

PRONOMINAL CLITIC DEPENDENCIES
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1. Introduction

Syntactic representations encode, and exist because they encode, a network of dependencies between lexical items (i.e. morphemes). We can illustrate this point in a simple clause such as:

(1) In which drawer does every boy put his papers?

There are numerous dependencies holding between pairs of elements, some of which can be informally described as:

- (2) a. the verb *does* and *every boy*: agreement
- b. the pronoun *his* and *papers*: case
- c. the verb *put* and *every boy, in, papers* : s-selection
- d. the verb *put* and *in, papers*: c-selection
- e. the determiners *which* and *every*: relative scope
- f. the pronoun *his* and the expression *every boy*: pronominal binding

One remarkable aspect of the work in formal syntax of the past twenty years is the conclusion that most, possibly all, of these dependencies can be fully described by appealing to primitives used to build and talk about constituent structure.

At first blush, dependencies come in a wide variety, holding between various kinds of elements and sensitive to a variety of conditions. One task facing syntactic analysts is to determine the nature of the elements entering into such dependencies. For example the dependency in (2a) is best described as one holding between the morpheme *s* of *does* and the number property of the expression *every boy*. Another task is to discover the kind of conditions various dependencies are subject to, to classify these dependencies accordingly and to try and explain why dependencies of such and such a class exhibit the properties that they do.

These questions are the kind of questions I want to investigate in connection with Object Pronominal Clitic Constructions, of which I will take the following kind of French examples as representative:

- (3) a. Dupont les a réunis
- b. Martin s’y rendra
- c. Gnervod en parle

The general theoretical point of view from which I want to discuss these questions is outlined in a number of recent works which include my Sportiche (1995) and Chomsky (1992) and which I will present below. The general conclusion I will reach is that the type of dependency exemplified by clitic constructions qua clitic constructions is best assimilated to an agreement relation. More specifically, the general thesis suggested here is that:

(4) Specifier/head licensing

A pronominal clitic argument of a predicate is in a standard agreement configuration with the nominal that would realize overtly this argument in the absence of the clitic. The presence of the clitic signals or licenses a particular (but not necessarily constant across clitics) property of this argument.

I illustrate the technical way in which this general idea is instantiated with the particular case of the following sentences:

- (5) a. Dupont a réuni les participants
 b. Dupont les a réunis

The patient argument of the verb *réunir* is realized as a direct object in the absence of the clitic as in (5a). In (5b), even though this argument appears not be realized as a direct object, I suppose that the syntactic representation includes a direct object position DP* satisfying the lexical requirement of the verb. The accusative clitic *les* heads its own projection, call it Def - to recall the definite article - and selects as its specifier an accusative XP. This selection is satisfied by establishing a movement dependency between the silent object DP* and the specifier of the clitic projection [spec,DefP]= DP^:

- (6) [DefP DP^ [[Def les] [... a réunis DP*_{+acc} ...]]]

2. The Existence of the Dependency

In a pair of sentences like (5), I will say that the clitic element in (5b) **stands for** the missing object that otherwise appears in (5a). The problem we face is to elaborate and understand what this relation of **stand for** means exactly.

2.1. Some descriptive Preliminaries

French (representative of many Romance languages) has a rich system of preverbal clitics. Their surface distribution in all clauses but positive imperatives clauses is summarized by the template below:

(7) French Clitic Template

Nom	Neg	1st/2nd/Refl	3rdAcc	3rdDat	Loc	Gen
		predicate				
il/elle	ne	me/te/se/nous	le/la/les	lui/leur	y	en

As Perlmutter (1972) describes it, for each column of the template, no more than one clitic is allowed (so for example, it is not possible to have a 1st person accusative object and a 2nd person dative object at the same time). Furthermore, the third and fifth column cannot be filled at the same time (e.g. **Je me lui montre / I show myself to him*). Understanding why there are these vertical cooccurrence restrictions (only one clitic per slot), these horizontal cooccurrence restrictions (not both third and fifth), why clitics are ordered this way and why clitics group the way they do in vertical slots seem to me fundamental to an understanding of clitic dependencies. Unfortunately these questions remain largely mysterious.¹ I will return in section 5 to considerations bearing on some of these questions. It should also be noted that although several of these elements can cooccur, sentences with four (and sometimes three) object clitics co-occurring yield cumbersome, perhaps ill formed sentences. In positive imperatives, these “pronominal” elements are postverbal and their order and form is different with assorted cooccurrence restrictions, in ways that might bear on the matters discussed here but of which present understanding remains rather limited.

2.2. What pronominal clitics relate to

¹ For example, why should first and second person all occupy the same slot regardless of Case. Why should adnominal genitive *en* (*il en a vu la cheminée*) be in complementary distribution with indefinite *en* (*il en a vu, des films*) or *en* corresponding to complements of verbs (*il en parle, de Pierre; il en parle d'acheter une maison*)?

Although the form in which they should be characterized may be controversial, the existence of dependencies between a pronominal clitic and other parts of the sentence in which it occurs is not. Limiting ourselves to an argument clitic, that is informally speaking, to a clitic standing for an argument, there are two apparent dependencies involving the clitic: one holding between the clitic element and some predicate and one holding between the clitic and whatever determines Case morphology.

The former is made apparent for example in (3b) by the categorial restriction imposed by the verb *se rendre* on its object: this object must be a PP denoting a location. Only the clitic *y* is allowed to stand for this object. Since this restriction is tied to the verb *se rendre*, this distributive restriction exemplifies the existence of a dependency between the clitic and the verb.

The latter is apparent since clitics show Case alternations, for example the third person alternations *le/lui* or *les/leur*. What determines which Case a (surface) object must have is surely related to the verb selecting this object and ultimately to the kind of interpretive relation that holds between this object and the predicate it is an argument of. The fact that the clitic must have the case that the object it stands for would otherwise have may also well reduce to a dependency between the clitic and the verb.

3. The Properties of the Dependency

Dependencies exhibit substantial superficial diversity. We want to investigate the properties of the clitic/verb dependencies to decide whether it defines a new subclass or whether it should be assimilated to some previously identified dependencies. In this domain various authors appear to substantially disagree with each other. Whether they actually do is not an easy matter to decide as most discussions are mired in complex questions of alternative notation.

3.1. Complementary Distribution and Clitic Doubling

If French is taken as the paradigmatic case of clitic/verb dependencies, one central property they exhibit is the complementary distribution between clitics and the XP* they stand for. This is illustrated below, where the c sentence contains only one intonational phrase (i.e. no dislocation intonation, pause...):

- (8) a. Marie connaît Louis
Marie knows Louis
b. Marie le connaît
Marie him knows
c. *Marie le connaît (à) Louis
Marie him knows (to) Louis

This observation, which led Kayne (1975) to suggest that clitics were base generated in the position of XP* and adjoined by a movement operation to an appropriate verb up the tree, was challenged by a number of authors on the basis of the existence of Clitic Doubling constructions as are found in varieties of French (cf. Roberge, 1990), Spanish (Strozer 1976, Rivas 1977, Jaeggli, 1982,...), Romanian, Hebrew, Arabic (Aoun 1981, Borer 1983....) and exemplified below for Romanian and River Plate Spanish):

- (9) a. I-am vazut pe Popescu / him-have-I seen OM Popescu
b. Lo vimos a Juan / him-saw-we Juan

In these constructions, both a clitic and a full phrase - the doubled phrase - seem to compete for the same grammatical function. The observation itself does not challenge whether complementarity between the clitic and the argument it stands for holds. However, an analysis of these facts claiming that the doubled DP "occupies" XP* would (and would thus appear incompatible with a movement analysis). It is however quite difficult to conclusively establish this point. The position of the doubled XP* has been the subject of

substantial debate, because of its assumed implications for the movement analysis. In general however, these discussions have concentrated on the external distribution of the doubling element. In order to preserve the movement analysis, one may try to claim that the doubled element is not XP* but rather an adjunct related to XP*. For example, Hurtado (1984) defends the idea that the doubled XP in (11b) occupies the position of right dislocated phrases. Aoun (1981) defends a variant of this position. Jaeggli (1986) convincingly argues against these proposals, although he does not generally settle the wider question of whether or not the doubled XP is in an adjunct position (he only argues that they are not in dislocated position). However, as Patricia Schneider (p.c.) remarks for Greek, doubled elements seem to occur in positions in which adjuncts are simply not tolerated, e.g. as subject of small clauses, or ECM subjects as below:

- (10) o Yiorghos tin-perimene [[tin Maria] na paraponiete]
 the G. CL_{acc} expected the Maria_{acc} subj complain
 George expected Maria to complain

This evidence concurs with Jaeggli's conclusions that the doubled element is not an adjunct and in fact has the same external distribution as XP*. From this it would be quite reasonable to conclude that the doubling element is indeed XP*.

The fact that the doubled phrase has the same external distribution as the missing argument does not suffice however to establish any conclusion concerning the issue of complementarity. Indeed, it is conceivable that the doubled element may be in fact part of XP*: an adjunct as in (i) or an YP specifier as in (ii) to a silent X⁰, head of XP* as illustrated below which would in effect further specify the intended content of the clitic element:

- (11) (a) XP* (b) XP*
 YP XP** XP X'
 doubled element CL doubled element CL

If either of these analyses is correct, we would expect this doubled element to have the same external distribution as XP*.

Clitic doubling constructions then do bear on the issue of complementary distribution by making the question more complex. Facts such as (10), regardless of which of these analyses (doubling as a dependent of XP* as in (11) or in XP*) is adopted, strongly suggest that the presence of a clitic does not necessarily remove the syntactic realization of the argument it stands for, i.e. of XP*. This means that there is really no complementarity of distribution between the clitic and XP*, as XP* must be present under either analysis. This does not mean that the clitic is not in complementary distribution with anything at all: it could be in complementary distribution with a subpart of XP* such as X⁰, the head of XP*, or XP** in (11).

3.2. Blocking effects

The verb/clitic dependency is not a strictly local dependency such as one holding between a morpheme and the stem it attaches to. A variety of elements can intervene between the verb and the clitic and more tellingly, a variety of elements cannot intervene between the clitic and the verb. The characterization of the class of blocking elements, in a sense to be made precise, will provide us with ways to assess the nature of this dependency.

3.2.1. Intervention Effects

We first turn to a class of restrictions on the clitic/verb dependency that seem to be related to the necessity to make the clitic/verb dependency as short as possible, i.e. as spanning the smallest possible syntactic domain: if there exists an option to make the dependency shorter, because of the intervention of appropriate material, this option must be exercised.

3.2.1.1. Clause Boundedness Effects

Object clitics, except in certain types of “restructuring” clauses cannot depend on a verb from another clause. We can exemplify this behavior both with tensed clauses and with tenseless clauses: With tenseless clauses, we observe:

- (12) a. Jean a laissé Pierre parler à Marie / Jean l'a laissé lui parler
Jean let Pierre speak to Marie / Jean him let to-her speak
b. * Jean lui a laissé Pierre parler / *Jean le lui a laissé parler
Jean to-her let Pierre speak / Jean him to-her let speak
- (13) a. Jean pense que Pierre parle à Marie / Jean pense que Pierre lui parle
Jean thinks that Pierre speaks to Marie / Jean thinks that Pierre to-her speaks
b. * Jean lui pense que Pierre parle
Jean to-her thinks that Pierre speaks

Placement of the dative clitic cannot reach the main clause. After Kayne (1975), the cause of this effect used to be attributed to the intervening subject of the embedded clause i.e. to some version of Chomsky's Specified Subject Condition (SSC). More recent treatments attribute it to some version of Rizzi's (1990) Relativized Minimality or Chomsky's (1992) Shortest Move, which prohibit establishing a longer dependency when a shorter one is available. Since the clitic/verb dependency can be satisfied as in (12a), it cannot be as in (12b).

3.2.1.2. DP Boundedness

Dependencies involving clitics are not limited to clitic/verb dependencies. They can also be found with clitics standing for the argument of a noun. Patterns of clitic/noun dependencies also show intervention effects. In the case of wh-dependencies, extraction out of direct object DPs in French obeys a simple generalization (cf. Giorgi & Longobardi 1991, Sportiche, 1989, Valois 1991, for recent discussion):

- (14) Extractability Requirement
an XP may be extracted out of a DP in a given structure
Iff XP may otherwise appear as the possessor of this DP or if the XP could bind
[spec,DP].

This generalization is illustrated by the paradigm below:

- (15) a. Jean a vu une/la photo de qui
Jean saw a/the picture of whom
b. dont_j Jean a vu [une/la/*ma/*cette photo t_j]
of whom Jean saw a/the picture

- c. Jean a lu une dépêche de Paris
Jean read a dispatch from Paris
- d. *D'où; Jean a-t-il lu [une dépêche t_j]
wherefrom did Jean read a dispatch

Only when the extracted phrase could otherwise be a possessor - this is blocked by the presence of another possessor like *ma* or a demonstrative like *cette* as in (15b), or because only DPs and not locative PPs may be possessivized as in (15d) - can it be extracted. Sportiche (1990) and Valois (1991) propose that this pattern is explained as follows: extraction of a post nominal XP must proceed through the [spec,DP] position, a proposal that can again be subsumed under the Relativized Minimality / Shortest Move generalization requiring certain dependencies to be as short as possible.

(16) dont_j Jean a vu [DP t_j [la [NP photo t_j]]

The same pattern holds of clitic extraction:

- (17) a. Jean a vu une/la photo de qui
jean saw a/the picture of whom
- b. Jean en_j a vu [une/la/*ma/*cette photo t_j]
Jean of-him saw a/the/*my/*this picture
- c. Jean a lu une dépêche de Paris
John read a dispatch from Paris
- d. *Jean en_j a lu [une dépêche t_j]
Jean therefrom read a dispatch
- e. Jean vient de Paris/ Jean en_j vient t_j
Jean comes from Paris? Jean therefrom comes

Note in particular that cliticization of the locative of origin is disallowed in the d sentence, even though it may in principle be cliticized as *en* as in the e sentence.

3.2.2. Container effects: Extraction from PP

A second class of restrictions operating on clitic/predicate dependencies are absolute: they cannot be reduced to the existence of an alternative, shorter construal of the dependency. One such case is found with dependencies reaching into PPs.

P-stranding under clear cases of movement is disallowed in French. For example, wh-movement of the object of the preposition is ill-formed (unless the P is pied piped):

- (18)a. Jean a voté pour Maastricht / *Quel traité Jean a-t-il voté pour
Jean voted for Maastricht / which treaty John voted for
- b. Marie est partie avec la valise / *Quelle valise est-elle partie avec
Marie left with the suitcase / which suitcase did she leave with

The same observations hold for stranding under clitic placement:

- (19)a. Jean a voté pour lui / *Jean lui a voté pour
Jean voted for him / Jean him voted for
- b. Marie est partie avec elle / *Marie lui est partie avec
Marie left with it / Marie it left with

It is not true however that stranded Ps cannot be stranded at all. As Zribi-Hertz (1984) discusses, the equivalent of (16) are perfectly well formed without the clitic:

- (20) Jean a voté pour / Marie est partie avec
Jean voted for / Marie left with

In these cases, the missing object is interpreted as referring to some discourse prominent entity, exactly as an overt pronoun object of the P is in (20b and d).

In connection with the previous section, note also that stranded prepositions are allowed in noun phrases, further supporting the contention that we are dealing with different kinds of gaps:

- (21) le / mon/ ce vote pour (cela) / mon départ avec (cela)
the/my/this vote for (it) / my leaving with (it)

4. The Representation of the Dependency

4.1. General Considerations

Every analysis of pronominal clitics must account for the facts that the items treated as clitics by are treated as clitics by French. This is a question of explanatory adequacy. This very strongly suggests a fundamentally uniform analysis of clitics. For if universal grammar allows pronominal clitics to be analyzed in one of several ways, the question of converging on the right analysis for each individual case arises, together with the problem of underdetermination of structure by the evidence. Although a uniform approach to the analysis of clitics is not forced, it is clearly more desirable a priori and I will adopt it as working hypothesis. As we will see, this seems largely justified a posteriori. As will be clear, I also take as point of departure the idea that this uniformity also holds true crosslinguistically, at least as far as the most analyzed Romance languages such as Italian and Spanish are concerned. Work on these languages has revealed enough similarity of functioning with each other and French clitic constructions to warrant this assumption. How uniform can these analyses be? Surely they cannot be uniform to the point of identity (since different pronominal clitics do behave differently). Minimally, we may assume that clitics are uniformly analyzed up to lexical differences. One important consequence of this assumption is the following: it is reasonable to argue for or against particular proposals concerning the analyses of pronominal clitic constructions by bringing any pronominal clitic to bear on the question (again up to lexical differences).

4.1.1. Space of Possible dependencies

In order to formulate an analysis of the clitic/predicate dependency consistent with the properties that we have discussed, we must make some general theoretical assumptions about the possible construals of dependencies allowed by Universal Grammar. In what follows, I will present and adopt some proposals to this effect made in Sportiche (1995), and consistent with Chomsky's (1992) proposals. Before doing so, I will briefly survey some previous proposals.

4.1.1.1. Remarks on Previous Proposals

Previous analyses of clitic/verb dependencies can be broadly organized in two subclasses: lexical analyses and syntactic analyses.

Lexical analyses in effect claim that a clitic is a derivational affix modifying the lexical entry of a predicate. To illustrate, the alternation between *lire un livre* et *le lire* would be one between a transitive verb *lire* and an intransitive *le+lire*. This intransitivisation process is the way these analyses derive the existence of complementarity between the clitic and the syntactic expression XP* of the argument it

stands for and can only be reasonably adopted if this XP* must be entirely missing from syntactic representations. Empirically, the existence of clitic doubling (and other considerations related to participle agreement) casts doubts on this approach, since, as we saw, XP* seem to be allowed in some instances, at least. Theoretically, the question arises of whether there exists any such kind of processes, that is processes affecting the syntactic requirements of a predicate (or anything else for that matter). I think not but I will set this issue aside here as it rather complex to sort elements of the debate into substantive questions and terminological or notational questions.

A lexical analysis claims that adding a clitic in a clause is an operation on the lexical entry of some lexical item. This derivational affix, the clitic, does not actually always show up on the verb that it intransitivizes². The examples below illustrate this point:

- (22) a. Jean croit Pierre malade / le croit malade
 Jean believes Pierre sick/ him believes sick
 b. Jean est semblable à sa mère/ lui est semblable
 Jean is similar to his mother/ to-her is similar
 c. Jean croit Pierre friand de tout/ en croit Pierre friand
 Jean believes Pierre fond of everything/ of-it believes Pierre fond
 d. Jean veut manger la pomme/ la veut manger
 Jean wants to eat the apple/ it wants to eat
 e. Jean a peint la cheminée de l'usine/ en a peint la cheminée
 Jean painted the chimney of the factory/ of-it painted the chimney

Related to the question raised above, note that in the a example, the clitic stands for an argument DP subject of a small clause bearing no thematic relation, hence no lexical relation with the main verb. Although it is possible to devise theories in which a DP is subcategorized by a predicate without being theta marked by it - hence bearing a lexical relation with it - such theories make it a mystery where subcategorization comes from and would require far stronger evidence that has ever been adduced in their favor to make them reasonable initial candidates. At any rate, none of the other examples could be so fixed. In the b and c examples, the clitic is an argument of the adjective and bears no lexical relationship to the main verbs. In d, the so-called *restructuring* constructions, an example ungrammatical in standard French but well formed in middle French or [its equivalent] in many (all?) varieties of Italian or Spanish, the clitic bears no lexical relationship to the verb it is affixed to. Instead, if anything, it might be argued to be lexically related to the embedded verb. In e, the clitic stands for a dependent of the head of the object DP. All these cases duplicate a central observation regarding the basic distribution of clitics: clitics appear on the highest verb of their clause (with provisions made for restructuring constructions). In conclusion, this paradigm shows that, at the very least, the intransitivization process must be supplemented by an algorithm to compute the position in which the clitic surfaces, away from its predicate. It is mostly this algorithm that we are interested in here. However, to examine the properties of this algorithm or this dependency between the clitic and the verb, we need to know exactly between kind of elements it holds. Given the reasons for wanting to have XP* syntactically represented that I just discussed, I will assume together with syntactic analyses that it is to be construed as a dependency between the clitic and XP*.

Syntactic analyses assume that the presence of a pronominal clitic, say CL, standing for some argument, say A, does not affect the thematic or c-selection properties of the predicate Y taking A as argument. I take the general reason for this assumption to be the postulated inexistence of processes affecting the syntactic expression of lexical properties of atomic lexical items. I furthermore take this view to be the null hypothesis, empirically justified and to a large extent adopted by everyone (even some who deny they do). Consequently, A is syntactically represented as some phrase XP* generated in its

² In fact, it never does in French: clitics never show up on verbs. They show up on Tense.

usual position. Initially we assume that clitic constructions obey the general schema [From now on, we will use XP* to refer to the argument position associated with a clitic]:

(23) ...CL_i... [Y ... XP*_i...] ...

For these syntactic analyses, the questions raised by clitic constructions have mostly concerned the nature of XP* and the properties of the relation between CL and XP*. Again, broadly speaking, past syntactic analyses can be grouped in two subsets: **Base Generation** analyses (Strozer (1976), Rivas (1977), Jaeggli (1982), Borer (1983), Bouchard (1982), Sportiche (1983), Burzio (1986) or Roberge (1990) - see Borer, 1986 for a survey and references) and **Movement** analyses (Kayne (1975, 1989, 1991) and Sportiche (1989,1990)). The movement analysis assumes that the CL/ XP* is a movement relationship: it entails some sort of complementary distribution,³ and displays the complex of properties associated with movement dependencies.

In the base generation analyses, the clitic is essentially base generated in its surface position so that there is no intrinsic reason why there should be any sort of complementary distribution. When silent, XP* is to be analyzed as a *pro* or a *PRO*, somehow related to the clitic. Sportiche (1983) also argues against a movement dependency based on the categorial distinction between the clitic (a head) and XP*, a phrase.

4.1.1.2. A general theory of dependencies

Sportiche (1995) puts forth a general proposal concerning the question of how many types of dependencies there are that I will briefly summarize here. There, it is argued that, apart from constraints about intermediate interveners or containers, a dependency D has the following properties:

- (24)a. D is a binary relation D(x,y)
b. Either (i) one of {x,y} must command⁴ the other
or (ii) x and y are in specifier/head relationship.

Binary dependencies between a specifier and a head are by definition dependencies between a head (i.e. a morpheme) and a phrase: those are spec/head relations and the only type of mixed dependencies. Other binary dependencies fall in one of two categories: and dependencies between heads (which I call movement dependencies).

³ Typically, the literature assumed that XP* was the trace of CL. This is not a necessary assumption (as discussed in Sportiche, 1990, and below) for two reasons: XP* might strictly contain the trace of the clitic or XP* is the trace of some element in a local relation with the clitic.

⁴ I will take the right notion of command to be i-command roughly defined as: i-command(x,y) iff the first constituent containing x contains y, x≠y, rather than the usual c-command, m-command (as discussed in Sportiche, 1990). Roughly, for x≠y, c-command(x,y) iff the first branching constituent (or its immediate projection) containing x contains y, m-command(x,y) iff the first phrasal constituent containing x contains y (see Aoun and Sportiche, 1981, and references therein).

Dependencies between heads display some characteristic properties, most notably their extreme locality: no intermediate (in the obvious sense involving i-command) head can intervene between two heads in a dependency relation.

Dependencies between phrases fall under the general category of movement to specifier. They are motivated by the need for the moving phrase to license one of its properties through a specifier/head relationship with an appropriate head, which, following Chomsky (1992), I will assume to be a morphophonological requirement or an interpretive requirement of the moving element. These dependencies are further subject to intervention constraints such as Relativized Minimality or Shortest Move, prohibiting a longer dependency when a shorter one is available.

Crucially when it comes to dependencies involving mixed dependencies, i.e. head/phrase dependencies that do not satisfy the specifier/head format, they must be analyzed as a concatenation of two dependencies: one between the head and its specifier, and one between this specifier and the phrase.

4.2. Discussion of the Alternatives

The clitic/predicate dependency is to be viewed as a dependency between a clitic and XP*. The clitic element behaves as a head: it may not be modified in any way or conjoined the way phrases can. As we will see, these conclusions and observations together with the theoretical claim that dependencies must fall within one of the allowed types described above leaves little choice how they should be analyzed

4.2.1. The Alternatives

Either the clitic/XP* dependency is a specifier/head dependency or it is a movement dependency. The first possibility is ruled out immediately since, by definition, a specifier/head relationship is a local relationship. However, the clitic element and XP* are not in a local relationship: they may be separated by intervening material such as a verb, adverbs or auxiliary verbs.⁵

- (25)a. Dupont a réuni les participants
 b. Dupont les a réunis XP*

(25b), the clitic is separated from XP* by the verb *réunir*.

⁵ The alternative we rejected is different from another one namely one in which underlyingly, the clitic and XP* enter a head/specifier relationship. Given the existence of the clitic doubling facts, a possible underlying structure is one similar to (11b) (note that now the star * is on the specifier rather than on the projection of the clitic):

- (11) (b) XP
 XP* X'
 doubled element [_X⁰ CL]

with the clitic the head of XP* and the doubled element as its specifier. This means that the argument A (of some predicate) is not realized as the syntactic object of this predicate but rather as the specifier of this object and that the head of this object is the clitic. As a consequence, the dependency between the surface position of the clitic and XP* is a dependency between the clitic and the head X* of XP*, or what we note here X'. In the first case, "clitic placement", i.e. the relationship between the surface position of the clitic and X⁰ would be head movement. In this case, the surface position of the doubled element gives us the span of the movement dependency. Since this dependency is head movement, it is predicted that no head should be able to intervene between the surface position of the clitic and the surface position of the doubled element. But this is contrary to fact: the clitic can be separated from the doubled element by more than one head. We conclude this analysis is incorrect. The second possibility would be that "clitic placement" is X' movement (which may be reinterpreted as phrasal movement in an antisymmetry framework like Kayne's (1995).

As a consequence, the dependency must involve either head movement, phrase movement or a combination of both. First of all, the conclusion that movement is involved is consistent with the observations we made concerning the properties of the dependency: complementarity of distribution may be involved, as movement dependencies require. The intervention effects and container effects that we discussed are diagnostic properties of movement dependencies: our theoretical considerations and empirical observations converge. The problem remains however to decide exactly how to construe the movement(s) implicated. What we already know suggests that a pure head movement analysis is inadequate: the clitic and XP* are simply too far apart (and separated by intervening heads) to allow for a head movement dependency between them. We are thus left with either a pure phrasal movement analysis or a combination head movement/phrasal movement.

A phrasal movement analysis would involve a phrase YP included in or equal to XP* and some other phrase XP^ such that XP^ and YP are in a movement relationship and XP^ in a local relation with the clitic. Since the clitic is a head, this local relation can be analyzed as a specifier/head relation. In other words, in a sentence like (5b), the accusative clitic *les* would head its own projection, call it Acc, and would select as its specifier an accusative XP. This selection would then be satisfied by establishing a movement dependency between the silent object DP* and the specifier of the clitic projection [spec,AccP]= DP^:

(26) [AccP DP^ [[Acc]les] [... a réunis DP*_{+acc} ...]]

A phrasal movement cum head movement analysis would involve the composition of phrasal movement with head movement in this order (i.e. thinking in derivational terms, phrase movement containing the clitic would come first followed by head movement of the clitic).⁶

In this case we end up with a configuration having the following characteristics:

(27) ... les [_{ZP} DP^ [[Z] [... a réunis DP*_{+acc} ...]]]

The object DP* moves to the specifier DP^ of some projection ZP. From within this projection the clitic element *les* head moves to its surface position. Given the locality constraints on head movement, the clitic may have move either from the head position Z of ZP or from the head position of DP^.

We have now to decide between three possibilities:

(28)a. ... [AccP DP^ [[Acc]les] [...réunis DP*_{+acc} ...]]
 b. ... les_i [AccP DP^ [[Acc t_i] [...réunis DP*_{+acc} ...]]]
 c. ... les_i [_{ZP} [DP^ t_i] [[Z] [...réunis DP*_{+acc} ...]]]
 d. ... [_{ZP} [DP^ les_i] [[Z] [...réunis DP*_{+acc} ...]]]

Alternative c is one adopted for example in Sportiche (1989, 1990) for all clitics and adopted for dative clitics in Sportiche (1992). It is also recently defended in Cardinaletti & Starke (1994). Alternatives a and b are adopted for different clitics in Sportiche (1993). Each of these alternatives make different predictions and raises different questions. The first two are similar in making ZP the projection of the clitic itself. This raises the question of what the function of AccP (and similar projections for other clitics) is, i.e. of what property of DP^ AccP license. The last two raise the same question regarding ZP. The middle two raise the question of why the clitic head moves: what property does this incorporation satisfy? Finally, alternative c and d, unlike the other two, require that movement from DP* to DP^ be overt movement since the overt position of the clitic feeds on this movement.

⁶ I am not going to discuss this here but the reverse order would mean that, because the clitic does appear higher than XP* here, phrasal movement cannot contribute to the distance between the clitic and XP*. This is due to the fact movement of a head is always to c-commanding head so that a phrase movement pied piping the clitic would pied pipe XP* as well.

4.2.2. Terms of the Dependency: Participle Agreement

There is evidence in the case of Accusative Clitics that the phrasal movement of XP* does involve an intermediate position not intrinsically related to the presence of clitics per se. The evidence comes from participle agreement. Participles may (or must depending on the variety of French) agree with its accusative direct object when it precedes the participle. Agreement is excluded when the participle follows.

- (29)a. Jean a peint(*E) la porte
Jean painted the door
b. La porte que Jean a peint(E) t
the door that John painted
c. Jean l'a peint(E)
John it painted

(29b) illustrates this with a relativized object, (29c) with a cliticized object. Such agreement may not take place if the accusative DP overtly follows the participle. This is illustrated below:

- (30) a. Jean a peint(*E) la porte
Jean painted(*FEM) the door(FEM)
b. Jean l'a peint(E)

Kayne (1989b) suggests that:

- (i) there is only one way to get agreement: Participle/object agreement is similar to subject/tense agreement in being the reflex of a relation between a head and its specifier.
(ii) there is an intermediate specifier (of the participial morphology) through which the moved object may (or must) transit triggering agreement.

As Sportiche's 1989 or 1990 extensive discussion shows, there is substantial independent evidence for the existence of this intermediate position in French. At any rate, this account would attribute (23c) the following analysis:

- (31) le a [XP*_j [peinte ...t_j]]

It is important to note that the participle agrees with the subject (instead of the object) if the verb uses the auxiliary *être* (including in passive constructions), and this agreement is obligatory.

- (32) La porte a été peint*(E)
the door(FEM) was painted*(FEM)

Verbs using the auxiliary *être* all are constructions with derived subjects: in all these cases (which include passive constructions and also reflexive constructions -cf. Sportiche, 1990 and Cortes, 1992), the superficial subject is an underlying object: the agreement can thus be described in the same way:

- (33) La porte_j a été [t_j [peint*(E)...t_j]]

In sum then, the basic premise we adopt is that put forth in Kayne (1989b): participle agreement (and agreement in general) is an XP/head relation that should be handled in a similar fashion as subject/tense agreement. Given that the latter is analyzed as a spec/head relation, the former should too. Pursuing the analogy, given that the subject agrees with T, and that this is analyzed as T raising to an agreement head, AGR-S, we postulate that participle agreement is triggered by the moving of a phrase through the

specifier position which we call [spec,AGR-O] of an agreement head AGR_O to which the participle raises.⁷

- agreement--
- (34) ...[spec_{AGR-O} [[participle] YP.....

This means that participle agreement is not specifically related to the presence of the clitic. It is a by product of a movement dependency holding between some argument position and some intermediate position in agreement relation i.e. in specifier head relation with the participle. As a consequence, the dependency between an accusative clitic and an object appears to be split in two: a dependency between the clitic and the spec_{AGR-O} position, and a dependency between spec_{AGR-O} and a postverbal object position.

Accordingly, we could conclude that the ZP of (28) could be AGR-OP, so that the correct analysis could be (28c). We would still need to argue that it is high enough that it allows head movement from its location to the surface position of clitics. There are a couple of difficulties with this proposal.

The first difficulty comes from the fact that such an account will have to be extended to all object clitics: accusative, dative genitive and locative. Since (i) any three of these clitics may cooccur, (ii) they behave in terms of distribution essentially the same way for our present purposes, we would need to postulate for each kind a corresponding ZP. Although the function of such a ZP could very plausibly be attributed to Case checking for Accusative and Dative Objects, it is much less easy to make a similar move in the case of locatives and especially genitives (they presumably get their case license DP internally).

The second difficulty comes the behavior of participle agreement with auxiliary *be*: agreement with derived subject is obligatory while agreement with preposed objects is optional. This is illustrated below:

- (35)a. Jean a peint(*E) la porte
 Jean painted(*FEM) the door(FEM)
 b. Jean l'a peint(E)
 c. Cette porte est peint*(E)

This optionality is actually not an isolated fact of French participle agreement. The same is true of Catalan participle agreement in clitic constructions, as discussed in Cortes (1992). It is also true of Italian participle agreement in clitic constructions when the object clitic is not a 3rd person clitic.

- (36) a. Giovanni la ha accusata /*accusato
 Giovanni has accused(FEM/*MASC) her
 b. Maria e Paola, vi ho visto/viste
 Maria and Paola, I have seen(MASC-SG/FEM-PL) you(FEM-PL)

The obligatoriness of agreement in the case of derived subjects suggests that the expression of agreement is not optional. We are not allowed to establish the configuration triggering agreement (spec/head) but fail to express it morphologically. How then do we handle the lack of agreement with preposed objects. Either option at our disposal in the restrictive framework we adopt leads to problems: we must prevent the specifier/head relationship to be established in a way visible to the morphophonology: this means that there is no spec/head relationship by S-structure that is that movement from DP* to DP^ = [spec,ZP] cannot be overt.

⁷This view is essentially Kayne's (op.cit). Many questions relating to object agreement will not be addressed here. A detailed look at this proposal and its implications is found in Sportiche, 1990. There and in Chomsky (1991) (see also Mahajan, 1990, for closely related although somewhat different views), it is argued that participle agreement with Case marked DPs is limited to Accusative DPs, the two properties being different reflexes of the same underlying configuration. Detailed discussions of many complex case are also examined there.

Note that alternatives (28a and b) can easily handle the data by claiming either that movement of DP* to DP[^] is covert in the cases lacking agreement or that the kind of movement involved (A-bar movement - see later) is allowed to skip the specifier of the agreement phrase (an A-position). This latter option is probably to be preferred since it seems necessary to handle optional agreement in overt preposing of accusative wh-objects:

- (37) *Quelle table as-tu mis(E)*
 Which table-Fem hve you set-(fem)

Obviously, this option must not be available in the derived subject case. This can be attributed to the fact that movement to the derived subject position is A-movement so that skipping an intermediate A-position is ruled out by the shortest steps requirement.

4.2.3. Terms of the Dependency: Stranded Quantifiers

The syntax of stranded quantifiers provides further reasons to adopt either of (28a or b) over (28c). Stranded quantifiers are illustrated in the following examples:

- (38)a. *Les enfants ont tous mangé*
 the children all ate
 b. *Je les ai vus tous*
 I have seen them all

Following Sportiche's (1988) proposal, we take it that the distribution of these quantifiers is determined in part by the position of intermediate traces of their antecedents: these quantifiers are in fact adjacent to a silent DP (trace, *pro* or *PRO*) bound by another (usually overt) DP they quantify over. Thus, in (38)a), the presence of the quantifier *tous* reveals that the subject of the sentence has raised from a lower position (yielding the VP internal subject hypothesis). Koopman (1991) and Schlonsky (1990) have convincingly argued that the mechanism of Q stranding under DP movement involves raising the DP through [spec, QP] as revealed by the fact that the Q agrees with the DP only under stranding in Hebrew (Schlonsky) or by the existence of phrases like *eux tous/them all* (Koopman) illustrating this intermediate step in English (in effect, a modern version of Kayne's 1975 Q-post analysis).⁸

There are actually two distinct ways of implementing Sportiche's 1988 basic idea in a way consistent with Koopman's and Schlonsky's proposals. The first one is to assume, as did Sportiche (1988), that a strandable Q is always generated with a DP complement. Stranding under this view is always under syntactic movement of this DP through the specifier position of the QP. An alternative is to postulate that this kind of Q may be generated in a wider variety of environments, e.g. as a Q taking a "VP" complement, and is understood to quantify over some DP moving through its specifier position (and thereby triggering agreement): [*QP DP_i [tous [VP V...t_i]]*]. This last analysis of *tous* would be akin to that of other quantifiers appear to be both determiners and adverbials (e.g. *Il a vu beaucoup d'enfants, il a beaucoup vu d'enfants*). Either approach straightforwardly extends to case (39a) but not to (39b-d):⁹

- (39)a. *Marie les a tous pris*
 Marie took them all

⁸This proposal might find direct support even in French as non stranded Qs are pronounced *tous* ([tu])/all-masc, *toutes* ([tut])/all-fem, but stranded Qs are *tous* ([tus]), *toutes* ([tout]). The difference in form for the masculine form can be taken to indicate that number agreement between the Q and the DP only occurs under stranding, in a way reminiscent of the Hebrew data. Note that gender agreement seems to obtain regardless of stranding, a surprising fact under this view but not unlike subject verb agreement in standard Arabic in the SV and VS orders (cf. Aoun, Benmamoun and Sportiche, 1994, for discussion).

⁹The distinction corresponds to the distinction made in Kayne, 1984, chapter 4, between Q as anaphors and Q as quantifiers. Our discussion in this section can be seen as an update of this distinction in the framework of Sportiche, 1988.

- b. Marie a toutes voulu [les manger]
Marie wanted to eat them all
- c. Il a tous fallu [qu'ils parlent]
It was necessary that they all speak
- d. Il a tous fallu [que Louis les lise]
It was necessary that Louis read them all

In the last three examples, that we shall call L-tous cases (from Kayne's 1975 Leftward-tous rule) the stranded Q is higher than the clitic it modifies. In fact it is out of the clitic's clause altogether.¹⁰ The fact that an intervening head, the complementizer *que*, does not block this construction indicates that, if the Q is placed by movement in its overt position, it does not move out of its clause by head movement but rather by XP movement. This movement is most plausibly of the A-bar type, given that NP-movement out of a tensed clause is strictly forbidden in French. Sportiche (1988) attributed the possibility of c and d to the syntactic application of Quantifier Raising (QR).

Suppose we both adopt one of the analyses of floating quantifiers described above and a movement analysis of clitics. This might be more precisely construed as follows: (i) the clitic is the head of the DP modified by or quantified over by *tous*, (ii) the clitic itself moves to its surface position, (iii) *tous* quantifying over this DP is licensed by this DP moving through the specifier position of the Q. Consider now what this would mean for a sentence like (28d). The following configuration will need to be arrived at:

(40) [QP [tous V ... [CP... [D]^{les_i}] ... [DP t_i]

The clitic, i.e. the D head of the object DP, has incorporated to some host. If the stranded Q gets to its surface position by movement, and gets stranded by movement of its complement DP (or the head D of such a DP) out of QP, the raised QP will contain the unbound trace of this D or this DP. If alternatively the stranded Q is base generated in the top clause, its licensing will require the following scenario: by LF¹¹, this DP will have to raise to the position [spec,QP] even though its head has moved out. This violates the requirement that traces be properly bound. This problem of course does not arise if the clitic is generated independently of the DP argument it is related to, a basic property of base generation analyses. One potential way to remove this offending trace would require reconstruction of this DP into the lower clause at LF. It is clear however that these leftward moved Q's have matrix scope, not embedded scope. This is illustrated by the following pair:

- (41)a. Il aurait tous fallu que tu ne les aies pas vus
it would have been necessary that you see none of them
- b. Il aurait fallu que tu ne les aies pas tous vus
it would have been necessary that you do not see all of them

As the paraphrases indicate, in the first sentence the Q must have scope wider than the embedded negation. If reconstruction was required, we would expect at the very least the Q to be able to take narrower scope than the embedded negation as in the second sentence.

4.3. Conclusion

¹⁰The c and d cases are perfectly acceptable for me. They are sometimes judged as ?. Movement out of a clause is only possible from infinitivals or subjunctives.

¹¹At the latest. If the analysis of the [tu]/[tus] alternation is correct, this configuration will have to have been reached by S-structure.

The conclusions we can reach from these obviously incomplete discussions is mixed. We have four alternatives:

- (42)a. ... [CIP XP^ [[C] clitic] [... XP* ...]]
 b. ... clitic_i [CIP XP^ [[C] t_i] [... XP* ...]]
 c. ... clitic_i [ZP [XP^ t_i] [[z] [... XP* ...]]
 d. ... [ZP [XP^ clitic] [[z] [... XP* ...]]

I have argued elsewhere (Sportiche, 1992 and 1993 respectively) that the first one is more appropriate for subject clitics in French while the second one is more appropriate for Accusative clitics in French (at least Accusative clitics). In the case of Accusative Clitics, the preceding discussion is consistent with adopting either one of the first two alternative below and rejecting the last two. We have not discussed other clitics in detail. In the case of adnominal genitive (*il en a vu la cheminée*), there does not seem to be a plausible independently justified ZP (e.g. Case: which presumably is assigned/checked inside the direct object DP) that could substantiate alternatives c and d. We conclude that the ZP projection needed to account for the properties of the adnominal genitives clitic constructions is specific to these clitic constructions and thus correspond to either of the first two alternatives. I leave open the status of locative and other genitive clitics. Finally, I have suggested elsewhere that Dative clitics might instantiate alternative c (or in fact d)¹² by taking ZP in this case to be the projection of an AGR licensing Dative Case. It is worth noting in this connection that Datives minimally differ from Accusatives and Nominatives in giving worse results in the stranded quantifier constructions we discussed above (contrastive judgments with (39) indicated):

- (43)a. Marie leur a tous parlé
 Marie spoke to them all
 b. * Marie a tous voulu [leur parler]
 Marie wanted to speak to them all
 c. * Il a tous fallu [que Louis leur parle]
 It was necessary that Louis speak to them all

I also argue elsewhere that the difference between dative clitics and others correlate with the A-bar status of the position [spec,ZP], a correlation strengthened in the adnominal genitive en case by its ability to license parasitic gaps (cf. Sportiche, 1992 or Tellier, 1991). We thus get the following table (where the middle column indicates the case of the corresponding clitic and the last column indicates the status of [spec,ZP]):

[CIP XP^ [[C] clitic] [... XP*]	Nom., Adnominal Gen.	A-bar
clitic _i [CIP XP^ [[C] t _i] [... XP*]	Acc., Adnominal Gen.	A-bar
clitic _i [ZP [XP^ t _i] [[z] [... XP*]	Dative	A
[ZP [XP^ clitic] [[z] [... XP*]	Dative	A

¹² In fact, I think that a case can be made to the effect that alternative c is more appropriate for 1st and 2nd person Dative clitics and alternative d more appropriate for 3rd person Dative clitics (relating this difference to the fact that 3rd person dative clitics follow accusative clitics while 1st and 2nd person clitics precede accusative clitics). This idea is inspired by the conclusion of Cardinaletti & Starke (1995) concerning Italian *loro*. This might also explain why Italian Datives *gli* - an instance of alternative c - precede Accusative Clitics unlike their French counterpart

In all these French constructions, Both XP* and XP^ are silent phrases and the missing object is interpreted as a pronoun.

One question that we will not discuss here (but cf. Sportiche, 1992) for discussion, is why, at least in French, XP* or XP^ cannot be overt, i.e. is limited to *pro*. I will simply adopt Sportiche's (1992) suggestion that movement of XP* to XP^ is and must be overt and that the specifier and the head of the Clitic Projection cannot be filled simultaneously (a doubly filled prohibition seen as an extension of the doubly filled Comp filter approach).

I now turn to the function of the clitic dependencies, i.e. the nature of the licensing relation that movement to XP^ fulfills in the case of Accusatives.

5. The Function of the Dependency

We propose that a nominative, accusative, genitive or locative clitic appearing in a clause heads its own projection and that the argument that the clitic stands for must raise to the specifier of this projection.

(44) [CIP XP^ [[Cl les] [... XP* ...]]]

Following Sportiche (1995) and Chomsky (1992) we suppose that movement is a triggered process driven exclusively by the need of the moving phrase to license one of its properties in a specifier/head relationship with an appropriate head. How does this approach apply to clitic constructions?

Note first that clitics overtly appear fairly high within the inflectional system of a clause. In French, object clitics cliticize to the highest verb of their clause. This suggests that the function of these clitic projections is one typically associated with positions located high within the clausal structures. This is reminiscent of wh-movement, which associate wh-phrases with clause initial position. I will limit myself to discussing the Accusative clitic case.

The idea I want to pursue is one that takes the analogy with wh-movement seriously. In a general sense, it is unclear why wh-movement exists. Because wh-in situ elements do not exhibit the same kind of scope possibilities as moved wh-phrases (a wh word in Comp cannot take larger scope than its clause unlike a wh-in situ), it would seem that this movement is motivated in part by the need to attribute scope, i.e. a constituent domain over which they may exert interpretive influence. But movement does not appear to be reducible to this requirement. First of all, many scopal expressions do not move: modals, intentional predicates, various quantified noun phrases etc. Secondly, the position to which a wh-element moves does not disambiguate its scope (cf. pair list readings with universal subject quantifiers). The descriptive approach to wh-movement is simply one that establishes a requirement on certain kinds of determiners, namely wh-determiners, embodied in Rizzi's 1991 Wh-Criterion:

(45) Wh-criterion or Q-criterion:

- i. A wh head must be in a spec/head relationship with a wh XP at LF
- ii. A wh XP must be in a spec/head relationship with a wh head at LF

5.1. Accusative Clitics and Definiteness

I would like to extend this rationale to clitics of the accusative type by generalizing this kind of requirement to all determiners. Determiners are quantifiers whose restriction is denoted by the NPs to which they are syntactically associated by forming a constituent with them. However, just like wh determiners, the (operator) property that they denote must itself be licensed in a specifier/head relationship with an appropriate head. The idea that the treatment of wh determiners should be extended to other classes of determiners has already been made in the case of negative quantifiers with the introduction of a Negative projection NegP and an associate Neg Criterion (Haegeman & Zanuttini,

1991). My intention is to extend further this treatment to all determiners, taking the existence of (some) clitics as witnessing the existence of the corresponding licensing projections. What I have called the Clitic Projection associated with Accusative Clitics is, according to the conclusions I reached earlier, headed by the accusative clitic. In the Romance languages, the accusative clitics look like the definite determiners. In order not to make this accidental, I will assume that the property licensed by the Accusative projection is in fact the property that definite determiners denote, call it [+definite], whatever this may be. Accordingly, I will, adapting a terminology due to Beghelli & Stowell (1994) call this projection DefP and I will introduce the definiteness criterion by analogy with the Wh-criterion or the Neg criterion (even though they are really all subcases of the general specifier/head licensing requirement):

(46) Definiteness criterion:

- i. A [+definite] head must be in a spec/head relation with a [+definite] XP at LF
- ii. A [+definite] XP must be in a spec/head relation with a [+definite] head at LF

The Accusative projection is seen to have nothing in particular to do with Accusativity but rather with licensing **whatever property of their DP definite articles indicate**. Pursuing the analogy with wh-phrases, we would expect that any definite phrase should be able to occur in [spec,DefP] just like any wh-phrase, regardless of category, argument status or Case, may occur in [Spec,CP].

This is not what we observe, at least in French and we need to explain why “this definite” head can only “stand for” an accusative argument (a relation that we now analyze as the argument standing in a spec/head relation with the Definite head).

One option to explain this restriction is to stipulate that this definite head agrees in Case with his spec and that the form *les* IS marked Accusative. Since there does not seem to be any reason why the definite article paradigm (*le, la, les*) should be marked accusative, we would lose an explanation for the systematic homophony “accusative” clitics/ definite articles. Furthermore, the existence of the predicate clitic appearing in contexts lacking Accusative Case (e.g. passive) *le* (see Sportiche, 1995a, for recent discussion) also casts doubts on the relevance of accusative Case.

An alternative option would try to derive this restriction. I will sketch an proposal relating this restriction to the fact holding in French and noted earlier that both XP[^] and XP* must be silent in the presence of an Accusative Clitic (recall that we attribute this the **required** overt raising of XP* to XP[^] together with a doubly filled phrase prohibition). In this light, consider the following paradigm in which we want to license either the definite direct object of a verb, the dative definite object of a verb, the definite object of a preposition which we all call XP* by moving them to the specifier of the DefP which we note XP[^].

- (47)a. Jean a réunis les enfants --> Jean XP[^] les a réunis XP*
- b. Jean a parlé aux enfants --> Jean XP[^] les a parlé à XP* --> Jean XP[^] les a parlé à XP*
- c. Jean a parlé des enfants --> Jean XP[^] les a parlé de XP* --> Jean XP[^] les a parlé de XP*

In the presence of the clitic *les*, XP* must raise to XP[^] and be silent, i.e. must be a *pro*. Begin with the object cases. The preposition/case marker *à* and *de* must be morphologically represented. If the input structures are as in (47), we must move XP* = *pro* stranding the prepositions, which is disallowed in French. The alternative is to realize the preposition/case markers on the *pro* XP* itself yielding constructions with dative (*lui*, *leur*) or genitives (*en*) clitics. In the Dative case, the clitic is part of XP* so that XP* is non null. As a result, the raising to [spec, DefP] required by the presence of the definite clitic *les* is impossible. We would be able to derive the same result in the genitive case if we suppose that the clitic *en* is similar to the dative *lui*, *leur* in being part of XP* rather than the head of their ZP. Raising XP* to XP[^] would then also be ruled out by the conflicting requirements of obligatory raising to XP[^] and doubly filled phrase prohibition.¹³

5.2. Essential Properties and Accidental Properties

By separating the essential properties from the accidental properties, we will be able to predict what we expect to find in particular when it comes to look for what corresponds to clitic constructions crosslinguistically. Since we have a non uniform analysis of the function of clitics, we will concentrate on one we have discussed the most: Accusative Clitic construction.

We take to be central to this construction the necessity to license determiner properties by raising the DPs they head to the specifier position of a designated projection by LF. The status of the doubly filled phrase prohibition is unclear. The choice of determiner entering into clitic construction is arbitrary and appears to be a subcase of a more general property including *wh* and negative determiners.

Consequently, we might expect a priori to find:

- (i) Cases in which this movement is overt and cases in which this movement is covert
- (ii) Different DP types to move to different location depending on the kind of determiners heading them.

5.3. Dutch Scrambling

In this section, we briefly discuss Dutch Scrambling as an example of a construction that can be looked at in ways similar to Clitic constructions in French (possibly all the same conclusions would hold of German, given Moltmann, 1990). Let us begin by summarizing the findings of Koopman (1988) on direct objects on which the following discussion relies entirely.

Throughout this section, we limit the discussion to direct objects. Dutch has clitic objects. Specific full DP objects, non specific objects and clitic objects (pronominal and specific) all have a different distribution.¹⁴ Non clitic specific objects must occur higher than the negative marker *niet* and may occur lower or higher than adverbs such as *waarschijnlijk*. Clitics must occur higher than all of these different elements. We illustrate these observations now (with examples from Koopman, 1988 throughout):¹⁵

(48)a. Hij heeft 't waarschijnlijk (*'t) niet (*'t) gezien

¹³ We must also worry why movement to subject of definite phrases (raising of the subject from VP internal position, passive, etc..) is incompatible with the presence of the object clitic: *Les enfants ont dormi*, **Les enfants les ont dormi*, **Ils ont dormi...* We might relate this to the same considerations: movement to XP[^] cannot be identical to movement to subject position XP** (whatever this is) since movement is driven by some licensing need: this requires that movement from XP* to XP[^] to XP** leave in XP[^] the phrase licensed in XP[^] contains the trace of the phrase moving to XP** to be licensed: XP[^] does not contain *pro* and is thus ruled out.

¹⁴ Throughout, we restrict ourselves to non focused constituents. Focus introduces further complications in the data, allowing specific DPs to stay low.

¹⁵ In embedded clauses, we would get *..Omdat hij 't waarschijnlijk (*'t) niet (*'t) gezien heeft* (because he it probably not seen has) or *..omdat hij Jan waarschijnlijk (Jan) niet (*Jan) gezien heeft* (because he Jan probably not seen has). Koopman notes that care should be taken to avoid contrastive or focal stress on the objects.

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