extensive list of French idioms and some discussion of their properties, see Rohrer (1967). The same kind of distribution holds for locative NP's in direct object position:
(be) Jean quittera Paris.
(bf) * Paris sera quitté par Jean.
(bg) *? Paris, je l'aime beaucoup.
(bh) Je ferai quitter Paris à Jean.
(in particular compare (bh) and (at).)
These facts taken together suggest that A-INS is not to be stated in the form we have used. We make the explicit claim, nonetheless, that none of our conclusions in this chapter or the next would be compromised by a more accurate formulation.

Our analysis implies, furthermore, that FA can apply to the verbal component of idioms, as in (ay) and (bd), thereby temporarily splitting them up. But in fact, there are sentences in which idioms can appear split up in just that way in surface structure:
(bi) Cela fait prendre au spectateur position contre l'escroc.
Finally, we note that so-called 'deletable' objects act as if they have already been deleted, if they were ever there:
(bj) Je ferai boire ce vin à Jean.
(bk) Je ferai boire Jean.
(bl) * Je ferai boire à Jean.
6. Alternatively, one could have 'a' inserted in all cases as part of FA, and then deleted in the absence of a following direct object. Internal to French, we know of no evidence that would choose between this and the formulation in the text.

Should such evidence be found, it would bear on certain theoretical points, however. Specifically, FA as in the text can yield a sequence of two bare NP's, which is something never generated by the PS-rules in French, and would therefore not be 'structure-preserving' in Emonds' (1969) sense. Moreover, it will become apparent in chapter six that FA is cyclic. In this formulation, it is in effect the pair of rules: FA, A-INS, which is 'structure-preserving,' rather than either transformation alone.

An interesting reflex of the condition that no French sentence have two 'direct-objects' is to be found in relative clauses with respect to the rule of STYLINV discussed in chapter two:
(bm) Voilà le garçon à qui parlait ton père.
(bn) * Voilà le garçon à qui disait ton père des bêtises.
(bo) * . . .des bêtises ton père.
Here, there is no subsequent rule comparable to A-INS; in such cases STYL-INV cannot apply. The difference between this rule and FA lies crucially in that the former is not cyclic.

Two NP's may come together if the second is a predicate nominal:
(bp) Voilà ce qui a fait devenir mon fils un bon professeur. (bq) Je croyais Jean l'homme le plus intelligent du monde.
(br) On nommera Jean président.
7. Nor would it help to complicate FA so as to get the correct order of constituents in all cases, e.g., by adding some feature '-pred. nom.' to term 5 of FA*, since A-INS would still have to be complicated in exactly the same way to rule out:
(18c) * Voila ce qui a fait devenir mon fils à un bon professeur.
In our formulation, FA operates independently of all distinctions between kinds of
object NP's, a problem which falls entirely, and not unnaturaliy, on A-INS.
8. All trees are simplified to show primarily the structure relevant to the argument. In general, we will assume only the most straightforward structure unless there is specific evidence to the contrary.
9. We do not want the derived structure:

for the foliowing reasons: when either subject or object clitics are attached to the verb in this construction, they do not act as if they were attached to the two verbs taken as a unit, but rather as if they were attached to 'faire' alone. This can be seen from their behavior in imperatives and questions:
(bs) Fera-t-ii partir Marie?

* Fera partir-il Marie?
(bt) Fais-lui lire ce livre.
* Fais lire-lui ce livre.

Similarly, for the placement of the negative 'pas:'
(bu) Je ne ferai pas partir Georges.
(bv) * Je ne ferai partir pas Georges.
M. Gross ( 1968, p. 42) suggests that 'faire'+ inf. be considered an 'unité verbale' different from other infinitive constructions. It is unclear exactly what kind of derived structure this would imply. He points out that the embedded verb cannot be accompanied by either underlying tense or auxiliary; this property is, however, shared by English 'have' which in no way acts as if combined with the embedded verb:
(bw) * I had John leave tomorrow.

* I had John have finished by six.

The real problem is in finding properties of the 'faire'/'laisser'+inf. construction that are not common to the more canonical structure, e.g., to find characteristics of:
(bx) Je laisserai partir Georges.
not found in:
(by) Je laisserai Georges partir.

These could then be taken as bearing on the question of the derived constituent structure of FA. Of the other facts cited by Gross, clitic-placement has already been shown to disconfirm a single-verb structure (see chapter 4 for further discussion), as does negation. The fact that we have:
(bz) Pierre ne fait boire personne.
is not peculiar to 'faire:'
(baa) Pierre n'essaie de voir personne.
Also
(bab) Pierre ne laisse sa femme parler à personne. More interesting is the ungrammaticality of:
(bac) * Pierre fait ne pas boire Jean. especially if the following is grammatical:
(bad) ?? Pierre laissera son fils ne pas chanter.
although it is not clear exactly what follows. Perhaps relevant, and again pointed out by Gross ( p .76 ), is the ungrammaticality of:
(bae) * Jean monte ne pas voir Pierre. .
Furthermore, 'faire'tinf. seems not to act like a single verb with respect to the rule operative in the following sentences (see chapter 5):
(ca) Ça se brule facilement.
(cb) * Ça se fait bouillir facilement.
Finally, it is likely that we need to rule out:
(cc) * Ce monsieur sera fait entrer par mon fils. vs. (cd) je ferai faire entrer ce monsieur par mon fils.
by recourse to the difference in structure between:

and


The third possibility, namely that the embedded verb is adjoined under the embedded S-node:

is ruled out by consideration of R-TOUS (see discussion of example 46 in text), as well as reflexivization, e.g.:
(ce) Jean se fera connaittre à Marie.
To say that the above structure is an intermediate stage to be followed by S-pruning is essentially equivalent to the text.
10. A second argument for the ordering of Passive before L-TOUS is as follows: there is a rule of extraposition of indefinite NP's which is needed to account for:
(cf) Les femmes sont arrivées.

* Il est arrivé les femmes.
(cg) Trois femmes sont arrivées.
II est arrivé trois femmes.
This rule must be ordered after Passive, because of:
(ch) II sera mangé trois poulets.
* Il sera mangé les poulets.
but must be ordered before L-TOUS, because of:
(ci) * II n'est arrivé rien.

II n'est rien arrivé.
(cj) * II ne sera mangé rien.
II ne sera rien mangé.
The grammatical sentences in (ci), (cj) are derived through application of L-TOUS to 'rien.' Such application is a much more general fact:
(ck) Je n'ai rien lu.
(cl) Je ne veux rien lire.
(cm) Je n'ai rien vouiu lire.

The derivation of 'll ne sera rien mange' is roughly:
$\Delta$ ne mangera rien $\longrightarrow$ Passive $\longrightarrow$ Rien ne sera mangé (also a possible sentence) $\longrightarrow$ Extraposition $\longrightarrow$ II ne sera mangé rien $\longrightarrow$ L-TOUS $\longrightarrow \quad$ II ne sera rien mangé. We know that L-TOUS had to apply after extraposition since 'tout,' which does not extrapose, cannot appear before the past participle:
(cn) * II sera tout mangé.
Tout sera mangé.
11. Similarly, for those speakers who reject (25):

> (co) *? Je l'aurais tout laissé manger.
> (cp) Je lui aurais tout laissé manger.

These examples constitute strikingly simple evidence for the theory of transformational grammar, in that superficially similar sentences are exhibiting distinct syntactic behavior, depending on a difference in derivational history. (v. Chomsky (1965, p. 147)).
12. Analogous evidence for non-trivial differences in derived structure of verb sequences can be found in the consideration of clitic-placement in Spanish:
(cq) La quiero ver.
(cr) *? La creo ver.
(cs) * Lo permití comer.
(ct) *? Lo decidí matar.
(cu) * Me fingía haber visto.
(cv) La puedo ver.
etc. A clitic can be moved out across a higher verb by a late rule, but not in all cases, presumably due to some difference in derived constituent structure.
13. Equi-NP deletion yields a derived structure which is also suitable for extended application of L-TOUS:
(da) J'ai tout voulu faire.
(db) J'ai tout cru comprendre.
although distinct from that resulting from FA, since the two act differently with respect to CL-PL (see ch. 4).
15. If we could, then we could further conclude that removal of the embedded subject NP by CL-PL or wh-preposing did not cause the embedded S-node to be pruned, thereby arguing against the automatic pruning of non-branching S-nodes (v. Ross (1967a)). We note that there would be no complementizer in French comparable to 'for' in English available to preserve the S-node in such a case.
16. This kind of inversion is Tent dependent only on the relative 'lengths' of the two complements, but also on the presence or absence of other complements. For example, in the 'faire. . .par. . .' construction, we have the following paradigm:
(de) *? Je ferai porter à ma femme des livres.
(df) Je ferai porter des livres à ma femme. (agent unexpressed)
but:
(dg) Je ferai porter à ma femme des livres par mon domestique.

Similarly in the 'faire. . .à. . .' construction:
(dh) Cela fera prendre position aux spectateurs.
(di) *? Cela fera prendre aux spectateurs position.
(dj) Cela fera prendre aux spectateurs position contre les agents.
where the 'a'-phrase is the underlying embedded subject. Crucially, in the 'faire'construction with embedded indirect object, as in (53), addition of a third complement does not permit inversion:
(dk) Je ferai parler mon fils à ta femme de tout ça.
(dl) * je ferai parler à ta femme mon fils de tout ça.

The observation in the text is thus strengthened.
For discussion of the general problem of length-inversion see Ross (1967a).
17. It also holds true for the 'faire. . .par. . .' construction (to be discussed later on in the text):
(dm) Jean va me faire présenter à elle par son copain.
Nor does the 'faire. . .par. . .' construction act unusually with respect to lengthinversion (see also fn. 16).
(dn) Je ferai présenter à Jean la plus belle fille du monde.
18. This kind of distinction might also account for the contrast:
(do) Marie se présentera à eux.
(dp) Ca se dit souvent aux rois.
*? Ça se dit souvent à eux.
The claim that the 'à+NP' complement in (73), (74) is not a 'sister' of the direct object receives some support from the following paradigm: (for those who accept (73), etc.)
vs. (dpc) Jean a parlé à Marie du bras (de la statue).
As will become apparent, it is surface, not deep, structure sisterhood that is relevant. This suggests, then, that 'à Marie' in (71), (73), and (dpa) is dominated by ' S ' rather than by ' VP '.
19. Thus it seems that reflexivization can apply to the NP dominated by PP: (dq) Jean fera parler Marie de lui-même.
(dr) Jean fera tirer Marie sur lui-même.
in sentences very similar to (64). The problem is that reflexivization of the indirect object, as in (64), usually requires a clitic, 'se,' which is ruled out for other reasons (cf. chapter 4). Furthermore, reflexivizing the embedded subject seems to lead to semantic difficulties. Compare:
(ds) ?? John had himself talk to Mary.
(dt) ?? Jean s'est fait parler à Marie.
On the other hand, the very fact that CL-PL applies to the NP in the position of 'Marie' in (64):
(du) Je la ferai parler à Paul.
(dv) Je l'y ferai repondre.
might seem itself to be an argument, in that one might not think CL-PL applied across sentence boundaries. In the most straightforward cases, it certainly does not:
(dw) * Je lui sais que Jean parlera.
(dx) * Jean lui laissera Paul parler.

However, these are cases where the lower sentence contains its own verb. Consider:
(dy) Je croyais Jean fidèle à Marie.
Most speakers accept cliticization of the adjectival complement:
(dz) Je lui croyais jean fidèle.
But the corresponding sentence with reciprocal 'l'un à l'autre' is out:
(ea) * Marie et Pierrette croyait Jean fidèle l'une à l'autre.
This suggests there is still an intervening S-node. Similarly:
(eb) Jean croyait ce livre à Paul.
(ec) * Jean et Paul croyaient ce livre l'un à l'autre.
If reciprocals were a valid test for lower sentences, this would look like a case of clitics being extracted from a lower S . On the other hand:
(ed) * Jean et Paul feront parler Marie l'un de l'autre.
contrasts with example (dq). Finally, we point out the problem of:
(ee) Why are John and Mary letting the honey drip on each other's feet?
They're always making things fall on each other.
More detailed examination of these phenomena is beyond the scope of this thesis. In any case, nothing crucial depends on the pruning of the S-node in (64).
20. Here, however, the motivation is clearer:
(ef) Jean se fera connaître à Marie.
(eg) Jean et Marie se sont fait lire des livres l'un à l'autre.
21. L-TOUS provides still another, albeit far from clear, example of the same kind. Those speakers who accept sentences like:
(eh) Vos amis, à qui j'ai tous donné des livres. . . .
Vos amis, sur qui j'ai tous tiré. . . .
seem to distinguish:
(ei) Vos amis, à qui j'ai tous fait lire des livres. . . .
*? Vos amis, à qui j'ai tous fait parler Jean. . .
although both of the following are grammatical:
(ej) J'ai fait lire des livres à tous vos amis. J'ai fait parler Jean à tous vos amis.

Unfortunately, intuitions seem to be rather unstable for (eh). Particularly mysterious is the fact that:
(ek) ? Vos amies, à qui j'ai toutes parlé. . . . is more readily accepted than:
(el) *? Vos amies, à qui je parlerai toutes. . . .
We leave this construction for further study.
22. According to Grevisse (1964):
"Plusieurs grammairiens estiment que, dans des phrases comme: Je fais réciter sa leçon à mon frère ou: elle laisse tout faire à sa soeur, . . . (l')infinitif a un sens passif et que le terme introduit par à est un complément d'agent." (p. 146)

See, e.g., Chevalier et al. (1964, p. 116) and Wartburg and Zumthor (1958, p. 196-7).
23. See footnote 5 .
24. There are, marginally, impersonal passives such as:
(em) Il a été parlé de vous hier soir.
in which subject-preposing has not applied. See chapter 4.
25. Similarly, one might misinterpret the ungrammaticality of both:
(en) * Fou sera devenu par Jean.
(eo) * Cela fera devenir fou à Jean.
as evidence for relating the ther onstructions. The correct generalization, however, will correlate (en) and:
(ep) * Cela fera devenir fou par Jean.
Sentence (eo) is excluded since adjectives are not direct objects; A-INS fails to apply in such a case. Correct is:
(eq) Cela fera devenir Jean fou.
26. We are indebted to J-C. Milner for bringing this paradigm to our attention.
27. See chapter 6 for detailed discussion of the distribution of 'se' in the 'faire'-construction.
28. Recall that A-INS applies in some cases even in the absence of a direct object (see footnote 5). While Passive applies exceptionally to a couple of verbs taking only indirect objects, e.g., 'obéir,' 'pardonner,' the classes of 'exceptions' to the two rules do not coincide on the whole:
(er) Ca lui fait penser à Marie.
(es) * Marie est pensé par Jean.
In fact, the class of 'exceptions' to A-INS seems to be far larger in this sense than that of Passive, and may very well be predictable at some deeper level of analysis, although we have not examined this question in detail. The exceptions to Passive seem tc be fixed and unpredictable. Furthermore, the cases in which impersonal passives are acceptable do not seem to coincide with the A-INS exceptions either.

More importantly, there is another sense in which the dependence of A-INS and that of Passive on direct objes:s are not isolated facts. In footnote 6, we suggested that the very existence of A-INS was related to the impossibility of certain sequences of NP's in French. We would claim, on the other hand, that this particslar consideration plays no role in passives, but rather that the absence of pseudopassives in French is related to an entirely different phenomenon, specifically the impossibility for certain movement rules in French to leave a preposition behind.

If Passive in French could apply to an NP dominated by PP, then the
following would be grammatical:
(et) * La fille sera courue après.
That it is not is related to the impossibility of:

| (eu) | * Voilà la fille que je courrai après. |
| :--- | :--- |
| (ev) | * Qui courras-tu après? |
| (ew) | * Cette fille serait facile à courir après. |
| (ex) | * Les filles, ça se court après. (In passive meaning) |
| (ey) | * C'est elle que je courrai après. |

Wh-preposing and cleft-formation must move the entire PP:
(ez) Voilà la fille après qui je courrai.
(fa) Après qui courras-tu?
(fb) C'est après elle que je courrai.
The preposing rules in (ew) (see chapter 4) and (ex) (see chapter 5) can apply only to non-prepositional objects, and so cannot apply at all with 'courir après.' Compare:
(fc) Cette fille serait facile à trouver.
(fd) Les filles, ça se respecte.
These rules and Passive seem to have in common the pioperty that their application does not produce a structure with a preposition left behind.

There is, on the other hand, no general constraint in French against final prepositions:
(fe) Je lui courrai après.
(ff) J'ai sauté dessus.
(fg) Je partirai avec.
The last two sentences probably come about through deletion of some unspecified pronoun. The first is probably derived via some rule which has the following effect: Je courrai après elle $\longrightarrow$ Je courrai après à elle, where the 'elle' is moved out of the 'apres'-phrase. CL-PL then applies yielding (fe) (see chapter 2). We note that CL-PL is itself a rule which leaves a preposition behind (a), which is usually then deleted (see chapter 2) (unless 'a' is regarded as a feature to be spelled out; ordering considerations however suggest that that approach would not be of help). This suggests that CL-PL is a different kind of rule from the movement rules mentioned above. We leave these questions open.
29. Similarly, in languages closely related to French which have 'de' uniquely in the passive (e.g., Italian, Walloon), there is a 'faire. . .de. . .' construction but no 'faire. . .par. . . .'

We note that there is no synchronic motivation for relating the 'par'-phrase to instrumentals, despite the fact that in some sentences it might make sense to talk about a derivative instrumental interpretation:
(fh) Je ferai peindre ma maison par mon ami.
30. Sentences such as:
(fi) Je te ferai avoir ce livre par Georges.
do not pose a real problem, despite lack of a corresponding passive:
(fj) * Ce livre sera eu par Georges.
since we can say that the 'par'-phrase is really an 'instrumental:'
(fk) Tu auras ce livre par Georges.
In fact, as pointed out to us by N. Ruwet, this distinction can be syntactically motivated. Sentence (fi) is a possible answer to the question:
(fl) Comment me feras-tu avoir ce livre?
Significantly, sentence (fh) is not a possible answer to the question:
(fm) Comment feras-tu peindre ma maison?
It is not clear how idioms containing 'faire' as an inherent part of them should be handled; e.g.:
(fn) Je lui ferai suivre son courrier par le bureau de poste.
(fo) * Le bureau de poste lui suivra son courrier.
(fp) * Son courrier lui suivra.
Son courrier la suivra.
On the other hand, the following paradigm is a further argument for relating the 'faire. . .de' (and 'faire. . .par') construction to passives:
(fq) Marie se fera bien voir de tout le monde.
(fr) Marie est bien vue de tout le monde.
(fs) * Tout le monde voit bien Marie. (in same meaning as (fq), (fr).)

## CHAPTER IV

In chapter three we discussed certain properties of the 'faire'-construction and postulated three rules, FA, A-INS and COMP-QRDER, to account for them. In this chapter we will consider the ordering relationship between these rules, most importantly FA, and the rule of CL-PL discussed in chapter two. Specifically, we shall attempt to show that FA must precede CL-PL.

The central observation is that, in the 'faire'-construction, if FA has applied, all clitics ${ }^{1}$ appear to the left of 'faire.' The following are examples of sentences the derivation of which includes application of FA:
(1) Je ferai partir Jean.
(2) Je ferai lire ce livre à Jean.
(Sentence (2) involves, in addition, application of A-INS and COMP-ORDER, as described in chapter three.) In such cases, substitution of a clitic-pronoun for any of the derived object NP's yields a sentence in which the clitic precedes 'faire;'
(3) Je le ferai partir.
(4) Je le ferai lire à Jean.
(5) Je lui ferai lire ce livre.
(6) Je le lui ferai lire.

Conversely, in none of these cases may the clitics be placed before the embedded verb--the resulting sentences would be ungrammatical:
(7) * Je ferai le partir.
(8) * Je ferai le lire à Jean.
(9) * Je ferai lui lire le livre.
(10) * Je ferai le lui lire.
(11) * Je le ferai lui lire.
(12) * Je lui ferai le lire.

In these sentences 'faire' can itself be preceded in surface structure by a clitic corresponding to the deep-structure object of the embedded verb. Thus in (4), 'faire' is preceded by 'le,' the deep structure object of 'lire.'

The same is true of the construction with 'laisser;' i.e., 'laisser' can be
preceded by a clitic corresponding to the deep structure object of the embedded verb:
(13) Je laisserai lire ce livre à Jean.
(14) Je le laisserai lire à Jean.
(15) * Je laisserai le lire à Jean.
etc. Notice, however, that this is the case only if FA has applied:
(16) Je laisserai Jean lire ce livre.
(17) * Je le laisserai Jean lire. ${ }^{2}$
(18) Je laisserai Jean le lire.

If FA has not applied, the clitic corresponding to the object of the embedded verb 'lire' precedes it, and may not precede 'laisser.' This is, moreover, the normal case. Apart from the constructions involving the application of FA, clitics invariably appear, in surface structure, attached to the verb of which they are a deep structure complement, if that verb occurs overtly in infinitival form. In other words, clitics may not normally 'move up' to a higher verb from an infinitival complement: ${ }^{3}$
(21) Je voudrais le lire.

Je vais le lire.
Je croyais la connaître.
Je tiens à le voir.
J'essaierai de les avoir.
Jean empêchera Paul de le faire.
Paul forcera Jean à le faire.
(22) * Je le voudrais lire.

* Je le vais lire.
* Je la croyais connaitre.
* Je le tiens à voir.
* Je les essaierai d'avoir.
* Jean l'empêchera Paul de faire.
* Paul le forcera Jean à faire. ${ }^{4}$

Comparing (14)-(15), (17)-(18), and (21)-(22), we see that the only cases in French of clitics appearing to 'move up' out of infinitival complements are exactly those in which the transformation FA has applied. Moreover, given the analysis of the 'faire/'laisser' construction proposed in the previous chapter, there is a relatively natural way of capturing this generalization. We recall that the derived constituent structure resulting from FA consisted in part of a VP-node immediately dominating two verbs,

second the verb of the original embedded sentence, and that this aspect of the derived structure was a direct consequence of the very formulation of FA as a
verb-raising rule. The point is that there is no other rule in French which is similar in these respects to FA. Therefore, we can make the minimal assumption that in all other cases of embedded infinitival complements, the particular structure assigned by FA is not present. Specifically, we will assume that the verb originating in the embedded sentence continues to be dominated, in all other cases, by the VP-node which immediately dominated it in deep structure. For example, in:
(23) Je voudrais lire ce livre.
the verb-verb sequence presumably comes about by EQUI-NP deletion. ${ }^{5}$ Given an underlying structure roughly of the form:

where the circled NP is the one to be deleted, there is no reason to think that the derived structure will not be, even assuming S-pruning,


Similarly, in the case of:
(16) Je lasserai Jean lire ce livre.
there is no relevant transformation that might affect the solidity of the embedded VP; i.e., there is no reason to think that there are not distinct VP-nodes dominating the two veris in question. ${ }^{6}$

We are now in a position to note that if we order CL-PL after FA and if we make CL-PL sensitive to the derived structure produced by FA, we have a natural way of distinguishing (14), (17) and (21). For example, let us suppose that CL-PL attaches a clitic pronoun to the initial verb of the verb-phrase in question. Since the only case among those being considered of a VP immediately dominating more than one verb is that involving FA, this provision insures the correct generation of all the sentences so far discussed, We can offer no independent motivation
in support of this particular way of stating CL.PL; on the other hand, we recall that the 'faire'-construction is unique in French. ${ }^{7}$

Sentence (14) will thus be derived roughly as follows:

$$
\begin{aligned}
& \text { Je laisserai - Jean lire le } \longrightarrow \text { FA } \longrightarrow \longrightarrow \text { A-INS } \longrightarrow-\longrightarrow \\
& \text { Je laisserai - lire - Jean - le } \longrightarrow \longrightarrow \text { COMP-ORDER } \\
& \text { Je laisserai - lire - à Jean - le } \longrightarrow \text { Je laisserai - lire - le - à Jean } \longrightarrow \text { CL-PL } \\
& \longrightarrow \text { Je le laisserai lire à Jean. }
\end{aligned}
$$

On the last step of the derivation, CL-PL will attach the '! $e^{\prime}$ to 'laisser,' since, due to the prior application of FA, 8 'laisser' and 'lire' are in the coriliguration:


$$
\text { laisser } \quad \text { lire }
$$

This is to be contrasted with the derivation of sentence (18):
Je laisserai - Jean - lire le $\longrightarrow$ FA does not apply $\longrightarrow$
A-INS, COMP-ORDER inapplicable $\longrightarrow$ CL-PL $\longrightarrow$ Je laisserai - Jean - le lire.
Here FA has not applied; CL.PL thus attaches 'le' to 'lire,' since 'laisser' and 'lire' are dominated by distinct VP-nodes. ${ }^{9}$

We have sketched an analysis capable of distinguishing the infinitival constructions in (14), (18) and (21) with respect to their behavior under CL-PL. We have implicitly claimed that there is a linguistically significant generalization in the correlation between FA and the 'moving up' of clitics, which is to be captured by ordering CL-PL after FA and making it sensitive to the particuiar derived structure resulting from FA. We have therefore shown that certain facts can be accounted for in this way. We have not, however, shown that they must be accounted for in this way.

The crucial result, as far as we are concerned, is that CL-PL is ordered after FA. Consequently, we must stow that the opposite ordering, i.e., CL-PL before FA, is incapable of accounting for the same range of data as the analysis we have proposed, or that it otherwise leads to loss of generalization.

We note immediately that sentences such as:
(5) Je lui ferai lire ce livre.
(17) Je lui laisserai lire ce livre.
show that CL-PL must be able to apply after FA, since the dative clitic 'lui,' which corresponds to the underlying subject of 'lire,' must have arisen through application of A-INS. The distribution of the dative clitic in this position is exactly that which one would expect if it came from A-INS; specifically it may not appear in the absence of an embedded direct object: ${ }^{10}$
(18) * Je lui ferai partir.

* Je lui laisserai partir.
(19) * Je lui ferai sortir de la chambre.
* Je lui laisserai sortir de la chambre.

Sentence (17) is thus derived exactly parallel to:
(13) Je laisserai lire ce livre à Jean.
with 'Jean' replaced by 'lui.' The string resulting from the application of A-INS and COMP-ORDER is: Je laisserai - lire - ce livre - a lui, to which CL-PL must apply, yielding (17). The crucial point is that A-INS must be formulated so as to apply to a structure resulting from the previous application of FA:
(20) Je laisserai Jean lire ce livre.
(21) * Je laisserai à Jean lire ce livre.
(22) * Je laisserai lire Jean ce livre.
(23) * Je laisserai lire ce livre Jean.
(13) Je laisserai lire ce livre à Jean.

Since A-INS follows FA, and since in the derivation of (17), CL-PL follows A-INS, we conclude that in the derivation of (17), CL-PL follows FA. In fact, CL-PL must move the pronoun 'lui' over both verbs, attaching it to 'laisser,' exactly as in the analysis proposed earlier with respect to the placement of 'le' in sentence (14). We see then that CL-PL must have the properties we were arguing for earlier, in particular it must follow FA and be able to 'move up' clitics from the infinitival complement in that construction.

We must still show that CL-PL does not also precede FA. CL-PL could both precede and follow FA, without loss of generality, given a theory embodying the principle of the transformational cycle. Showing that CL-PL could not precede FA would be equivalent to showing that if there is a transformational cycle, then CL-PL is not a cyclic rule. ${ }^{11}$

Returning to the derivation of sentence (17), we note that CL-PL does not
attach the clitic to the second verb, in this case 'lire:'
(24) * Je laisserai lui lire ce livre.

Therefore, when CL-PL follows FA, it attaches the citic originating to the right of 'faire'/'laisser'+infinitive to 'faire' or 'laisser.' But this means that even if CL-PL could not precede FA, all the clitics, in addition to those derived through A-INS, would be correctly positioned without any complication of the rules. Both the 'le' and 'lui' of:
(6) Je le lui ferai lire.
could be correctly positioned at the same time, by the same rule, despite the fact that one, 'lui,' was an underlying subject, and the other, 'le,' an underlying object. The derivation of (6) is thus:

$$
\begin{aligned}
& \text { Je ferai - lui lire le } \longrightarrow \text { FA } \longrightarrow \longrightarrow \\
& \text { Je ferai - lire - lui - le } \longrightarrow \text { A-INS } \longrightarrow \longrightarrow \\
& \text { Je ferai - lire - à lui - le } \longrightarrow \text { COMP-ORDER } \longrightarrow \\
& \text { Je ferai - lire - le - à lui } \longrightarrow \text { CL-PL } \longrightarrow \rightarrow^{12} \\
& \text { Je le lui ferai lire. }
\end{aligned}
$$

We conclude that there is no need for CL-PL to precede FA.
Nonetheless this is not sufficient to show that CL-PL does not precede FA. There is no a priori reason why the two clitics in (6) have to be placed at the same time. One could imagine that 'le,' which, as an object, is in cliticizaible position before the application of FA, is attached first to 'lire,' and then later 'moved up' to 'faire.' In fact, this is a necessary consequence of the claim that CL-PL precedes FA. The clitic 'lui' would still be placed after FA. The derivation of (6i), in such an analysis, would be:


We immediately notice two difficulties. First, it is not clear that a unique formulation of CL-PL will suffice to move both 'le' and 'lui' after FA applies, since 'le,'
but not 'lui,' is already in clitic position. Let us grant that this problem can be solved. The second difficulty is that A-INS would have to be complicated to apply to the string: 'Je ferai - le lire - lui' since 'le' is no longer in object position, nor is it dominated by the node NP. ${ }^{14}$ We recall that A-INS is formulated as:

$$
\begin{aligned}
& \begin{array}{llllll}
1 & 2 & 3 & 4 & 5 & 6
\end{array}
\end{aligned}
$$

If CL-PL only applies after FA (and A-INS), then ' 1 ' in (6), just as 'ce livre' in (17), will fulfill the role of term 5. If, however, 'le' is already in clitic position, the rule would have to be extended to apply also if there were an accusative clitic preceding term 3. Clearly, a generalization is being lost. It is not fortuitous that 'a'-insertion is triggered by direct object NP's and accusative, rather than dative, clitics. ${ }^{15}$

A second type of argument against the proposal that clitics originating as objects in the sentence embedded under 'faire' assume their surface position as the result of two applications of CL-PL rests on the observation that variocis restrictions on CL-PL in this construction can be accounted for in a non-ad-hoc manner only if application of CL-PL is withheld until after that of FA. Consider again the derivation of a sentence like:
(25) Paul les fera lire à sa fille.
if CL-PL can precede FA, then the clitic 'les' is initially attached to 'lire,' and subsequently moved up and attached to 'faire:'


At this point, CL-PL, or some sub-part of it, must reapply, preposing 'les' to 'faire.' We recall that a point in favor of the hypothesis that CL-PL did not precede FA, was that it permitted reference to the derived structure produced by FA. This, however, is not excluded if CL-PL is allowed to apply twice in the derivation of (25). At the time of the second application of CL-PL, we have the structure:

which is easily distinguished from e.g.:

as in (21). Thus this aspect of the derived structure, namely the configurational relationship between 'faire' and the embedded verb is available to both analyses.

There is, however, another aspect of the derived structure resulting from FA which is only available under the hypothesis that the derivation of (25) involves a single application of CL-PL. In chapter three, we discussed two peculiarities of sentences such as:
(26) de ferai répondre Jean à Marie.
and argued that the decision to regard FA as a verb-raising rule made it possible to account for them in terms of a partially anomalous derived structure; specifically, in (26), the underlying indirect object of the embedded sentence, 'à Marie,' is dominated by a VP-node which itself dominates no verb. Interestingly, there is a third peculiarity of this construction: substitution of a pronoun for 'Marie,' the VP-dominated object, results in an ungrammatical sentence. We would not expect:
(27) * Je ferai répondre Jean à elle.
to be grammatical, for the same reason that:
(28) * Jean répondra à elle.
is not grammatical. ${ }^{16}$ Nor would we expect to find that:
(29) * Je ferai lui répondre Jean.
is grammatical, since once FA has applied, clitics may not occur attached to the embedded verb. ${ }^{17}$ On the other hand, we might very well expect that:
(30) * Je lui ferai répondre Jean.
would be grammatical, parallel to:
(31) Je lui ferai lire ce livre.

In fact, we have the striking contrast:
(32) Je ferai écrire ce garçon à Marie.
(33) Je ferai écrire une lettre à Marie.
(34) * Je lui ferai écrire ce garçon.
(35) Je lui ferai écrire une lettre. ${ }^{18}$

The difference between sentences (32) and (33) is exactly that only (32) is an example of the construction seen to be anomalous in chapter three, and is derived by embedding a sentence of the form 'subject - verb - indirect object' under 'faire. 19 Sentence (33) is derived through application of A-INS (but see footnote 18); 'Marie' is the underlying subject of the embedded sentence.

We claim that it is a linguistically significant generalization that (32), but not (33), acts peculiarly with respect to CL-PL, as well as in the ways discussed in chapter three (i.e., with respect to length-inversion and the 'me, te, se. . à Pro' constraint). That is, the ungrammaticality of (34) is due to the complexity, or rather anomaly, of the derived structure resulting from the application of FA. ${ }^{20}$

The crucial observation is that reference to the relevant derived structure can be made only if CL-PL does not precede FA. If CL-PL could precede FA, then in the derivation of (30), we would have:

Je ferai - Jean répondre à lui $\longrightarrow$ CL-PL $\longrightarrow$ Je ferai -
Jean lui répondre.
but we see that at the time of application of CL-PL, no exceptional derived structure has yet been created. In particular, we do have:
(36) Je laisserai Jean répondre à Paul.
(37) Je laisserai Jean lui répondre.

Continuing with the derivation of (30), we get:
Je ferai - Jean lui répondre $\longrightarrow$ FA $\longrightarrow$
Je ferai - lui répondre Jean.
But now that part of CL-PL which would take:
Je ferai - ies lire à Jean
into Je les ferai lire à Jean
will apply in the derivation of (30), yielding:

* Je lui ferai répondre Jean.

It is difficult to see where in the course of the derivation this could be ruled out.
Under the hypothesis that CL-PL can only apply after FA, however, we have the following derivation:

$$
\begin{aligned}
& \text { Je ferai - Jean répondre à lui } \longrightarrow \\
& \text { Je ferai répondre Jean à lui } \longrightarrow
\end{aligned} \text { FA } \longrightarrow \text { CL.PL }
$$

Now, though, we have available the partially anomalous derived structure created by FA, which depends on the prepositional phrase, 'à lui:'


We can thus say that this derived structure causes CL.PL to block. ${ }^{21}$ Within a cyclic theory of grammar, the conclusion would be that CL-PL does not apply on the first cycle, i.e., is not a cyclic rule.

A slightly different application of the same type of argument can be constructed with respect to the Pro-Adjective 'le.' An adjective can be 'replaced' by 'le' only in the position directly following the verb; e.g.:
(38) Jean est fou.

Jean deviendra fou.
Jean restera fou.
Jean l'est.
Jean le deviendra.
Jean le restera. 22
This 'le' cannoi occur corresponding to an adjective in the position V - NP - Adi.:
(40) Je crois Jean fou.

Je trouve Jean fou.
(41) Je rendrai Jean fou.

Je nommerai Jean président.
(42) * Je le crois Jean.

* Je le trouve Jean.
(43) * Je le rendrai Jean.
* Je le nommerai Jean. 23

Notice, moreover, that if we embed a sentence of the kind in (38) under 'faire,' 'le' is impossible:
(44) Jean deviendra fou.

Jean le deviendra.
(45) Cela fera devenir Jean fou.

* Cela le fera devenir Jean.
* Cela fera le devenir Jean.

We can relate the non-occurrence of 'le' in (42), (43), and (45) only if CL-PL applies at a time when there is an intervening NP between the verb and adjective; in the case of (45) that implies after the application of FA. Conversely, if CL-PL
applied on the first cycle:

$$
\text { Cela fera - Jean devenir le } \longrightarrow \text { CL-PL } \longrightarrow
$$

Cela fera - Jean le devenir
one would expect the subsequent application of FA and supplementary CL-PL to have the effect:

Cela fera - Jean le devenir $\longrightarrow$ FA $\longrightarrow$
Cela fera - le devenir - Jean $\longrightarrow$ CL-PL $\longrightarrow$

* Cela le fera devenir Jean

This again suggests that CL-PL must be ordered after FA. ${ }^{24}$
We have been arguing, on the basis of evidence from the 'faire'/'laisser'construction, that CL-PL would not be a cyclic rule, given a linguistic theory embodying the principle of the transformational cycle. There is, moreover, further reason to believe this to be true if one considers certain other areas of French syntax, e.g., the French equivalent of the 'easy to please' construction:
(46) Jean est facile à contenter.

Sentence (46) is understood as cognitively synonymous with:
(47) II est facile de contenter Jean.

The deep structure of (46) will at least contain a sentence in which 'Jean' is the object of 'contenter.' We claim in addition that the deep structure of (46) does not have 'Jean' as the subject, but is essentially equivalent to the deep structure of (47). ${ }^{25}$ The evidence for this position is the occurrence of nominals in subject position in (46) which correspond to the nominal-object component of certain idioms:
(48) Il sera difficile de rendre justice dans ces conditions.

Il serait facile de prêter assistance à une si belle fille.
(49) Justice sera difficile à rendre dans ces conditions.

Ássistance serait facile à prêter à une si belle fille.
'Assistance' and 'justice' do not occur freely as articleless nouns in subject position; this can be accounted for by postulating a movement transformation which raises the object of the embedded sentence in the structure underlying (46) to surfacesubject position. Such a transformation would clearly apply on the second cycle in the derivation of (46). Consider now:
(50) II serait facile de trouver l'auteur de ce livre.
(51) Il serait facile d'en trouver l'auteur.

If the 'en' in (51) were placed cyclicaily in clitic position, i.e., on the first cycle,
we would expect the raising rule to be able to apply on the next cycle, yielding:
(52) * L'auteur serait facile à en trouver.
which is, however, ungrammatical. We have, rather:
(53) ?? L'auteur en serait facile à trouver. ${ }^{26}$
which suggests that CL-PL does not apply to this 'en,' if at all, until after the raising of the NP, i.e., CL-PL is not cyclic. Similarly, we have:
(54) II serait facile de trouver trois livres.
(55) II serait facile d'en trouver trois.
(56) * Trois serait facile à en troyver.
(57) Trois serait facile à trouver. ${ }^{27}$

Additional evidence for the non-cyclicity of CL-PL comes from the construction exemplified in the following sentences:
(58) On croit Jean fou.

On croit Jean fidèle à sa femme.
On croit Jean fidèle à ses principes.
On croit Jean un grand savant.
On croit Jea' capable de tout faire.
We claim that the deep structure of each of these sentences contains an embedded sentence with 'être,' and that this 'être' is later deleted. Some evidence in favor of this view can be found in, e.g.: ${ }^{28}$
(59) On croit Jean aimé de sa femme. On croit Jean facile à contenter.
If the adjective phrases in (58) were generated directly by the PS-rules, we would not expect to find in that position strings produced by transformation, such as those in (59) (where the relevant transformations are Passive ${ }^{29}$ and the rule for 'facile' discussed earlier in this chapter).

The embedded sentences in (58) are thus:
(60) Jean est fou.

Jean est fidèle à sa femme.
Jean est fidèle à ses principes.
Jean est un grand savant.
Jean est capable de tout faire.
All have counterparts with clitics:
(61) Jean l'est.

Jean lui est fidèle.
Jean y est fidèle.
Jean en est un grand.
Jean en est capable.

Consider now:
(62) On y croit Jean fidèle.

If CL-PL were cyclic, the ' $y$ ' in (62) would have initially been placed as in (61) and later moved up to 'croire'. This would leave unexplained the assymmetry in: 30
(63) * On le croit Jean.
? On lui croit Jean fidèle. On y croit Jean fidèle.
*? On en croit Jean un grand.
On en croit Jean capable.
The non-cyclicity of CL-PL would likely lead to an explanation along the lines of the discussion of examples (38)-(45). ${ }^{31}$

## Section II

At the end of section l of chapter three, we noted that our theory predicted that if a sentence containing both $\mathfrak{y}$ direct object and an indirect object were embedded under 'faire', the resulting complex sentence would contain three objects, two indirect, of which only one would show any 'anomalous' behavior. For example, if we embed under 'faire' the sentence:
(64) Son fils portera des livres à sa femme.
we get: ${ }^{32}$
(65) Paul fera porter à son fils des livres à sa femme.

Our theory predicts that the 'a'-complement corresponding to the indirect object of the embedded sentence, here 'à sa femme' will exhibit 'anomalous' behavior, whereas the other two complements will not.

We therefore correctly predict that only the latter two complements are cliticizable:
but
(67) * Paul lui fera porter à son fils des livres.

* Paul lui fera porter des livres à son fils. 34

Example (67) is thus parallel to examples (30) and (34), as expected.
Returning now to the 'faire. . .par' construction, we recall that in section II of chapter III, we argued that this construction was to be derived from an embedded passive. The deep structure of:
(68) Je ferai lire ce livre par mon fils.
will therefore contain an embedded sentence which in isolation would be realized as:
(69) Ce livre sera lu par mon fils.
lgnoring for the moment the problem of the auxiliary, we notice that if we allow Passive to apply on the lower cṿcle: Je ferai [Ce livre lire par mon fils], then $S$ S on the second cycle FA will apply, raising 'lire' out from the embedded sentence, correctly yielding (68). Nonetheless, despite the simplicity of such an analysis (let us call it the full-passive analysis), we will argue that it is incorrect.

Consider the verb 'obéir', which is exceptional in entering into the passive
construction despite the lack of a direct object: ${ }^{35}$
(70) Jean obéit à Paul. Paul est obéi de/par Jean.
(71) Jean parlera à Paul. Jean répondra à Paul. Jean écrira à Paul. Jean ressemble à Paul.

* Paul sera parlé par/de Jean.
* Paul sera répondu par/de Jean.
* Paul sera écrit par/de Jean.
* Paul est ressemblé par/de Jean.

Given the full-passive analysis, we would expect, but do not get: ${ }^{36}$
(72) * Je ferai obéir Paul de/par Jean.

The ungrammaticality of (72) would, however, follow from an analysis in which Passive was broken up into two parts, agent-postposing and subject-preposing, 37 and which asserted that, in the derivation of sentences like (68), only agent-postposing had applied. ${ }^{38}$

Such an analysis could also account for the contrast, for most speakers, between:
(73) Jean fera faire entrer le monsieur par son fils.
(74) * Le monsieur sera fait entrer par son fils.

In the light of the ungrammaticality of (74), the full-passive analysis could not generate (73). If Passive applied in two parts, though, one could claim that (74) was excluded by virtue of the derived structure resulting from FA: i.e., that subjectpreposing could not apply across two verbs. 39 Sentence (73), which, like (68), does not involve application of subject-preposing, would be generable.

Most importantly, an analysis in which subject-preposing is not involved in the derivation of sentences like (68) automatically accounts for the gap in the following paradigm:
(75) je iaisserai jean partir.

Je laisserai partir Jean.
(76) Je laisserai mon fils lire ce livre. Je laisserai lire ce livre à mon fils.
(77) * Je laisserai ce livre lire par mon fils. Je laisserai lire ce livre par mon fils.

If the derivation of the grammatical half of (77) involved full application of Passive, one would ad-hocly have to say that FA was obligatory in the presence of the
passive ma:ker. Nio special condition need be stated at all in the two-part-passive analysis.

Finally, we note that if subject-preposing has not applied in (77), 40 the problem of accounting for the absence of the auxiliary falls away: ${ }^{41}$
(78) * Je laisserai être lu ce livre par mon fils.

The derivation of (68) is now: Je ferai - [Mon fils lire ce livre par $\Delta$ ] $\longrightarrow$ Je ferai - [ lire ce livre par mon fils]. At this point, what must happen is that, on the 'faire' cycle, the verb and all the objects become attachad to the VP dominating 'faire. 42 FA would, however, raise only the verb, and COMP-ORDER is inapplicable. An interesting possibility is that the objects are raised by a rule which apparently makes reference to the feature 'agentive.'

Consider:
(79) On fera tirer Jean sur Marie.

On fera marcher Jean sur les bras de Marie.
(8n) Jean tirera sur Marie. Jean marchera sur les bras de Marie.
(81) Jean lui tirera dessus. Jean lui marchera sur les bras.
(82) *? On lui fera tirer Jean dessus.

* On lui fera marcher Jean sur les bras.

The ungrammaticality of (82) is related to that of (30), (34), (67). iWe do not claim that (82) is derived directly from (79), nor (81) from (80) - see chapter 2, section C, II). Contrasting with (82), however, is:
(83) On lui fera tomber des pierres dessus.

Cea iui faisait monter des sanglots à la gorge.
and especially
(84) On lui fera tomber Jean dessus. 43

It seems that there must be a rule which further collapses the structure resulting from FA, just in case there is no agentive NP following 'faire'. Such a rule might then be extendable to the case of 'faire. . .par'.

## Footnotes to Chapter IV

1. With the 'exceptions' discussed in chapter six.
2. Similarly:
(a) * Paul en laissera Jean parler.
(b) * Paul y laissera Jean aller.
(c) * Paul lui laissera Jean donner des livres.
3. Clitics 'move up' in the case of adjectival complements:
(d) Jean lui est fidèle. Jean lui restera fidèle.
(e) J'y croyais Jean fidèle. J'en croyais Paul capable.
and in certain cases, e.g., in the construction represented in (e), when an embedded verb has been deleted:
(f) Moi, je croyais Jean à Paris; est-ce que tu l'y croyais aussi, toi?
(see latter part of this chapter for a more detailed discussion of this construction). They also 'move up' to the auxiliaries 'avoir' and 'être,' when the main verb appears in past-participle form:
(g) Je l'ai vu.

Cela livre nous a déjà été donné dóné par Georges.
4. Some of the starred sentences in (22) were grammatical in Old French, and a somewhat larger sub-class (i.e., their equivalents) are grammatical in modern Spanish. Study of this historical change is beyond the scope of this thesis.
5. The relative ordering of EQUI-NP and CL-PL is unclear. The argument given in the text is superfluous if EQUI-NP follows CL-PL.
6. The distinction between

is not sufficient to adequately distinguish the various possibilities. We recall that the derived structures resulting from EQUI-NP and FA acted alike with respect to

L-TOUS (see footnote 13, chapter 3), yet were distinct from that resulting from the extraction of 'Jean' in (16) by Passive, wh-preposing, or CL-PL. Thus it would seem that there is at least a three-way distinction to be made. (See also footnote 12, chapter 3 concerning some relevant data from Spanish.)

On the other hand, if CL-PL precedes EQUI-NP (more precisely the actual deletion of the identical NP; see Postal (1968a)), then the distinctive effect of FA would merely be its forming 'verb + infinitive' sequences at a relatively early stage in the derivation. The important point is not so much exactly what aspect of the derived structure produced by FA CL-PL is sensitive to, but that some such property be available to CL-PL at the time of its application; i.e., that CL-PL follow FA.
7. We note that there is no necessity for evidence bearing on the exact formulation of CL-PL to exist internal to French, insofar as there is the possibility that some of its properties may be predictable from linguistic theory.

It will become apparent in chapter six that the superficial similarity between the 'faire'-construction and auxiliaries breaks down in a crucial respect.
8. As expected (see chapter 3 with respect to L-TOUS), removal of the embedded subject NP by a rule other than FA does not yield a structure suitable for the 'raising' of the clitic. Unfortunately the evidence is somewhat marginal, since we obviously cannot, as we did for L-TOUS, use prior application of CL-PL as a test, and since Passive and wh-preposing are both excluded with 'laisser' and 'faire.' However, we do have the contrast:
(h) Paul a envoyé Jean chercher la fille. Paul a envoyé Jean la chercher.

* Paul l'a envoyé Jean chercher.
(i) Paul a envoyé chercher la fille par Jean.
* Paul a envoyé la chercher par Jean.

Paul l'a envoyé chercher par Jean.
Paul la lui a envoyé chercher.
but:
(j) Jean a été envoyé chercher la fille. Jean a été envoyé la chercher.

* Jean l'a été envoyé chercher.

The sentences in (i) involve application of FA, and are parallel to (13)-(15).

Those in (j) involve application of Passive prior to CL-PL and behave quite differently.

In the light of the argument given in chapter five (independently of these constructions) that CL-PL follows Passive, these facts suggest that CL-PL is not merely sensitive to the earlier formaion of V-Inf. sequences (see footnote 6).
9. Notice that if we replace 'Jean' in (13)-(18) by a clitic, we obtain an interesting paradigm which, like the examples with 'tout' in chapter 3, shows that superficially similar sentences can have radically different structures due to differences in derivational history:
(k) Je lui laisserai lire ce livre. Je le laisserai lire ce livre.
(I) * Je lui laisserai le lire. Je le laisserai le lire.
(m) Je le lui laisserai lire. * Je le le laisserai lire.

The two sentences in (k) differ exactly as do (14) and (18), and the difference is reflected in (I) and (m).

The ungrammatical sentence in (m) might also be ruled out on the grounds that two accusative clitics form an impossible clitic sequence in French.
10. See footnote 5, chapter three for discussion of certain exceptions to this generalization.
11. There is a slight equivocation here. We are assuming that CL-PL is obligatory. If CL-PL were optional (see Kayne (forthcoming-a)), then the arguments in this chapter would show rather that, in the actual derivation of the grammatical sentences, CL-PL did not apply cyclically, and that if it did, some way of blocking the derivation would be necessary. Such a result would in no way compromise the conclusions of chapter six. Furthermore, it will become apparent in chapter six that no such blocking mechanism would be feasible, given that certain clitics are in fact placed cyclically.
12. The deletion of the 'a' is discussed in chapter two.
13. We argued in chapter two that the derived structure assigned by CL-PL has the sequence 'clitic+verb' dominated by the node V. FA will therefore raise the clitic 'le' along with the verb 'lire,' as indicated.
14. See chapter two.
15. Thus:
(n) Je le ferai lire à Jean.

* Je le ferai lire Jean.
(o) Je lui ferai parvenir cette lettre.
* Je lui ferai parvenir à cette lettre.

See latter part of this chapter for more detailed discussion of the construction exemplified in ( 0 ).

A similar argument can be constructed with respect to the clitic ' y .' Certain prepositional phrases can optionally act like direct objects with respect to A-INS:
(p) Cela les fait penser à la guerre.

Cela leur fait penser à la guerre.
but:
(q) Cela les fera aller à Paris.

* Cela leur fera aller à Paris.

In both cases, the prepcsitional phrase can be pronominalized as ' $y$,' with the paradigm essentially unchanged:
(r) Cela les y fait penser.
(s) ? Cela leur y fait penser.
( t ) Cela les y fera aller.
(u) * Cela leur y fera aller.

If CL-PL had applied to ' y ' before FA, and therefore before A-INS, whatever difference there is in structure between the two types of PP's would have been lost in ( $r$ )-(u). If, on the other hand, CL-PL applied after A-INS, these sentences could be derived exactly as are ( $p$ ) and ( $q$ ).
16. See Kayne (forthcoming-a) for an argument that (27) and (28) are to be ruled out by an output constraint.
17. Compare:
(v) * Jean fera les lire à sa fille.

* Jean fera les lire sa fille.

18. Sent ices (33) and (35) are both ambiguous. One reading, that parallel to (31), is 4 . one we are interesterd in here, i.e., 'I'll have Mary (her) write a letter.' The oth is in effect the 'faire. . .par. . .' construction with agent unexpressed: 'I'll he e a letter written to Mary (her)." Thus the contrast is even stronger; (34) differs from both readings of (35). We return to the 'faire. . .par. . .' construction below.
19. The two sentences aiso cififer in the animacy of the NP following 'écrire.' This is not a relevant distis:cion Compare, parallel to (33), and derived by A-INS:
(w) Je ferai consiaitre ce garçon à Marie. Je lui ferai connaître ce garçon.
and parallel to the 'faire. . .rar. . .' reading:
(x) Je fersa nresenter ce gargon à Marie. Je lui forai présenter ce garçon.

See below for further discussi:n.
20. This is not to say that we have an explanation for why the anomaly manifests itself in this particular way. We note that there is no general constraint on movement from the position in question:
(26) je ferai répondre Jean à Marie.
(30) * Je li: ferai répondre Jean.
(y) Voilà la fille à qui je ferai répondre Jean.

Even more strikingly, CL-PL itself is permitted if the clitic is ' $y$ :'
(z) Je ferai rénondre Jean à ses questions.
(aa) J'y ferai repondre Jean.
The same paradigm reveals itself if the subject of the embedded sentence is a clitic:
(ab) Je le ferai répondre à Marie. * Je ie ui fera! répondre.
(ac) Je le ferai répondre à ses questions. Je l'y ferai répondre.
'En' patterns like 'y:'
(ad) le le ferai parler te ses projets.
Je l'en ferai parier.
J'essaierai d'en faire parler ton copain.
The clitics 'en' and ' y ' can apperently be extracted from more deeply embedded structures than can the dative clitics, a fact that hopefully can be related to the
structurai difterence betweer, 'en' and 'y,' both Pro-PP's, and the dative clitics, which are Pro-NP's. See chapter two for arguments in favor of such a distinction.

The fact that dative clitics are extracted less easily than ' $y$ ' or 'en' in the above constructions is :airrored, for some speakers, in the 'croire'construction:
(ae) Je crois Jean fidèle à sa femme.
(af) ? Je lui crois Jean fidèle.
(ag) Je crois Jean fidèle à ses principes.
(ah) J'y crois Jean fidèle.
While most speakers accept both (af) and (ah), there are some who accept only (ah).
See footnote 14, chapter two, for discussion of another environment in which 'en,' ' y ' have a freer distribution than the other clitics.

In addition, there is a minority of speakers who allow 'en' and ' $y$ ' to be attached to the embedded verb in the 'faire'construction, even if FA has applied. For these speakers, the following are grammatical:
(ai) ? Je ferai en manger douze à inazrie.
? Je ferai en manger douze par Marie. ? Je ferai y aller Jean.
(aj) J'en ferai manger douze à Marie. J'en ferai manger douze par Marie. $J ’ y$ ferai aller Jean.
(ak) Je les ferai manger à Marie. Je les ferai manger par Marie. Je lui ferai apporter des livres par Lyan.
All speakers accept the sentences in (aj) and (ak). Those in (ai) are rejected by most speaikers. Those who accept (ai) still reject:
(al) * Je ferai les manger à Marie.

* Je ferai les manger par Marie.
* Je ferai lui apporter des livres par Jean.

We have no expianation for the optionality shown in (a: ; ;aij, but emphasize the correlation between the various sets of data in this footncte and the fact that 'en,' ' $y$ ' can be distinguished from the other clitics by their Pro-PP charscter.

We note that the sentences in (ai) do not constitute an arament for the cyclic placement of 'en' and ' y ' (in the dialects of those speakers who accept (ai)), since suci spezkers often accept sentences like:

$$
\begin{aligned}
& \text { (am) ? Paul a laissé s'en noyer trois. } \\
& \\
& \text { ? Cela a fait s'en tuer trois. }
\end{aligned}
$$

where the 'en' must have been placed after FA, because of the foliuwing contrast:

| (an) | Paul en tuera trois. |
| :--- | :--- |
| (ana) | $*$ Trois s'en tueront. |
| (anb) | Trois se tueront. |

The 'en' in (am), which correspond to underlying subjects, could not have been extracted on the first cycle, as shown by (ana)-(anb).
21. See footnote 16, this chapter.
22. The facts are clear with 'true copulas' like 'être,' 'devenir,' 'rester.' Informants' responses seem to differ for verbs like 'sembler,' 'paraître:'
(ao) Jean semble fou. ? Jean le semble.
and in the passives of verbs like 'rendre:'.
(ap) Jean a été rendu fou.
*? Jean l'a été rendu.
In addition, 'le' may replace the past-participle in passives:
(aq) Jean a été bousculé par Paul et Marie l'a été par Georges. It is not clear that this 'le' should be distinguished from the 'le' of:
(ar) II semble que. . . .
II le semble.
(as). II faut que. . . .
II le faut.
or how, if at all, it is to be related to the 'le' which is a Pro-NP (see Ross (1969)). Note the contrast:
(at) Jean est l'homme le plus intelligent du monde; non, il ne l'est pas.

* Jean est le garçon dont je t'ai parlé hier soir; non, il ne l'est pas.

Also:
(au) Jean est professeur mais Pierre ne l'est pas.
Interestingly, 'le' as a Pro-Adj cannot co-occur with any other clitic (although it of course can as a Pro-NP) and furthermore has no strong form (again distinguishing it from ' $1 \mathrm{e}^{\prime}=$ Pro-NP).
23. M. Gross (1968) feels that this restriction is due to the fact that a verb may not have two direct objects, and that it may be related to:
(av) * J'en croyais Jean un.
(See further on in text.)
24. Implicit in these arguments is the assumption that there is a unique rule of CL-PL for all non-reflexive clitics (see chapter six). If this were not the case, then each individual argument would be valid only for some CL-PL rule or rules. We have no evidence that there is not a single rule for non-reflexive clitics, in any case.
25. It is not clear whether the deep structure of (47) very closely approximates its surface structure or is rather more like 'de contenter Jean est facile.' See Rosenbaum (1967) and Emonds (1969) for differing analyses of extraposition in English, as well as Ross (1967a).

Difficulties that exist only in French for this construction are, first, the change in preposition:
(aw) Jean est facile à contenter.

* Jean est facile de contenter.
(ax) !! est facile de contenter Jean.
* II est facile à contenter Jean.

More precisely, 'de' here is a complementizer, probably predictable in this environment, and much like:
(ay) Il est important de tout savoir.
The origin of the 'a' in (aw) is unclear. Second, we have the contrast:
(az) II lui est facile de contenter Jean.

* Jean lui est facile à contenter.

Despiie these and other problems, we maintain the position that 'Jean' is not the deep-structure subject.
26. 'En' from subject position is highly restricted.
27. Also impossible is:
(ba) * Trois en serait facile à trouver. but this is part of the more general paradigm:
(bb) * Trois en sont intelligents.

There is no general restriction on 'en' in the complement of 'facile:'
(bc) La bouteille serait facile à remplir de ce vin-ci. ? L'autre serait facile à en remplir aussi.

The behavior of 'en' in cleft sentences might be relevant here, but is superficially incomprehensible:
(bd) C'est l'auteur de ce livre que je connais.

* C'en est l'auteur que je connais.
* C'est l'auteur que j'en connais.
(be) J'en connais l'auteur.
(bf) C'est l'auteur de ce livre qui est connu.
*? C'en est l'auteur qui est connu.
C'est l'auteur qui en est connu.
(bg) C'est la forme de ce poème qui est admirable.
? C'en est la forme qui est admirable. C'est la forme qui en est admirable.

There is much to be done here.
A further mystery is sentences like:
(bh) La solution de ce problème mérite d'être étudiée.

* La solution en mérite d'être étudiée.

La solution mérite d'en être étudiée.

* La solution mérite d'être étudiée de ce problème.
(hb) Le pied de la table parait être cassé.
Le pied paraît en être cassé.
? Le pied en paraît être cassé.
* Le pied en paraît en être cassé.

More generally, it is not clear how 'en' coming from subject position fits in with the other clitics, in particular whether there might not be a separate rule involved.

We note finally that the restrictions on 'en' from subject position comprise an instructive example of left-to-right assymmetry (as predicted by the formalism for writing transformations), which is born out by the fact that subject clitics do not pattern like object clitics. (Sentences such as 'La tête lui tourne' are only apparent counterexamples - see Gross (1968, p. 24)). Compare also :napter 1, section 3, and footnote 15, chapter 6.
28. For further argument, see Gross (1968, chapter V). We leave open the question of whether the deep structure is V - NP - S or V - S.
29. As pointed out to us by N. Ruwet, there are restrictions on which passives can be embedded here:
(bi) * On croit Jean battu par Paul.
The relevant difference is likely one involving 'tense'.
30. One could alternatively claim that CL-PL was optional and cyclic (for all clitics) and that if CL-PL did apply cyclically, the derivation blocked in all cases.

3i. See also fn. 20 and Gross (1968, p. 127).
We note that the non-cyclicity of CL-PL in sentence (62) makes it especially clear that CL-PL must have a variable.
32. For most speakers. All speakers accept:
(66) Paul lui fera porter des livres à sa femme.
where the number of complements has been reduced by substituting 'lui' for 'son fils'.
33. Similarly:
(bj) Paul fera porter à son fils ces livres à sa femme. (bk) Paul les lui fera porter à sa femme.

We note that cliticizing the direct object alone leads to an unacceptable sequence of compiements:
(b) * Paul en fera porter à son fils à sa femme.
34. This sentence is of course grammatical in the reading corresponding to (bm) Elle portera des livres à son fils.
Another somewhat dulled reflection of the 'anomalous' behavior of the embedded indirect object is the fact that (65) cannot come from having embedded under 'faire': (bn) Sa femme portera des livres à son fils.
35. Like 'obéir' is 'désobéir', and, for most speakers, 'pardonner'. Some speakers do, however, accept:
(bo) ? Jean pardonnera Paul.
vs.
(bp) * Jean obéira Paul.

* Jean désobéira Paul.

36. It is unclear why one does get:
(bq) Paul arrive à se faire obéir de tout le monde.
Notice, though, that there is no reason to call 'se' here an accusative:
(br) * Paul est arrivé à la faire obéir de tout le monde.
37. The terminology is taken from Chomsky (forthcoming - a), who argues on the basis of nominalizations that Passive must be so divided in English.
38. It would also be necessary that the exceptionality of 'obéir' be with respect to subject-preposing, a not unnatural claim in the light of impersonal passives (see chap. 3, fns. 24, 28). Compare also:
(bs) Je ferai parler de Marie au professeur par un de mes frères.
39. See fn. 9, chapter 3.
40. Further evidence for divorcing agent-postposing from subject-preposing might have existed in Middle French:
(bt) $\quad \mathrm{MF}_{\text {Ça }}$ se dit par tout ie monde.
41. Some speakers accept sentences like:
(bu) Paul laisserait sa femme être arrêtée par les gendarmes.
This indicates that there is no general constraint on subject-preposing applying in sentences embedded under 'faire'/'laisser' and suggests that sentences like
(bv) * Paul fera ce livre être lu par son fils.
be ruled out by some kind of output constraint (see in. 3, chap. 3). We leave this question open. It is also unclear why FA cannot apply to (bu), yielding
(bw) * Paul laisserait être sa femme arrêtée par les gendarmes.
(or even (78)). Much remains to be done here. Perhaps relevant is the grammaticality, for some speakers, of:
(bx) Paul vous les fera laisser tomber.
42. See fn. 19. See also fns. 16, 17, chapter 3.
43. In the non-agentive meaning of 'tomber'.

## CHAPTER V

## Section I

In this chapter we consider the syntax of the object-clitic 'se,' ${ }^{1}$ beginning with its "reflexive" use. In non-clitic positions, French has a reflexive form much like English 'self,' as in the following:
(1) Jean parle souvent de lui-même.
(2) * Jean parle souvent d'elle-même.

* Jean parle souvent de toi-même, ${ }^{2}$
etc.
(3) * Jean voudrait que tu parles de lui-même. ${ }^{3}$ Jean voudrait que tu parles de lui.
The appearance of 'même' in (1) is triggered by the identity of subject and object. As (3) shows, there are constraints on what pairs of identical NP's count in determining when 'même' can occur. ${ }^{4}$

In clitic position, third-person reflexives appear as 'se.' For example, with a verb that takes direct objects, identity of subject and object causes the direct object clitic to be 'se' and prevents the appearance of the non-reflexive object-clitic: 5
(4) Jean la regarde dans le miroir. Jean le regarde dans le miroir. Jean me regarde dans le miroir. etc.
(5) * Jean le regarde dans le miroir.
(6) Jean se regarde dans le miroir.

Sentence (5) is ungrammatical if 'le' and 'Jean' are to be understood as referring to the same person. Instead we have (6). The same is true with dative clitics:
(7) Jean lui achètera des bonbons. Jean leur achètera des bonbons. Jean m'achètera des bonbons. etc.
(8) * Jean lui achètera des bonbons.
(9) Jean s'achètera des bonbons.

Again, sentence (8) is only grammatical if 'lui' and 'Jean' are not coreferential. Conversely, the 'se' in (9) must refer to 'Jean.'

Furthermore, 'se' can appear only if the two identical NP's are in the same sentence:
(10) * Jean voudrait que tu śachètes des bonbons.

In the cases where 'se' is thereby excluded, the non-reflexive pronoun is possible:
(11) Jean voudrait que tu lui achètes des bonbons.

The distribution of 'se' thus resembles that of the 'même'-reflexive and of 'self' in English. This suggests that 'se' might be considered merely the clitic form of the 'même'reflexive. In fact we note that the 'même'form alone often leads to an ungrammatical sentence when 'se' would be possible:
(12) * Jean regarde lui-même dans le miroir. ${ }^{6}$

This recalls the contrast:
(13) Jean me regarde.
(14) * Jean regarde moi.

Giver the analysis of clitics proposed in chapter two, there would appear to be a rather natural way of expressing the parallelism between (6), (12), (13), (14). We already have a rule of CL-PL, which moves the pronoun in a structure resembling (14) to pre-verbal position, yielding (13). If we now said that CL-PL applied as well to reflexive pronouns, we could have it apply to the reflexivized pronoun in a structure resembling (12), moving it to pre-verbal position, where it would be spelled out as 'se,' yielding (6). In such an analysis, the derivations of (6) and (13) would be the same except that in the case of (6), an extra rule of reflexivization would have applied.

One problem that arises immediately is the following: we showed in chapter two that CL-PL applies only to bare pronouns; in particular it does not apply to pronouns modified by numerals, 'tous,' 'autres,' nor even overtly to 'même:'
(15) Tu te regardes trop souvent dans le miroir.

* Tu te-même regardes. . .
* Tu toi-même regardes. . . .

Jean se regarde. . . .

* Jean se-même regarde. . . .
* Jean soi-même regarde. . . .
(17) Nous n'écrivons qu'à nous-mêmes.

Nous nous écrivons.

* Nous nous-mêmes écrivons.

This implies that we cannot derive 'se' from a pronoun to which 'même' has been added, i.e., to a pronoun which has undergone the 'même'-reflexivization rule. Otherwise we would have to complicate CL-PL to apply to modified pronouns in just this one case, and then have this modifier obligatorily deleted just in case CL-PL had applied.

Alternatively, in order to preserve the claim that 'se' is introduced parallel to the other clitics, i.e., through the application of CL-PL to an object pronoun, we could say that the rule of refiexivization, rather than introducing 'même' directly, first added an ad-hoc feature ' + reflex.' to the pronoun in question. This feature would then not prevent the application of CL-PL. Later rules would specify that a pronoun with this feature was spelled out "se' ${ }^{7}$ in clitic position, but that in nonclitic position no morphological change took place, the formative 'même' being inserted instead. ${ }^{8}$ The derivation of (6) would be roughly: ${ }^{9}$


We claim that such an analysis would be incorrect and that despite all that 'se' has in common with the other clitics, it would be a mistake to derive the former by CL-PL. This would imply that linguistic theory must be able to capture generalizations such as those about 'se' and other clitics by means other than that of derivation by a single rule. ${ }^{10}$

We shall proceed in three ways. On the one hand, we shall show that 'se' differs from the other clitics in ways which make less implausible than it would seem the idea that there is more than one rule involved. Second, we shall argue on the basis of ordering considerations that ' se ' must be placed in clitic position at an earlier stage than the other clitics. Finally we shall show that certain 'se' should be generated in the base, and that these have important properties in common with the other clitics and with reflexive 'se,' which suggests that the apparent loss in generalization caused by a separate rule for reflexive 'se,' is in fact recoverable.

Before going on to consider the differences between 'se' and the 'même'-
reflexives, we point out that the apparently more natural morphological strong form for 'se,' 'soi,' is synchronically no longer related to reflexives. ${ }^{11}$ From the point of view of the morphology, it is not terribly natural to say that 'se' is an automatic variant of 'lui-même,' 'elle-même,' 'eux-mêmes' and 'elles-mêmes.' It would be desirable, given that one wants to relate 'se' to some strong form, to maintain the paradigm 'se'/soi,' 'me'//moi,' 'te'/'toi'. Unfortunately, this is impossible. 'Soi' is now merely a strong form corresponding to the subject clitic 'on. ${ }^{12}$ In particular, it occurs in environments where reflexives do not:
(18) J'ai toujours mes livres avec moi (-même*).

Jean a toujours ses livres avec lui (-même*).
(19) Quand on a ses !ivres avec soi, . . . .
(20) Jean $\mathrm{t}^{\prime}$ emmènera avec lui (-même*). Je t'emmènerai avec moi (-même*).
(21) Quand on emmène les gens avec soi, . . . .
(22) Jean m'a demandé de parler avec lui (-même*). Je lui demanderai de parler de moi (-même*).
(23) On ne doit pas demander aux gens de parler de soi. ${ }^{13}$

Conversely, 'soi' is not usually a possible reflexive, for most speakers:
(24) Jean parle de lui-même.
(25) * Jean parle de soi. ${ }^{14}$

Most strikingly, 'se' and 'soi' differ syntactically in various ways:
(23) On ne doit pas demander aux gens de parler de soi.
(26) * On ne doit pas demander aux gens de se donner de l'argent. ${ }^{15}$
(27) Jean s'écrit souvent.

* Jean n'écrit qu'à soi.
* Jean s'écrit à soi.

Jean m'écrit souvent.
Jean n'écrit qu'à moi.
Jean m'écrit, à moi.
(28) Quand on est livré à soi, . . . .

* Quand on s'est iivré, . . .
(29) Il faut rester fidèle à soi
* II faut se rester fidèle. 16

The restrictions on 'se' iilustrated in sentences (28) and (29) in fact distinguish it from the 'même'reflexives as well as from 'soi.' Sentence (29) is an example of an adjectival 'a'-complement, which is in general subject to CL-PL:
(30) Jean est fidèle à Marie.
(31) *? Jean est fidèle à elle.
(32) Jean lui est fidèle.
(33) *? Marie est fidèle à toi.
(34) Marie t'est fidèle.
etc. However, if the complement is a reflexive, cliticization is impossible:
(35) Jean est fidèle à lui-même.
(36) * Jean s'est fidèle.

If 'se' were in fact placed in pre-verbal position by CL-PL, that rule would have to be restricted ad-hocly so as not to apply to adjectival complements just in case they were marked with the feature 't reflex.' On the other hand, if 'se' were introduced by a rule distinct from CL-PL, it would not be unnatural to find such a rule applying to verbal complements only. Sentence (28) is a further example of the incomplete parallelism between 'se' and the other clitics. In the passive of a verb like 'livrer,' the 'a'-complement is cliticizable except if a reflexive:
(37) On livrera Jean à Marie. Jean sera livré à Marie.
(38) *? Jean sera livré à elle par la police. Jean lui sera livré par la police.
(39) Jean sera livré à lui-même par la police. * Jean se sera livré par la police.

We return to these examples below in the section on ordering.
It might be objected that the above examples arr semantically funny, ${ }^{17}$ specifically that both (35) and (39) impose rather special interpretations on 'fidèle' and livrer' respectively. This $r_{2}$. Ae true, but its importance is diminished by the observation that exactly the same naradigm is wid or reciprocal 'se,' where there is no question at all of semartic :angeness.

Just as reflexive 'se' cort nds roughly to the 'même'-reflexive, so does reciprocal 'se' correspond to the ex ~assion 'I'un l'autre.' In non-clitic environments, we have:
(40) Ils parient souvent l'un de l'autre.

Ils comptent l'גn sur l'autre.
Ils pensent l'un à l'autre ${ }^{18}$
Conversely, with direct objec:- we get:
(41) * Ils aiment I'un l'autre.
(42) Ils s'aiment. is;
and with indirect objects, both:
(43) ? Ils ressemblent l'un à l'autre.
(44) lis se ressemblent.

Returning to the restrictions on the distribution of 'se' noted earlier, we fird:
(45) Ils sont fidèles I'un à l'autre.
(46) * Ils se sont fidèles. 20
(47) On les présentera l'un à l'ejtre.
(48) Ils seront présentés l'un à l'autre par Jean.
(49) * Ils se seront présentés par Jean.

Sentences (46) and (49) could certainly not be excluded on the basis of any semantic argument. Again leaving (49) to the section on ordering, we note that (46) does not choose between the analysis in which 'se' is subject to CL-PL, and that in which it is introduced by some other rule, which we will call 'se'-insertion (SE-INS). In either case, we would like to be able to say that reflexives and reciprocals have some feature in common which accounts for their sonth being realized by the same clitic. If this is true, then SE-INS would fail to produce (46) just as with (36). Similarly, the restriction on CL-PL, though still ad-hoc, couid be qeneralized to (46) from (36).

Reciprocal 'se,' nonethe'ass, poses the same problem for the CL-PL analysis as did reflexive 'se,' in that there is no convenient source for reciprocal 'se' either. 'L'un l'autre' is a complex expression which we would not expect to be subject 10 CL-PL, sir:e the iatter applies only to bare pronouns (see chapter two). If reciprocal 'se' is placed in pre-verbal position by CL-PL, it must therefore be derived from sume abstract pronoun which never shows up in surface structure.

This kind of difficulty is well-illustrated by recipieual first and second person clitics. Corresponding to (44), we have:
(50) Ils s'écrivent souvent.
(51) Nous nous écrivons souvent.
(52) Vous vous écrivez souyent.
all with reciprocal meanings. ${ }^{21}$ Conversely, the following are impossible:
(53) * Nous s'écrivons souvent.
(54) * Vous s'écrivez solivent.

In the CL-PL analysis, one would say that the abstract reciprocal pronoun that is being moved is marked for persor: and spelled out accordingly. What remains unexplained is the fact that 'nous' and 'vous,' which in (51) and (52) are reflexes of this reciprocal pronoun, lose this possibility in non-clitic position: the following can only be interpreted reflexively: ${ }^{21 a}$
(55) ? Nous n'écrivons qu'à nous.
? Vous n'écrivez qu'à vous.
(56) Nous parlons de nous.

Not only must we set up an abstract reciprocal pronoun as the source for the reciprocal clitics in the CL-PL analysis, but this pronoun must undergo CL-PL or the resulting sentence is ungrammatical. (If it were not, then (55), (56) would admit to a 'reciprocal' reading.)

The analysis we propose is the following: both reflexive and reciprocal 'se' are introduced under the appropriate conditions by a rule SE-INS, and are consequently not derived via CL-PL from pronouns generated in true object position. Given this analysis, we account for the fact that (55) and (56) must be interpreted as reflexives. The clitics 'nous' and 'vous' in (51) and (52) will be derived via an agreement transformation which will refer to the subject of the sentence.

Support for this analysis comes from the following ₹entences:
(56a) Nous nous écrivons souvent l'un à l'autre.
(56b) Ils s'aiment l'un l'autre.
(57) Vous ne vous ressemblez pas l'un •utie. ${ }^{22}$
in which both 'se' and 'l'un l'autre' appear overtly in surface structure. These sentences would be difficult to derive if 'se' came from some abstract reciprocal pronoun, since we would not expect such a pronoun to co-occur with 'l'un l'autre.' Given a rule SE-INS, however, we can say that these sentences directly reflect the output of that rule. The derivation of (56b) is:

Ils aiment l'un l'autre $\longrightarrow$ SE-INS $\longrightarrow$
Ils s'aiment l'un l'autre.
The derivation of (56a) involves application of the agreement rule (SE-AGR):
Nous écrivons l'un à l'autre $\longrightarrow$ SE-INS $\longrightarrow$
Nous s'écrivons l'un à l'autre $\longrightarrow$ SE-AGR $\longrightarrow$
Nous nous écrivons l'un à l'autre.
Reflexive clitics will be introduced in the same way. Simi!ar to (56a) is:
(58) Elle s'écrit à elle-même de très longues lettres.

Significantly, (58) differs from the corresponding sentence with non-reflexive clitic:
(59) Elle m'écrit, à moi, de très longues lettres.
in that the former does not require either 'contrastive' or 'detachment' intonation. We recall that our analysis of CL-PL makes the claim that must be a case of
'detachment,' or derivatively, 'contrast,' since CL-PL is a movement rule. If reflexive clitics are introduced by SE-INS, then we would not expect this to be true of (58). 23

The rule of SE-AGR needed in our analysis is required on independent grounds to account for the varying form of the clitic in 'inherent' reflexives. These are verbs which occur with 'se' but 'hich otherwise do not take objects. For example, in:
(60) Marie s'évanouit.
the 'se' corresponds to no rea! object, since both of the following are ungrammatical:
(61) * Marie évanouit Jean.

* Marie évanouit à Jean.

We analyze such verbs as having 'se' part of their lexical entry, or alternatively as being specified with some feature which triggers the spelling out of 'se.' The important point is that 'se' does not correspond to an object. If this is true, then an agreement rule is necessary for:
(62) Je m'évanouis.

Tu t'évanouis.
Nous nous évanouissons.
Vous vous évanouissez.
The only alternative, in the CL-PL analysis, which would obviate the need for an agreement rule would be to say that at some point in the derivation the structure leading to (60) was: '* Marie évanouit elle-même.' This could be produced, for example, by a rule which placed a pronominal copy of the subject in object position. Such a rule would apply just in case the yerb was one of what we are calling the 'inherent' reflexives.

There is evidence, however, which suggests that such an approach is incorrect. Deriving (60) from: "* Marie évanouit elle-même.' via application of CL-PL is equivalent to saying that after the copying rule has applied, 'évanouir' is just like any other verb that happens to have a reflexive object. This assumption leads to undesirable results. Consider the verb 's'imaginer,' which takes direct objects:
(63) Jean se l'imagine.
but not indirect objects:
(64) * Jean l'imagine à Paul.

Clearly, 's'imaginer' is like 's'évanouir' except that the 'se' is felt as dative. Sentence (63) would presumably be derived from a structure resembling:
(65) * Jean l'imagine à lui-même.

This fails to account for the fact that we do not get (if the direct object is, e.g., 'moi'):
(66) * Jean m'imagine à lui-même.
parallel to:
(67) Jean me présentera à elie. ${ }^{24}$

Similarly, we have the contrasts:
(68) * Jean ne l'imagine qu'à lui-même.
(69) Jean n'en écrit qu'à lui-même.
(70) * C'est à lui-même que Jean l'imagine.
(71) C'est à lui-même que Jean écrit.
and most strikingly:
(72) * Jean se l'imagine à lui-même.
(73) Jean se parle à lui-même.
(74) * Jean s'imagine à lui-même que tout est bon.
(75) Jean s'écrit à lui-méme de très longues lettres.

In particular, sentences (72) and (74) show that it would be insufficient to claim that 'imaginer' in this usage had to be preceded by 'se' in surface structure. We conclude that a rule of SE-AGR is necessary to account for the shape of the object clitic in:
(76) Je m'imagine que. . . .

Vous vous imaginez aue. . . .
etc.
To further heighten the plausibility of an analysis which includes the rules SE-AGR and SE-INS and which rejects the claim that 'se' is the result of CL-PL, we recall that CL-PL, as argued in chapter two, is restricted in application to direct and indirect object complements. In particular, we argued that the clitic in:
(100) Jean lui court après.
did not come from a structure of the form: . . .après Pro. . .
but rather from: . . .après à Pro. . . . In other words, (100) is not derived directly from the structure underlying:
(101) Jean court après elle.
through application of CL-PL. If 'se' too were introduced by CL-PL, we would
therefore not expect to find it occurring with any reciprocal except 'I'un l'autre' and 'l'un à l'autre.' We consequently would have no way of accounting for:
(102) Jean et Marie se courent l'un après I'autre. (103) Jean et Paul se sont tiré l'un sur l'autre.

Deriving 'se' by CL-pL implies that it, like the other clitics, cannct come from an 'après'- or 'sur'-phrase. The derivational history of (102) and (103), however, does not include a stage containing an 'a'somplement. If the rule ${ }^{25}$ producing the ' a '-complement in (100) had applied in (102), (103), we would expect, and do get:
(104) Jean et Paul se sont tiré dessus l'un l'autre. ${ }^{26}$

The SE-INS analysis, on the other hand, is not subject to the same limitations as the CL-PL analysis, and is capable of generating both (103) and (104), since the rule of SE-INS need not be sensitive to the kind of preposition preceding the reciprocal element. ${ }^{27}$

Similarly, although CL-PL cannot apply to pronouns preceded by 'pour,' as argued in chapter two, many speakers accept:
(105) Jean et Paul se sont trouvé des chambres I'un pour l'autre. (106) Jean et Paul se sont acheté des jouets I'un pour l'autre.

It is difficult to see how the 'se' in such sentences could be derived through CL.PL. ${ }^{27}$

## Section II

We tree discussed various problems that arise if it is assumed that 'se,' like the other object clitics, is placed in pre-verbal position by the rule CL-PL, and suggested, despite the many similarities between 'se' and the other clitics, that the former is introduced by a distinct rule, SE-INS. In additio،ı, we argued that certain 'se,' the 'inherent reflexives, ${ }^{28}$ should be considered not to have been placed by a rule at all, hence are obviously a case of a clitic not placed by CL-PL. We now turn to a different kind of argument, namely one based on rule ordering.

Insofar as it can be shown that 'se' must be in pre-verbal position at the point of application of some transformation, $T_{1}$, and that $T_{1}$ must precede CL-PL, it follows that 'se' is not placed by CL-PL, quite independently of the exact nature of the rule that places it. We claim that such a rule $T_{1}$ exists for both reflexive and reciprocal 'se' and that $\mathrm{T}_{1}=$ Passive. We must therefore show that Passive follows SE-INS and precedes CL-PL. Such a result wedid be extremely strong support for the arguments in the preceding section.

We begin by considering the ordering of Passive and SE-INS. 'Se' can appear if subject and indirect object are identical, but not if direct object and indirect object are identical:

> (107) Jean s'écrit souvent. (108) Jean s'achète des jouets.
> (109) *a police livrera Jean à lui-même. 29
> * police se :it -sra Jean.

The same paradigm holds for reciproes. 'se:'
(110) Jean et Paul $\underline{s}^{\prime} i_{i c:}$ nt souvent. Jean et Paul $\underbrace{\cdots-i}$ : ant des jouets.
i:11) Je présenterai Jean et Paul l'un à l'autre.
(112) * je se présenterai Jean et Daul.

The crucial observation is that 'se' is also not possible in the passives corresponding to (108) and (111), as pointed out in section one:
(113) Jean sera livré à lui-méme par la police.
(114) * Jeañ se sera livré par la police.
(115) Jean et Paul seront présentés l'un à l'autre par ma soeur.
(116) * Jean et Paul se seront présentés par ma soeur. 30

We claim that there is a linguistically significant generalization in the exclusion of (114), (116) alongside (109), (112). Notice that this would follow automatically if SE-INS preceded Passive, independently of the mechanism by which (109), (112) are
excluded. ${ }^{31}$
Assume, for example, that the correct way of excluding (112) is to state as part of SE-INS that the first of the two 'identical' 32 NP's must be the subject of the sentence. Then sentence (116) will not be generated since at the time of application of SE-INS it will not yet have been passivized and will thus be subject to the proposed condition on SE-INS. Another possibility for blocking (112) would seem to be by reference to the cross-over principle. Actually, however, this principle ${ }^{33}$ is inconsistent with the formulation of SE-INS as a rule introducing 'se,' rather than moving it in from object position.

On the other hand, it would be quite natural to invoke 'cross-over,' given the CL-PL analysis, in order to exclude (112). If 'se' were placed in clitic position by CL-PL, then (112) would be an instance of 'se' moving over 'Jean et Paul,' an obvious violation of 'cross-over.' Notice, however, that if CL-PL follows Passive, then CL-PL applied to 'se' in (116) does not move it over 'Jean et Paul,' which has by now been moved to subject position b: Passive; this would mean that (116) could not be ruled out by 'cross-over.' If (116) were ruled out by 'cross-over,' the 'crossing-over' would have to precede Passive, which implies the order CL-PL Passive.

We conclude that (112) and (116) can be excluded in the same way ${ }^{34}$ only if 'se' is placed in clitic position prior to Passive. Consequently, if 'se' is placed by CL-PL, then that rule must precede Passive. We now argue that this ordering is impossible for other reasons, from which it would follow that 'se' is not placed by CL-PL.

The evidence for ordering CL-PL after Passive depends on the clitics 'le' (as a Pro-Aaj.) and 'en. ${ }^{35}$ 'Le' is clearly placed after Passive since it can replace a past participle which is created by Passive:
(117) Jean a été bousculé par Paul et Pierre lıa été par Jacques.

Compare:
(118) * Paul a bousculé Jean et Jacques l’a Pierre.
(119) * Paul est arrivé à 3 h . et Jacques म'est à $4 \mathrm{~h} .{ }^{36}$
'En' must be placed after Passive for the following reason: the conditions under which 'en' can be extracted from object position are much less restricted than for subject position. For example:
(120) Paul en connait trois.
(121) Trois sont intelligents. ${ }^{37}$
(122) * Trois en sont intelligents.
(123) Paul en prendra un jaune.
(124) Un jaune est à votre droite.
(125) * Un jaune en est à votre droite. 38

Significantly, the conditions under which 'en' may be extracted from subject position in passives correspond to those for subject position in non-passives and not to those for object position, the deep-structure position of the passive subject:
(126) Paul en a lu trois.
(127) Trois ont été lus par Paul.
(128) *? Trois en ont été lus par Paul.
(129) Paul en a pris un jaune.
(130) Un jaune a été choisi par Paul.
(131) * Un jaune en a été choisi par Paul. ${ }^{38}$

If we are to exclude (128) and (131) parallel to (122) and (125), the extraction of 'en' must take place after the surface-subject NP's have been placed there by Passive. 39 If 'en' could have been subject to CL-PL prior to Passive, we would incorrectly expect (128) and (131) to be the passives corresponding to (126) and (129):

Paul a lu trois en $\longrightarrow$ CL-PL $\longrightarrow$
Paul en a lu trois $\longrightarrow$ Passive $\longrightarrow$
*? Trois en ont été lus par Paul.
A second argument, ${ }^{40}$ related to and supporting the first, in favor of the ordering of Passive before CL-PL involves a rule which we shall call 'il'-extraposition (IL-EX) ${ }^{40 a}$ and which is operative in the derivation of sentences like:
(132) Il est arrivé trois hommes.
which is synonymous with:
(133) Trois hommes sont arrivés.

One characteristic of this rule is that it is sensitive to the distinction definite/indefinite: $\mathbf{4 1}^{41}$

* Il est arrivé vos amis.
* II est arrivé les Américains.

This is mirrored in passives:
(134) Il a été mangé des pommes de terre au lard.
(135) * Il a été mangé les pommes de terre au lard.

The fact that (134), but not (135) is grammatical suggests very strongly that their derivation involves application of IL-EX to, respectively:
(136) ? Des pommes de terre au lard ont été mangées.
and: (137) Les pommes de terre au lard ont été mangées.
We conclude that IL-EX follows Passive. Conversely, the foilowing pair of sentences shows that IL-EX must precede CL-PL:
(138) II en est arrivé trois.
(139) * Trois en sont arrivés.

Sentence (138) is like (132) with 'hommes' replaced by a pronoun. As (139) and (128) show, 'en' with numerals cannot come from subject position. The 'en' in (138) must therefore have been extracted after the postposition of the subject NP, i.e., after IL.EX, which itself follows Passive. Therefore CL-PL follows Passive. However, we showed earlier that 'se' had to be placed before Passive. We conclude that there is a rule SE-INS distinct from CL-PL.

The rule IL-EX can furthermore be used to show that still another kind of 'se,' what we shall call "middle 'se'," is introduced independently of CL-PL. This 'se' is found in sentences like:
(140) Ça se dit souvent.
(141) Ça se mange partout.
(142) Ça se remplace facilement.
where the surface-structure subject 'ça' is understood as the object of the verb in each case. That there is a productive rule involved in the derivation of these sentences is shown by:
(143) Assistance se prêterait facilement à une si belle fille. Justice se rendrait facilement dans ces conditions.
since neither 'assistance' nor 'justice' is normally a possible subject. ${ }^{43}$ Consequently, the 'se' must also be introduced by a rule. Independently of the exact riuiure of the rule that will account for these 'se, 44 we note that it must precede IL-EX, because of:
(144) II se vend beaucoup de fruits chez nous.
(145) * Il se vend les raisins surtout en France.
vs. (146) ? Beaucoup de fruits se vendent chez nous.
(147) Les raisins se vendent surtout en France.

As in (134)-(137), we see the definite/indefinite distinction playing a role, confirming the claim that (144) is derived from a structure resembling (146) by IL-EX, i.e.,

IL-EX follows the insertion of "middle 'se'." Since, as shown earlier, CL-PL must follow IL-EX, we can conclude that CL-PL follows the insertion of "middle 'se'." In that this result makes more apparent the dissimilarity between 'se' and other clitics, it is an argument for the SE-INS analysis proposed in section one. 45

Section 111
In preceding sections we proposed an analysis of 'se' in which we denied thi: desirability of treating all clitics uniformly. in postulating a separate rule (or rules) for introducing 'se,' it might seem that we are eliminating the possibility of capturing several obvious generalizations about clitics. For instance, ${ }^{50}$ all clitics share certain behavior with respect to past-participle agreement. 51 Past-participles agree with preceding direct objects, in particular with preceding direct object clitics:
(148) Paul l'a prise par la main. (Marie)
(149) Marie l'a pris par la main. (Paul)

When it corresponds to a direct object, 'se' likewise triggers agreement:
(150) Marie s'est prise par la cheville.
(151) Paul s'est pris par la cheville.

Furthermore, indirect object clitics do not trigger agreement, and neither does a 'se' corresponding to an indirect object:
(152) Paul lui a offert une robe.

* Paul lui a offerte une robe. (à Marie)
(153) Marie s'est cuit des oignons.
* Marie s'est cuite des oignons. ${ }^{52}$

The problem is that if 'se' is introduced by a rule other than CL-PL, in no sense is it, in (150), a direct object that has been preposed. Rather it is introduced to the left of the verb in the presence of a direct object identical to the subject. In particular, 'se' has exactly the same derivational history in (150) as in (153), given the SE-rvS analysis. Furthermore, since 'se' does not differ morphologically depending on case, there is apparently no independent motivation for marking 'se' for case as it is introduced. In the CL-PL analysis, however, 'se' will automatically be marked for case, since it is treated like the other clitics, which do show morphological variation, e.g., 'les'/'leur'. Similarly, in order to distinguish (150) from (151), 'se' must somehow be marked for gender. 53 Again, in the SE-INS analysis, it is not clear how this could be accomplished, nor is there any independent motivation for it, since 'se' does not vary according to gender. As before, this would not be a problem in the CL-PL analysis since clitics do sometimes show such morphological variation, e.g., 'le'/"la.'

The advantage of the CL-PL analysis in these cases is, however, only apparent. Consider the inherent 'se' described in section one. There it was argued in effect
that even if reflexive 'se' were derived by CL-PL, the class of inherent 'se,' e.g., 's'évanouir,' 's'imaginer' were best considered not to be derived from objects at all. Significantly, however, these inherent 'se' display the same behavior with respect to past-participle agreement as reflexive 'se:'54
(154) Marie s'est eprise de Paul.
(155) Paul s'est epris de Marie.

The 'se' in (154) is acting as if it were marked as a direct object and as '+ feminine.' This means that even if reflexive and reciprocal 'se' were not introduced separately from the other clitics, mechanisms for assigning these features to inherent 'se' would be necessary. But this implies that there is really no support for the CL-PL analysis to be found in this area, since the SE-INS analysis now has the option of extending these independently available mechanisms to "reflexive" and "reciprocal" 'se.' 55

Somewhat analogous mechanisms would seem to be necessary to account for the difference between:
(156) Ils se sont tiré l'un sur l'autre.
(157) * Ils se comptent l'un sur l'autre.

We argued earlier that (156) was evidence for SE-INS since 'se' appeared despite the lack of 'à'-complement. Sentence (157) shows that SE-INS must be constrained in a very peculiar way: the ci isast between (156) and (157) is clearly related to that in:
(158) Je lui ai tiré dessus.
(159) * Je lui compte dessus.

Apparontly, the insertion of 'se' is dependent on the possibility of certain other clitics preceding the verb in question. Along the same line, we have:
(160) * Ils se sont juré I'un contre l'autre.
(161) * Je lui ai juré contre.

Furthermore, it appears that the idea of surface-structure subcategorization will not work because of:
(162) Ils ont parlé l'un de l'autre.
(163) ? Ils se sont parlé l'un de l'autre.

If (163) is possible at all, it definitely does not correspond to (162) as (156) does to:
(164) Ils ont tiré l'un sur l'autre.

The 'de'-complement in (162) can in no way be associated with a clitic. ${ }^{56}$ Consequently, no 'se' can be introduced corresponding to it. The fact that 'parler' also has a cliticizable 'à'-complement (the only possible "source" for the 'se' in (163)), as in:
(165) Jean lui parle.
changes nothing. We conclude that although many serious problems remain for the SE-INS analysis, the evidence here does not support the CL-PL analysis. Moreover, the evidence discussed in the first two sections strongly suggests that the CL-PL analysis is in fact incorrect.

## Footnotes to Chapter V

1. That is, 'se' shares all the characteristic properties of object clitics referred to in chapter two. To take only a handful of examples, it precedes the auxiliary in compound tenses:
(a) Jean s'est acheté des bonbons. * Jean a/est s'acheté des bonbons.
follows 'ne:'
(b) Jean ne s'achètera rien.

* Jean se n'achètera rien.
and cannot be separated from the verb by anything except other clitics:
(c) Jean, souvent, s'achète des bonbons.
* Jean se, souvent, achète des bonbons. Jean s'en achète souvent.

2. Unlike 'self,' 'même' is usually optional:
(d) Jean parle souverit de lui. Jean pense d'abord à lui.
with certain exceptions:
(e) Jean se fâche contre lui-même. * Jean se fâche contre lui.
3. In all our examples, 'même' is to be read without extra-heavy stress. it is not clear under what conditions the 'même'-reflexive, with such stress, can correspond to English 'him himself.' See Postal (1968b) for some comments on the problems of stressed reflexives in English.
4. See Lees and Klima (1963) and Chomsky (1965) for discussion with respect to English. We do not insist that 'même' is introduced exactly as 'self' in English, since we have not investigated the syntax of 'même' in detail. We use 'même' primarily to set off various peculiarities in the distribution of 'se,' and we will uttimately claim that these two reflexives are in fact not directly related. In general, intuitions about 'se' are much sharper than those about 'même' (see footnote 3).
5. This is clear for third-person pronouns. In the first and second persons, there is no difference between reflexive and non-reflexive:
(f) Jean me regarde. Je me regarde.

We return to the significance of this fact below.
6. The facts are less clear with dative clitics:
(g) Jean s'écrit souvent.
(h) ? Jean écrit souvent à lui-même.

In particular (h) seems to be distinctly better than:
(i) *? Jean écrit souvent à moi.
7. Again, we temporarily leave aside first and second persons.
8. The rule inserting 'même' would have to follow CL-PL, so could not be cyclic (see chapter 4). This would preclude explaining the ungrammaticality of sentences like (3) on the basis of Chomsky's (1965) proposed universal constraint on the introduction of morphological material into lower sentences (see chapter 3), unless it could be shown that rules adding features were subject to this constraint also.
9. We assume that pronouns are generated in the base as such, i.e., not derived from full NP's. See Bach (forthcoming) and Kayne (forthcoming - b) for arguments in favor of this position. In addition, we note that this discussion is independent of the possibility of reflexives being generated in the base and then subject to some interpretive mechanism (see Jackendoff (1969)). If pronouns like 'lui-même' are generated in the base, CL-PL cannot apply to them, as argued in the text. Furthermore, the arguments in the text against deriving 'se' from pronouns to which a feature '+ reflex.' has been added by rule are valid as well with respect to pronouns introduced in the base with such a feature. We return later on in the text to the possibility that 'se' itself is generated in the base.
10. It is beyond the scope of this thesis to discuss in detail how one might express the generalization that both CL-PL and the rule (or rules) introducing 'se' place the clitic in a unique position. See Emonds (1969) and footnote 50.
11. In Old French, 'se' and 'soi' were much more closely related. See Stefanini (1962).
12. This is true of 'on' meaning 'one.' 'On' has many uses, some of which we would claim to be syntactically distinguishable. 'Soi' can refer back to 'on' just as 'lui' to 'il,' but actually has a much more restricted distribution:
(j) Lui, il est parti il y a longtemps.

II est comme ga, iui.
(k) * Soi, on ne doit pas faire de telles choses.

* Quand on est comme ga, soi. . . .

Detailed consideration of 'on' is beyond the scope of this thesis.
13. Under certain conditions, 'on' can be referred back to by 'vous:'
(1) On ne doit pas demander aux gens de parler de vous.
14. A few dialects have maintained (25) as a remnant of Old French.
15. 'Vous' would be possible.
16. This sentence is grammatical for some speakers. In addition, we note that 'même' itself can be added to 'soi:'
(m) Quand on parle de soi, . . .

Quand on parle de soi-même, . . .
17. See Bresnan (1969)
18. The preposition must separate 'I'un' from 'l'autre:'
( n ) * Ils pensent à I'un l'autre.
We leave open the question of the deep-structure of these sentences. Dougherty (1968) has argued that 'each other' in English is to be derived from 'each. . . other' where 'each' is introduced in the base independentiy of 'other.' None of the arguments carry over to French. 'L'un l'autre' is very much like English 'one another,' which poses somewhat different problems than 'each other.'
19. Sentence (42) is ambiguous: it may also have a reflexive meaning.
20. For most speakers.
21. As well as reflexive meanings.

21a. These sentences are also possible with 'même:'
(na) Nous n'écrivons qu'à nous-mêmes.
(nb) Vous n'écrivez qu'à vous-mêmes.
(nc) Nous parlons de nous-mêmes.
22. It is unclear why SE-INS should be obligatcry in (56b) but optional in (43). (See also footnote 6.)

Once SE-INS has applied, the deletion of 'l'un l'autre' is optional, as in (50)-(52). In addition, in the case of indirect objects, SE-INS allows the optional deletion of 'à:'
(o) ? Ils ressemblent l'un à l'autre. ? Ils se ressemblent l'un à l'autre.
(p) Ils se ressemblent l'un l'autre. * Ils ressemblent l'un !'autre.

The possibility of deletion is affected by the verb:
(pal Ils se parlent l'un à l'autre.
(pb) ? Ils se parlent t'un l'autre.
This deletion of 'a' may be related to that in:
(q) ? Je leur donnerai tous des livres.
(r) Je leur donnerai des livres à tous.

Compare: (s) ? Je donnerai des livres à tous.
(t) * Je donnerai tous des livres.
$I$ : also suggests that the insertion of 'se' can somehow change the status of 'I'un l'autre.'

Judgments about the above sentences, moreover, vary considerably from speaker to speaker. We leave this problem for further study.
23. It is difficult to show that there is a real syntactic difference between the two sentences. Some marginal evidence is available: In standard French (specifically in dialects where sentences such as the following are impossible:
(u) * C'est moi que j'ai fait ça.)
there is the contrast:
(v) ? C'est à elle-même qu'elle s'écrit.
(w) * C'est à nous qu'elle nous écrit.

This observation is complicated, however, by the following:
(x) * C'est elle-même qu'elle s'aime.
(y) Elle ne se parle qu'à elle-même.
(z) ? Elle ne me parle qu'à moi.
(aa) * Elle ne l'aime que lui.
(ab) * Elle ne s'aime qu'elle-même.
There seems to be a systematic difference in French between direct and indirect objects with respect to the syntax of both clitics and pronouns, for which we have no explanation.
24. See chapter 3.
25. The argument in the text, however, does not depend on the existence of such a rule, nor whether its status would be lexical or transformational. It is necessary only that there be two distinct structures: . . .courir après NP. . . and . . . courir après à NP. . . , of which only the latter is subject to CL-PI.
26. We would also expect, but do not get:
(ac) * Jean et Paul se sont tiré dessus l'un à l'autre.
This may be related to the ungrammaticality for most speakers of:
(ad) *? Paul a tiré dessus à Jean.
(See also footnote 22.) For some speakers, almost all such sentences are better with 'tirer' than with 'courir.' In addition, the corresponding reflexive sentences are worse:
(ae) ? Jean s'est tiré sur lui-même.
The impurtant point is that (103) is grammatical, and that it is not generable in the CL-PL analysis; in particular, it contrasts with:
(af) * Jean leur a tiré sur tous.
27. How then can SE-INS distinguish between (103), (105), (106) and the ungrammatical:
(ag) * Jean et Paul se sont juré I'un contre l'autre.
(ah) * Jean et Paul se penserit l'un à l'autre.?
We return to this and related questions in section 3.
28. Similarly for 'inherent reciprocals' like 's'entretuer.'
29. See footnote 17.
30. Compare:
(ai) Jean et Paul se seront présentés à ma soeur avant minuit. where 'Jean et Paul' is the underlying subject of the sentence.
31. This mechanism cannot be an output condition requiring ' $s e^{\prime}$ to appear to the right of its associated NP for at least tvic reasons. First, it would not permit (114), (116) to be excluded parallel to (109), (112). Second, it would incorrectly predict that:
(aj) Cela ferait se tuer votre ami.
is ungrammatical (see chapter six).
32. 'Identical' is obviously the wrong word with respect to reciprocals.
33. Due to Postal (1968b). Conceivably, one could consider SE-INS as a rule that introduces a copy of the object into object position, this copy then being moved into clitic position, all as part of one rule. Formulated in this way, SE-INS would be subject to the 'cross-over' principle. This discussion is of course predicated on the validity of such a principle, which has been questioned: see Jackendoff (1969). Possible counterexamples to 'cross-over' in French are first, SUBJ-CLINV (see chapter two), as in:
(ak) Se souvient-il de tout ça?
second, STYL-INV (see chapter two):
(al) Voila ce que se disait Jean.
and COMP-ORDER (see chapter three):
(am) ? Cela fera connaître Jean à lui-même.

In the case of SUBJ-CL-INV, the problem would disappear if it could be shown that the rule moves the verb rather than the clitic. (This is in fact assumed in Asselin (1968).) Sentence (ak) would then be like:
(aj) Cela ferait se tuer votre ami.
which is not inconsistent with 'cross-over' since the inversion is effected by FA, which is a verb-moving rule. The same might be true of STYL-INV, too; one would need to show that the rule does not move the subject-NP. Since the correct formulation of STYL-INV is unclear, we leave the question open. COMPORDER poses a more serious problem, since the derivation of (am) is presumably:

Cela fera - lui connaitre Jean $\longrightarrow$ FA $\longrightarrow$
Cela fera connaitre lui Jean $\longrightarrow$ A-INS $\longrightarrow$
Cela fera connaître à lui Jean $\longrightarrow$ COMP-ORDER
$\longrightarrow \quad$ Cela fera connâtre Jean à lui $\longrightarrow$ reflex.
$\longrightarrow \quad$ Cela fera connaître Jean à lui-même.
Another example of the same type is:
(an) Je ferai connaître Jean et Paul l'un à l'autre.
34. Alternatively, one could deny that there is a significant generaiization here. This would permit introducing 'se' a ". Passive, but would require other means for ruiing out (110). The central problem is explaining why (114) and (116), but not:
(ao) Jean me sera livré par la police.
(ap) Jean et Paul me seront présentés par ma soeur.
are ungrammatical, and at the same time accounting for the contrast between (115), (116) and:
(aq) Jean et Paul ressemblent l'un à l'autre.
(ar) Jean et Paul se ressemblent.
If 'se' is introduced after Passive, then at the time of its introduction, (115) and (aq) are virtually identical. The only possibility for distinguishing them, as far as we can see, would be to claim that (116) is excluded for the same reason as:
(as) * Jean et Marie se sont fidèles.
(at) Jean et Marie sont fidèles l'un à l'autre.
(see section one). That is, one could claim that (116) is an example of a derived 'être + Adj.' structure, and in fact one could give a strong argument for assigning derived adjectival structure to the past-participle in passives. Nonetheless, we reject
this alternative on the basis of the fact that there are some speakers who accept sentences like:
(au) ? Jean et Marie se sont fidèles l'un à l'autre. There is no one, however, who accepts the corresponding passives:
(av) * Jean et Marie se seront présentés I'un à I'autre par Paul. We interpret this to mean that the extension of SE-INS to adjectival complements has no effect on the co-occurrence of 'se' and passives, as in (116). This is predicted by the ordering: SE-INS -- Passive.
35. The fact that there are no direct arguments for the other clitics is unimportant. On the one hand, there is no evidence that all the non-reflexive clitics that come from non-clitic position are not placed by one rule. On the other hand, even if there were such evidence, the demonstration that two of them must be distinguished from 'se' is significant and makes our position quite reasonable.
36. This is one of the arguments for the adjectival character of passive, but not other, past-participles, alluded to in footnote 34. Our example is chosen such that the past tense quality of the verb is sloarly felt. The facts mav be more complicated in other environments. The examples in the text are, in addition, to be distinguished from cases of adjectives having the form of past-participles; e.g., 'cassé.'
37. We give all examples from subject position with 'être.' Extraction of 'en' from subject position depends on the verb. 'Etre' is one verb which does not increase the restrictions on 'en':

$$
\begin{array}{ll}
\text { (aw) Le pied en est cassé. } \\
(a x) & \text { *? Le pied en cassera. }
\end{array}
$$

38. Similarly, for most speakers:
(ay) Paul en connait le frère ainé.
(az) *? Le frère ainé en est intelligent.
(ba) Paul en a rencontré le frère ainé.
(bb) *? Le frère ainé en a été rencontré par Paul.
39. Conversely, 'en' must be extracted after Passive in order to account for:
(bc) On obéit aux lois du pays.
(bd) * On en obéit aux lois.
(be) Les lois du pays sont obéies.
(bf) ? Les lois en sont obéies.
The 'en' in (bf) could not have been moved before Passive due to a general constraint on the movement of PP's, as in (bd) (see chapter two).
40. A third argument, valid in literary French and in some dialects, revolves around those few verbs which can take 'de' as their agentive preposition:
(bg) Jean est aimé de Marie.
The PP thus created by Passive is sometimes subject to CL-PL:
(bh) Jean est aimé de Marie, tandis que Paul en est détesté. The conditions under which 'en' can refer to animates, as in this case, are unclear, and subject to dialectical variation.

40a. Despite the name, we do not mean to imply that this rule is involved in other kinds of 'extraposition', e.g.:
(bha) II est important que tu partes.
41. In this respect, it is similar to 'there'-insertion in English. The rule is limited to certain verbs, all intransitives (at the time of application of IL-EX). That it does not apply to transitives is likely related to the constraint on NP-NP sequences discussed in chapter 3, footnote 6. The appearance of 'il' in subject position is probably predictable (see chapter 3, footnote 4).

Justification for this rule, in addition to that implicit in the text, comes from consideration of past-participle agreement (cf. chapter 3, footnote 4):
(bhb) Les choses que j'ai produites. . .
(bi) Les choses qu'il s'est produit. . .
(bj) * Les choses qu'il s'est produites. . .
43. Compare the discussion of 'facile' in chapter four. The problem is that here one could claim that some kind of lexical redundancy rule is involved; we have no evidence that any transformation must apply prior to the 'rule' at issue.

On the one hand, verb sequences produced by FA do not enter into this
construction (v. chapter 3, footnote 9):
(bk) * L'eau se fait bouillir facilement.
(bl) * Le courrier se fait suivre d'habitude chez nous.
(bm) * Les enfants, ga se fait taire facilement.
even when, as in the above, the combination 'faire $+V$ ' is felt strongly as a unit. On the other hand, there are sentences like:
(bn) CCa se dit surtout pour ennuyer les gens.
(bo) C̣a se mange bien en parlant.
where the subjects of the two verbs in each sentence are understood to be the same. Further consideration of this topic would take us too far afield.
44. It is not clear that there is any reason to think that it is the same rule as that for reflexive 'se.' For discussion of a similar construction in Portuguese, see Naro (1968).
45. Middle 'se' will not be discussed at all in chapter six, since for some reason it may not be embedded under 'faire' (v. Gross (1968, p. 44)).
50. We will not discuss how one might account for the fact that CI-PL and SEINS place the clitic in the same position, i.e., both attach it to the left of a particular verb, assigning a unique derived structure, and the choice of verb is always the same for both rules. We note, however, that inherent 'se,' which are not placed by any transformation, have all the properties of the clitics that are. This is certainly not fortuitous.
51. See footnote 4, chapter 3, and chapter 2, section C, part I.
52. Similarly for reciporcal 'se':
(bp) Marie et Pierrette se sont prises par la main.
(bq) Marie et Pierrette se sont offert des cadeaux.
53. Verbs in French that are conjugated with 'être' show past-participle agreement with the subject:
(br) Marie est morte il y a 250 ans.

* Marie est mort il y a 350 ans.

We know that (150) is not a case of this type of agreement because of (153). The parallelism between (148), (152) and (150), (153) strongly suggests that the agreement with 'se' is as if the auxiliary were 'avoir.' This is not surprising, given that the alternation 'avoir'/'être' is a derivational fact. This is shown most strikingly by the contrast, in Oid and Middle French, between:
(bs) Marie s'est voulu cuire des oignons.
and Marie m'a voulu cuire des oignons.

Thus we would claim that there is a rule taking 'avoir' to 'être' in the presence of 'se,' and that this rule follows the agreement rule for past-participles.

This implies that there is no relationship between the use of 'être' with 'se' and its appearance in (br), a not unreasonable position since in the latter case, it is a question of a small number of verbs being lexically marked:
(bt) Marie est morte il y a 450 ans. Marie a crevé il y a 550 ans.
(although there may be some lexical sub-generalizations here). The appearance of 'être' with 'se,' on the other hand, is completely productive, and independent of the verb.

Further evidence in favor of distinguishing these two uses of 'être' comes from diaiects with 'temps surcoumpōsés:'
(bu) Quand j'ai eu fini. . . .
(bv) Quand j'ai été arrivé. . . .
but (bw) Quand je me suis eu cuit des oignons. . . .
Parallel to (bu), which has the perfect tense of 'avoir' as the auxiliary, is (bv), with auxiliary equal to the perfect tense of 'être.' Sentence (bw) indicates then that the underlying auxiliary with 'se' is in fact 'avoir' and that the rule 'avoir' $\rightarrow$ 'être' applies only to that part of the auxiliary to which 'se' is directly attached.

We are not claiming that the two 'avoir'/'être' alternations are fortuitous.
There may very well be some explanation for why 'être' and not, e.g., 'devenir' is the auxiliary that alternates with 'avoir' in the ways in question. See, e.g., Bach (1967). However, only in the sense that both may be predictable from some deeper regularity in linguistic theory and/or French syntax can they be said to be related. We would thus expect to find dialects in which one but not the other use of 'être' was existent.
54. In addition, we have for inherent 'se':
(ca) Quand il s'est eu aperq̣u de cela. . . .
parallel to (bw). Therefore the agreement in (154), (155) is effected by the same rule as for reflexive 'se.'

Unfortunately there are few examples of inherent dative 'se' like 's'imaginer,' and we know of none having past-participles which would show a phonetic change if agreement took place; consequently, we can offer no examples parallel to (153).
55. A more detailed analysis of what such mechanisms might look like is beyond the scope of this thesis.
56. More precisely, with a dative or accusative clitic; the fact that it can be pronominalized to 'en' evidently plays no role. Similarly, for ' $y$ ':
(cb) Ils pensent l'un à l'autre.
(cc) * Jean lui pense (à).
(cd) * Ils se pensent l'un à l'autre.
(ce) Jean y pense.

## CHAPTER VI

The subject of this chapter is the highly assymmetrical distribution of the clitic 'se' in the 'faire'/'laisser' construction. If the rule FA has not applied, then 'se' patterns just like the other clitics:
(1) Paul laissera son fils s'acheter des chaussures. Paul laissera son fils m'acheter des chaussures.
(2) * Paul se laissera son fils acheter des chaussures.

* Paul me laissera son fils acheter des chaussures.
(3) Paul laisssra son fils se tuer.

Paul laissera son fils te tuer.
Paul laissera son fils la tuer.
(4) * Paul se laissera son fils tuer.

* Paul te laissera son fils tuer.
* Paul la laissera son fils tuer.

If, however, FA has applied, then the distribution of 'se' is rather different from that of the other clitics. We saw in chapter four that the application of FA had the effect of preventing the attachment of the object clitics to the embedded verb:
(5) * Cela fera la tuer Jean.

* Cela fera te tuer Jean.
(6) * J'essaierai de faire lui acheter des chaussures à mon ami.
* J'essaierai de faire t'acheter des chaussures à mon ami.
(7) * J'essaierai de faire lui laver les mains à mon ami.
* J'essaierai de faire te laver les mains à mon ami. ${ }^{1}$
' $\mathrm{Se}^{\prime}$ is superficially an exception to this generalization:
(8) Voila ce qui a fait se tuer votre ami.
(9) Paul essaiera de faire s'acheter des chaussures à mon ami.
(10) Paul essaiera de faire se laver les mains à mon ami.

On the other hand, 'se' can also occur, like the other clitics, attached to 'faire':
(11) Jean me fera connaître à Marie. Jean te fera embrasser par Marie. Jean vous fera laver les mains par Marie.
(12) Jean se fera connaître à Marie.
(13) Jean se fera embrasser par Marie.
(14) Jean se fera laver les mains par Marie.

However, when 'se' is attached to 'faire' it is interpreted differently from when
attached to the embedded verb. In the latter case, 'se' is interpreted as associated with a following NP, specifically the subject of the embedded sentence:
(8) Voila ce qui a fait se tuer votre ami.

* Voila ce qui a fait se tuer votre ami.
(9) Paul fera $\underline{s}^{\prime}$ acheter des chaussures à mon ami.
* Paul fera $\underline{s}^{\prime}$ acheter des chaussures à mon ami.
(10) Paul fera se laver les mains à mon ami.
* Paul fera se laver les mains à mon ami.

Conversery, when 'se' is attached to 'faire,' it must be interpreted as associated with the subject of 'faire:'
(12) Jean se fera connaître à Marie.

* Jean se fera connaître à Marie.
(13) Jean se fera embrasser par Marie.
* Jean se fera embrasser par Marie.
(14) Jean se fera laver les mains par Marie.
* Jean se fera laver les mains par Marie. ${ }^{2}$

Consequently, in (12)-(14), the 'se' could not appear attached to the embedded verb:
$(121)$ * Jean fera se connaître à Marie.
$(131)$ * Jean fera s'embrasser par Marie.
$(141)$ * Jean fera se laver les mains par Marie. ${ }^{3}$
Similarly, (8)-(10) could not be rendered with 'se' attached to 'faire:'
$(81) \quad *$ Voila ce qui se fera tuer votre ami.
$(91)$ * Paul se fera acheter des chaussures a mon ami.
$(101)$ * Paul se fera laver les mains à mon ami. ${ }^{4}$
We have so far noticed two "peculiarities" in the behavior of 'se' in the 'faire'-construction (after the application of FA): it occurs in positions which exclude the other clitics, and it varies oddly in coreference possibilities depending on its position. A third "peculiarity" of 'se' in these constructions involves the rule A-INS (see chapters 3 and 4). This rule inserts an 'à' before the embedded subject "postposed" by FA in the presence of another NP which has originated as direct object of the embedded sentence. Furthermore, this 'ap appears even if the direct object of the embedded sentence is cliticized:
(15) Paul le fera lire à Jean.

* Paul le fera lire Jean.
'Se,' when attached to 'faire' acts the same:
(12) Jean se fera connaître à Marie.
(12) * Jean se fera connaitre Marie.

However, a 'se' attached to the embedded verb, although still corresponding to the direct object of the embedded sentence, does not trigger A-INS:
(8) Voila ce qui a fait se tuer votre ami.

* Voila ce qui a fait se tuer à votre ami. ${ }^{5}$

These facts about 'se' in fact constitute a good argument for the proposal made in the previous chapter concerning the derivation of 'se.' If 'se' were introduced by CL-PL, parallel to the other clitics, it is difficult to see how this data could be accounted for.

We would, however, like to make the much stronger claim that all the above superficially anomalous facts about 'se' can be explained, given the rules so far discussed, i.e., CL-PL, FA, A-INS, COMP-ORDER, and SE-INS, plus the principle of the transformational cycle. That is, we may claim to have achieved the level of explanatory adequacy, in that a highly assymmetrical distribution of data follows from otherwise simple rules applied in a cyclic fashion. No ad-hoc conditions need to be added to any of the rules formulated in previous chapters. The apparent irregularity in the behavior of 'se' as compared with the other clitics is merely a consequence of the order in which the rules are applied. In extracting the principle of the cycle from the data, we are saying that these properties of the 'faire'construction are not directly reflected in the grammar of French, but follow rather from linguistic theory.

The precise way in which all the facts about 'se' in the 'faire'-construction follow from the principle of the cycle depends in part on the possibility, within a cyclic theory, of distinguishing between cyclic and non-cyclic rules. The difference in behavior between 'se' and the other clitics in the 'faire'-construction will be seen to follow from the cyclic character of SE-INS, vs. the non-cyclic character of CLPL. The peculiar facts about possible coreferents of 'se' will follow from the cyclic interplay between SE-INS and FA.

We argued in chapter four that CL-PL could not precede FA, which is equivalent to saying that, given the principle of the cycle, CL-PL is a post-cyclic ${ }^{6}$ rule. Consider now SE-INS. This rule differs crucially from reflexivization in English and from the similar 'meme'-insertion in French in that, since it inserts a clitic, it must mention the node ' $V$ ' in its $S D$. The most straightforward
formulation of Sc-iNS is, then: ${ }^{7}$
$\begin{array}{cccccccccccccc}\text { SE-INS: } & X & N P & V & Y & N P & Z & \longrightarrow & & 1 & 2 & ' s e '+3 & 4 & 5 \\ & 1 & 2 & 3 & 4 & 5 & 6 & & & & & & & \end{array}$
with appropriate conditions on the two NP's. 8 The important point is that the SD of the rule contains the sub-part: . . .NP V. . . On the one hand, this automatically accounts for the fact, noted in chapter five, that 'se,' unlike 'même' or 'I'un l'autre,' cannot appear if the first of the two "identical" NP's is an object:
(16) Je présenterai Jean et Paul l'un à l'autre.
(17) * Je se présenterai Jean et Paul. ${ }^{9}$

On the other hand, it makes it clear that in the derivation of, e.g.:
(10) Paul essaiera de faire se laver les mains à mon ami. the 'se' had to be inserted before the string 'mon ami - laver' was broken up, i.e., before the application of FA. SE-INS must also be able to apply after FA, however, as is shown by the following sentences:
(18) Marie laissera Jean L'embrasser.
(19) * Marie laissera Jean s'embrasser.
(20) Marie se laissera embrasser par Jean.
(21) * Marie la laissera embrasser par Jean.
(12) Jean se fera connaitre à Paul.
(22) * Jean le fera connaitre à Paul.

The 'se' in (20) and (12) could on!y have been inserted after FA, since, corresponding to the direct object of the embedded sentence, 'se' cannot occur in the absence of FA, as shown by (18), (19). We conclude that SE-INS must both precede and follow FA. Given the principle of the transformational cycle, and the most straightforward notion of simplicity, it would immediately follow that SE-INS (as well as FA) is a cyclic rule. ${ }^{10}$

The distinction between SE-INS as a cyclic rule and CL-PL as a post-cyclic rule will account for the possibility of 'se,' but not of the other clitics, being attached to the embedded verb in the 'faire'-construction, when FA has applied: ${ }^{11}$
(8) Voila ce qui a fait se tuer votre ami.
(23) * Voila ce qui a fait la tuer votre ami.
(10) J'essaierai de faire se laver les mains à mon ami.
(7) * J'essaierai de faire te laver les mains à mon ami.

We noted in chapter four that when FA has applied, clitics corresponding to objects of the sentence embedded under 'faire' must appear to the left of 'faire.' ${ }^{12}$

Sentences (23) and (7) are merely examples of this general fact. The more difficult problem, then, is to account for the grammaticality of (8) and (10). But this in fact follows directly from the cyclicity of SE-INS. The relevant part of the underlying structure of ( 8 ; is: faire - votre ami tuer Pro. Now since SE-INS is cyclic it will apply on the first cycle, before FA, plecing the 'se' on 'tuer,' just as if it were a simple sentence. The result is: faire - votre ami se+tuer Pro. Assume that the 'Pro' is then deleted. ${ }^{12 a}$ On the second cycle, FA will convert . . .faire votre ami se+tuer. . . into . . .faire - se+tuer - votre ami. . . . The string 'se+tuer', rather than 'tuer' alone, is raised by FA, since a 'clitic+verb' sequence has the derived structure: , as argued in chapter two. No further rules
will apply. In particular, CL-PL will not apply to the 'se' in . . .faire - se+tuer post-cyclically. ${ }^{13}$ The derivation of (10) will be essentially the same: . . faire - mon ami laver les mains à Pro. . . $\longrightarrow$ SE-INS (first cycle) $\longrightarrow$. . .faire - mon ami se+laver les mains à Pro. . . $\longrightarrow$ deletion $\longrightarrow \quad$. . faire - mon ami se+laver les mains $\longrightarrow \quad F A$ (second cycle) $\longrightarrow$. . .faire - se+laver - mon ami les mains $\longrightarrow$ A-iNS $\longrightarrow$. . fatire - setlaver - à mon ami les mains $\longrightarrow$ COMP-ORDER $\longrightarrow \quad$. . faire - se+laver - les mains à mon ami

It can now be seen that clitics other than 'se' cannot position as in (23) and (7) for a combination of reasons. On the first cycle, they cannot be attached to the embedded verb since CL-PL is post-cyclic. Nor can they be so attached post-cyclically due to a general fact about clitics in the 'faire'-construction (v. footnote 11).

Moreover, this indicates where the explanation lies for the fact that a 'se' attached to the embedded verb, as in (8)-(10), always refers to a following NP, whereas a 'se' attached to 'faire' can only refer to a preceding NP, as in (12)-(14). We saw that in the former case, the 'se' is placed cyclically, which implies that it corresponds to the subject of the embedded sentence. Consequently, when FA applies it will necessarily have the effect of moving this 'se' to the left of its associated NP:

## . . faire - $\underline{v}$ jtre ami se+tuer $\rightarrow$ FA $\rightarrow$ faire - se+tuer

- votre ami

The same holds for sentences (9) and (10). Since the only way for 'se,' or any other clitic, to end up on the embedded verb is by being placed cyclically (see also footnote 17), there is no way this 'se' could refer to anything but a following NP, given subsequent application of FA.

What then is the origin of the 'se' which occurs attached to 'faire'? The preceding discussion shows that it could not have been inserted on the first cycle. It must therefore have been inserted on the second, or 'faire', cycle. This correlates with the observation that the 'se' in (12)-(14), while interpreted as referring to the subject of 'faire,' is also understood as corresponding to the object of the embedded verb. But this means that the two 'identical' NP's that triggered the insertion of 'se' did not originate in the same sentence. The following example shows that SE-INS is not normally applicable in such a case:
(24) * Marie laissera Jean s'embrasser.

The two NP's in question must therefore have become co-sentential through the effect of FA (see chapter three), which implies that the 'se' was inserted on the 'faire'-cycle. The derivation of (12) is:

Jean fait - Marie connaitre Pro $\longrightarrow$ 1st cycle; SE-INS inapplicable $\longrightarrow$ 2nd cycle; FA $\longrightarrow$ Jean fait - connaître - Marie Pro $\longrightarrow$ A-INS $\longrightarrow$ Jean fait - connaître - à Marie Pro $\longrightarrow$ COMP-ORDER ${ }^{14} \longrightarrow$ Jean fait - connaître - Pro - à Marie $\longrightarrow$ SE-INS $\longrightarrow$ Jear: se fait connaître

Pro à Marie $\longrightarrow$ deletion $\longrightarrow$ Jean se fait connaître à Marie.
The formulation of SE-INS given earlier correctly predicts ${ }^{15}$ that on the higher cycle, 'se' will be attached to 'faire' and not to the embedded verb.

Thus we see that the extra freedom of distribution of 'se,' compared with the other clitics, follows from the cyclicity of SE-INS vs. the post-cyclicity of CLPL. Furthermore, in the constructions at issue, each possible position for 'se' correlates with its insertion on a particular cycle, and it is this that explains the striking difference in coreferentiality relations between 'se' attached to 'faire' and 'se' attached to the embedded verb.

Finally, we note that the principle of the cycle also allows us to account for the inapplicability of A-INS in (8). Despite the fact that the 'se' in (8) corresponds
to an underlying direct object of the embedded sentence, the original subject of the sentence is not preceded by 'a.' This contrasts sharply with (12) ${ }^{16}$ (see footnote 5). The property of (8) which prevents the application of A-INS is exactly that SE-INS, and the accompanying deletion rule, have applied on the first cycle. The output of the first cycle: . . .faire - votre ami se+tuer. . . no longer has an NP object in the embedded sentence. FA will apply, yielding: . . .faire - se+tuer - votre ami. . . , and the lack of object NP will render A-INS inapplicable. This is to be contrasted with the derivation of (12) given earlier, in which SE-INS does not apply until the second cycle, after A-INS. Therefore at the point of A-INS the pronoun object from the embedded sentence is still present to trigger application of the rule. Similarly, in the derivation of sentences with clitics other than 'se' correspondir.j to a direct object in the lower sentence (see chapter four), A-INS will be applicable by virtue of the non-cyclicity of CL-PL.

All the superficially exceptional facts about 'se' presented at the beginning of this chapter are thus seen to be accounted for by the fact that the rule introducing 'se' is cyclic, while that placing the other clitics in clitic position is post-cyclic. No extra conditions on either of these rules need be stated. In the sense that the assymmetrical distribution of 'se' may be said to follow from the principle of the transformational cycle, we have achieved an explanatorily adequate analysis. ${ }^{17}$

At the same time, this analysis is a strong argument for the existence of the cycle in syntax. In searching for linguistic universals, one is interested, not in properties that happen to be true of existing human languages, but in principles which can account in a simple way for an otherwise hopelessly complicated mass of data. From the point of view of learning a language, one must account for the child's ability to acquire a complicated set of intuitions, here those concerning the distribution of 'se,' on the basis of the relatively poor primary linguistic data he is ', rsed to. To the extent that this can be achieved in the context of a particuiar mguistic analysis, one has found strong evidence both for the proposed linguistic universal in question, here the transformational cycle, and for those aspects of the grammar of that language which crucially interact with it, in this case the transformations developed in earlier chapters of this thesis.

## Footnotes to Chapter VI

1. We are interested in the readings under which the clitics in (5)-(7) correspond to objects of the embedded sentences, i.e., where (5), (6), (7) are the result of embedding under 'faire':
$(51)$ Jean la tuera. Jean te tuera.
$(61)$ Mon ami lui achètera des chaussures.
Mon ami t'achètera des chaussures.
$(71)$ Mon ami lui lavera les mains.
Mon ami te lavera les mains.
Corresponding to (5)-(7), we have the following possible grammatical sentences:
$\left(5_{2}\right)$ Cela la/te fera tuer par Jean.
$\left(6_{2}^{2}\right)$ J'essaierai de lui/te faire acheter des chaussures par mon ami.
$\left(7_{2}\right)$ J'essaierai de lui/te faire laver les mains par mon ami.
The corresponding sentences with clitic preceding 'faire' and embedded subject being preceded by 'a' are ungrammatical. Sentence:
$\left(5_{3}\right) \quad *$ Cela la/te fera tuer à Jean.
is ruled out by a restriction dapending on the animateness of the object of the embedded sentence (see footnote 55, chapter 2). Sentences:
$\left(6_{3}\right)$ J'essaierai de lui/te faire acheter des chaussures à mon ami.
$(73)$ J'essaierai de lui/te faire laver les mains à mon ami.
are possible, but only with the reading under which the clitic has come from the subject of the embedded sentence, i.e., they are grammatical in the sense of having embedded under 'faire':
(6a) $11 / T u$ achetera(s) des chaussures à mon ami.
(7a) II/Tu lavera(s) les mains à mon ami.
In this reading, 'mon ami' is the indirect object, rather than subject, of the embedded sentence. Sentences $\left(6_{3}\right),\left(7_{3}\right)$ are not possible with a meaning approximately that of $\left(6_{2}\right)$ and $\left(7_{2}\right)$ due to a restriction on CL-PL discussed in chapter four.
2. It may be that the starred sentences in (13) and (14) are doubly ruled out, i.e., if:
(a) * Ces chaussures se seront achetées par Jean.
is excluded by some constraint on "coreference" with agent-phrases (see Jenkins (forthcoming)) rather than by cross-over.
3. For a variety of reasons, the 'se' in $\left(12_{1}\right)-\left(14_{1}\right)$ cannot refer to 'Marie' either. For $(121)$, see discussion below about A-INS. Sentence $(141)$ is excluded by a constraint on reflexive-passives (see footnote 2, and chapter 3, section II). Sentence $(131)$ would have had to come from the inconceivable passive of:
(b) Marie s'embrassera.
4. The 'se' in these senterices could not refer to the subject of 'faire' either. There seems to be a restriction, of semantic character, on embedding under 'faire' sentences whose subject is identical to that of 'faire.'
5. Note the difference between this sentence and:
(c) * Votre ami s'est fait tuer à la police.
which is out for a different reason (see footnote 55, chapter 2), whence the contrast between (8) and:
(d) * Votre ami s'est fait tuer la police.

In particular, we have, as opposed to (12), the following grammatical, albeit somewhat odd:
(e) Voila ce qui a fait se connaitre Jean.

* Voila ce qui a fait se connaitre à Jean.

6. We will continue to use the term 'post-cyclic,' although we have no evidence to choose between 'last-cyclic' and 'post-cyclic.' Specifically. none of the rules which we know follow CL.PI: e.g., L-TOUS, STYL-INV, AUX-DEL (see chapter two), gapping (see footnote 34 , chapter 2), probably R-TOUS, and SUBJ-CL-INV would seem to be cyclic.
7. We are here abstracting away from the problem of how to restrict the NP of term 5 to a suitable complement (see last page of chapter five); in fact, it is far from clear that this should be stated as part of SE-INS.
8. Presumably we want to insert 'se' uniformly for reflexives and reciprocals, since the various conditions on the insertion of 'se' discussed in chapter five, section 1 , as well as the ordering arguments of section 2 , are valid for both. This suggests
that they might have some feature in common to which SE-INS would be sensitive. Moreover, it suggests that at the time of SE-INS, both reflexives and reciprocals are already there, i.e., that the NP is already maiked as either a reflexive or a re5
ciprocal. This would eliminate having to state the conditions for reflexives and reciprocals twice, and is necessary to exclude:
(f) * Jean se laissera Marie embrasser.
parallel to:
(g) * Jean laissera Marie tirer sur lui-même.
(h) * Jean et Paul laisseront Marie tirer l'un sur l'autre. especially if the latter two are to be ruled out by a condition on the insertion of morphological material into lower sentences (see footnote 8, chapter 5).
9. We also saw in chapter five, footnote 33, that 'cross-over' was not apt to be the reason for the ungrammaticality of (17) if 'se' was not placed by CL-PL. The observation in the text insures that no special condition need be stated in the SEINS analysis to exclude (17). Furthermore, should 'cross-over' turn out to be incorrect, this would constitute still another argument against the CL-PL analysis, which would then have no ad-hoc way of ruling out (i7).
10. Notice that this kind of argument does not necessarily mirror any part of the language-acquisition process. A linguist working on a grammar of French, within a cyclic framework, would look at the facts just presented, reason that SE-INS both precedes and follows FA, and conclude, for reasons of simplicity, that both rules are cyclic. In fact, given a cycle, one might very well guess that SE-INS were cyclic, merely on the basis of its preceding Passive. Although we have little direct evidence (but see chapter four for some evidence that Passive precedes FA), it is likely that if any rule is cyclic, it is Passive.

In any case, there is no particular reason why the child learning French would need to hear sentences like (10) and (12) to know that SE-INS is cyclic. The cyclicity of SE-INS might rather follow from the nature of the rule itself, abstract conditions on rule ordering, or some global property of French grammar, i.e., from considerations of linguistic theory.

On another level, we note that the strongest argument for the cyclicity of SE-INS is really the fact that the analysis as a whole can achieve explanatory adequacy. More generally, despite the linear order of presentation, the analysis of French syntax presented here must of course be judged as a whole. For example, it is not really the case that the evidence in chapter five for the distinction between SE-INS and CL-PL prepared the way for this chapter except from an expository point of view. The fact that 'se' must be placed cyclically and the other clitics not, is, in the light of the explanatory power of the analysis, conclusive proof of the need for two separate rules, and in turn strengthens the arguments in chapter five.
11. If FA has not applied, as in (1) and (3), no notable structure is in existence; both 'se' and the other clitics will be attached to the verb of the VP dominating the objects they correspond to, just as in simple sentences. (See footnote 8.) It is only when FA, as a rule that changes verb-verb configurations, applies, that clitics gain the power of 'moving up,' thereby creating the contrast between them and those 'se' that have already been placed prior to FA, and which have therefore lost out on the chance to 'move up' to a higher verb.
12. We have described, but in no way explained, this fact. We proposed that the $S D$ of CL.PL include the provision that the verb to which the clitics were to be attached be VP-initial. The question is: could French conceivably change such that (23) and (7) were grammatical? (But see footnote 20, chapter four.) If the answer is no, then there is presumably some deeper reason why CL-PL should be so constrained (if VP-initial is the right constraint). In addition, one might wonder whether the verb-raising nature of FA were not related to its cyclicity.

12a. The 'Pro' is clearly deleted at some point. As far as the placement of 'se' is concerned, it makes no difference when. It will become apparent when we discuss A-INS that the deletion must be cyclic, unless the 'Pro' somehow loses the status of an NP. See footnote 22, chapter five for some perhaps relevant remarks about 'l'un l'autre.'

In simple sentences, the facts are unclear. With indirect objects, the pronoun can sometimes remain, as in:
(i) Elle s'écrit à elle-même de très longues lettres.

With direct objects, there is the problem of distinguishing the reflexive object from the emphatic reflexive felt as associated with the subject. Thus:
(j) Jean se lave lui-même.
is felt much as English:
(k) John washes himself himself.
whereas the following is more likely to be felt as a pure object reflexive:
(1) Jean s'aime lui-même.
(We are indebted to N . Ruwet for bringing this problem to our attention.)
In the great majority of cases with direct object, it is most natural to have the clitic form only:
(m) Jean se lave. Jean s'est tué.
13. If it did, we would get the ungrammatical $\left(8_{1}\right)$. We note that there is no reason to expect that it would. As formulated, CL-PL is a rule which moves NP(or pp-) dominated pronouns from object into clitic position. Such a rule would not necessarily extend to moving pronouns out of clitic position, in particular since clitics, as argued in chapter two, are no longer dominated by NP (nor presumably by PP). Unfortunately, we do not have a motivated way of writing CL-PL such that the formalism would predict what is in fact the case. (It is not clear how the Pro-Adj 'le' fits in here.)

Moreover, there is extremely suggestive evidence in Spanish that indicates that there is an independent reason for the non-applicability of CL-PL to the 'se' in (8), which would hold in addition to or instead of the preceding argument.

Spanish has a rule very much like CL-PL and a construction very much like the 'faire'-construction, in which the distribution of clitics closely resembles that of French:
(n) Cela fit se tuer Jean. Eso hizo matarse a Juan.
(o) * Cela fit la tuer Jean.

* Eso hizo matarla a juan.

In addition, Spanish has a subsidiary clitic-moving rule which 'moves up' clitics in certain verb + infinitive sequences (v. footnote 12, chapter 3). This rule is optional, and can apply to 'se:'
(p) Quiere verla.

La quiere ver.

Quiere matarse.
Se quiere matar.

Strikingly, this rule is inapplicable to ( $n$ ):
(q) * Eso se hizo matar a Juan.
although in other cases clitics can 'move up' to 'hacer' just as they can to 'faire:'
(r) Cela le fera lire à Jean. Eso se lo hizo leer a Juan.
(The 'se' in '(r) is not a refilexive, but comes from 'le' via the "spurious 'se' rule" --see Perimutter (1968).) The ungrammaticality of (q) suggests that the 'se' in (8) may be immune to movement rules of all kinds. We leave this matter to future study.

Finally we note that there are cases in French in which a clitic appears to have been moved out of silic position. We argued in cnapter five, section one, that certain 'se,' e.g., in 's'évanouir,' should be regarded as not having originated as objects. This implies that this 'inherent' 'se' was never in any but clitic position. Yet it occurs attached to other than the lexical verb in sentences with tenseauxiliary:
(s) Marie s'est évanouie.

* Marie est/a s'évanouie.

If there is a rule that moves it off the past participle, then this rule does not generalize to the 'faire'-construction:
(t) Cela fera s'évanouir Marie.

* Cela se fera évanouir Marie.

This demonstrates a significant difference between the tense-auxiliaries and 'faire,' which has often been called an auxiliary verb in this construction. (See e.g., Chevalier et al. (1964, p. 116)).
14. We recall that the question of whether FA alone was suificient to cause the deletion of the embedded S-node was left unsettled in chapter tinree. If not, then COMP-ORDER must be ordered before SE-INS. This is a rather ratural decision, moreover, since in some sense FA, A-INS, and COMP-ORDER act like a tightly knit
set of rules.
15. The prediction is not one based merely on the order of exposition of the argument. There is a real sense in which choosing the simplest formulation of SEINS for non-complex sentences leads to the right results across a much braoder range of data. Thus, considering only non-embedded sentences, it is clear that SE-INS must mention the node ' $V$ ' and at least two NP-nodes. The fact that verbs may have more than one object would immediately suggest placing a variable between V and the NP to its right: . . .V X NP. . . . In contrast, only one NP is generated to the left of the verb; consequently no variable is necessary there: . . .NP V X NP. . . . It immediately follows, as noted earlier, that 'se' cannot be inserted under identity of two objects. In fact, it would require enormous complication of the rule to allow that possibility. Furthermore, the formulation: 'NP $V \times N P$ ' correctly predicts that 'se' can be inserted if the two NP's are separated by two verbs, as in the text, and that it will be attached to the first one, in this case, 'faire.'
16. As mentioned earlier, there is a general restriction on the 'faire'-construction with 'à'-insertion if the underlying embedded object is animate. This means that sentences such as (12) are not really productive. The important point is that when such sentences are possible, A-INS is obligatory, hence the ungrammaticality of:
(12') * Jean se fera connaître Marie.
On the whole, the sentences in this chapter which illustrate SE-INS applying on the first cycle, e.g., (8)-(10), are of delicate, although unquestioned, grammaticality. By this we mean that they seem to be very sensitive to slight changes which reduce their acceptability to informants. For instance, in (9), replacing 'des chaussures' by 'les chaussures' makes the sentence less good. The choice of embedded verb may also be significant. This observation in no way detracts from our argument, however. Such sentences do exist, and are productive. That there may be independent restrictions acting to reduce their generality is irre!avant. A crucial point is that none of the ungrammatical sentences in this chapter are even remotely possible.

Similarly, although we have not given any examples of the distribution of reciprocal 'se' in the 'faire'-construction, it is certain that insofar as sentences with reciprocal 'se' can be embedded under 'faire,' the paradigm will mirror that for reflexive 'se.'
17. See Ross (1967b) for an analysis of pronominalization in English which makes similar use of the principle of the cycle.

The cycle will also account for the inability of 'inherent' clitics in idioms to appear attached to 'faire,' even after the application of FA. Compare:
(aa) J'essaierai de l'en faire parier. J'essaierai d'en faire parler votre ami.
(ab) Voila ce qui l'a fait en vouloir à Jean.
? Voila ce qui a fait en vouloir votre ami à Jean.
(ac) * Voila ce qui l'en a fait vouloir à Jean.

* Voila ce qui en a fait vouloir votre ami à Jean.

If the idiom 'en vouloir à qn.' is embedded under 'faire,' the 'en' must remain attached to vouloir. This would follow if 'en' were in clitic position to begin with, i.e., as part of a lexical idiom. Sentence (ab) would then be similar to:
(ad) Cela a fait s'évanouir Marie.
with inherent 'se.' Again, we note the contrast with tense auxiliaries:
(ae) Votre ami en a voulu à Jean.
The sentences in (ac) show furthermore why one would not want to claim that CL-PL moved the clitics up stepwise in, e.g., (aa). Parallel to (aa)-(ac), we have:
(af) Voila ce qui l'a fait s'en prendre à sa femme.

* Voila ce qui l'en a fait se prendre à sa femme.

Voila ce qui l'a fait s'en aller.

* Voila ce qui l'en a fait s'aller.
for the idioms: 's'en prendre à qn.,' 's'en aller'. These contrast sharply with:
(ag) Voila ce qui I'en a fait se souvenir.
Voila ce qui l'en a fait se repentir.
These latter examples are notabie in that they are instances of object clitics originating in the same verb-phrase, yet appearing in distinct VP's in surface strrisure. In (ag), we have embedded sentences corresponding to:
(ah) II s'en souvient.
II s'en repent.
where the two clitics are together. A parallel case, derived from (9), is:
(ai) J'essaierai de lui en faire s'acheter.
vs.
(aj) II s'en achetera.
These facts follow from the analysis given in the text. For extra complications concerning 'en,' however, see footnote 20 , chapter four.


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