

Syntactic approaches to cliticization

M. Rita Manzini

1. Introduction

With generative grammar, clitics and in particular pronominal clitics have become a syntactically recognized category, and cliticization a syntactic phenomenon. The word clitic in itself reflects a prosodic conception: in essence, clitics are forms that do not define a phonological word domain by themselves, but only in conjunction with appropriate lexical material. Under this broadest notion of cliticization, English itself can be said to have a full series of pronouns, negations and auxiliaries (*him, not, has* etc.) and a clitic series (*'m, n't, 's, etc.*); in this respect the borderline between syntax and phonology appears to be blurred. Another interface equally or even more strongly called into question by cliticization is that between syntax and morphology. There the issue that immediately arises is whether clitic and affixal material can be separated on any principled ground. Thus we may wonder what the difference is between the elements described as pronominal clitics in the Romance languages (French *le, la, les, lui* etc.) and the elements standardly annotated as agreement morphemes in other languages (Baker 1996).

The difficulties in carving up the empirical domain are well known. Thus, as far as the PF/syntax interface is concerned, the problem arises whether those clitics that are not purely phonological are positioned at least in part according to prosodic rules, or on the contrary fall entirely within the purview of the syntactic component. As for the lexicon/syntax interface, do the similarities between affixation and cliticization mean that cliticization is to be treated as a morphological process, or on the

contrary that affixation is to be conceived, largely or wholly, as a syntactic operation? It is interesting to note that all of the positions mentioned have not only been entertained in the past but have a number of current adherents.

As its title indicates, the present survey of cliticization adopts a syntactic perspective; thus it is from the viewpoint of syntax that the various claims of the phonology and morphology components will be investigated. This perspective appears only natural in a generative framework: it is syntactic treatments that represent the really original contribution of generative grammar to the study of cliticization. I should mention briefly that contributions to the syntactic theory of clitics are to be found in most of the frameworks of generative-inspired formal grammar, including LFG, HPSG, and most recently Optimality. I shall however concentrate on the mainstream transformational theorizing, where in my view all of the leading questions and answers are to be found, at least in this empirical domain. Similarly, though very interesting questions concerning clitics have been raised, and are currently being raised, in connection in particular with Slavic and so-called Balkan languages, it is in the Romance domain that one can still find the most comprehensive range of both problems and analyses. This is certainly because of a number of accidental factors, such as the fact that it was Kayne (1975), working on French, who first suggested a transformational account of clitics. Be it as it may, I'll be taking all of my examples from Romance in what follows.

2. *Movement vs. base-generation in the analysis of clitics*

A number of important issues in current syntactic theories of clitics go back all the way to the seminal work of Kayne (1975). I shall therefore briefly review these beginnings, introducing progressively more detail into the discussion as we approach current treatments. Kayne's (1975) fundamental contribution to the theory of clitics in generative grammar consisted in the proposal that cliticization is a movement rule. Thus consider French (1):

- (1) *Je le vois*
 I him see
 'I see him'

Kayne (1975) proposes that the clitic *le* is generated in the object position of the verb, where full NPs such as *Jean* can also be found, and from there moved to a position left-adjoined to the verb. This movement is generally clause-bound, but there are contexts in which the clitic apparently crosses

sentence boundaries, such as causatives in French. In this case, Kayne (1975) is able to argue that movement of the clitic actually obeys standard constraints on movement, such as the Specified Subject Condition. Thus a sentence such as (2) is ungrammatical, in that it implies movement of the dative clitic *lui* from its base-generated complement position across the (inverted) embedded subject *Marie*:

- (2) **Je lui fais écrire Marie*
 I him make write Mary
 'I make Mary write to him'

Kayne's (1975) work largely set the agenda for research into clitics at the end of the 70's and at the beginning of the 80's (straddling the passage from so-called Extended Standard Theory to Government and Binding Theory). Perhaps the first strand of research to be taken up systematically concerned long clitic movement (clitic climbing). Kayne's (1975) causativization rule was revised in terms of a more restrictive Principles and Parameters framework by Rouveret and Vergnaud (1980). The general idea however remained, in this and subsequent treatments of Romance causativization, that at least some constraints on clitic placement are to be interpreted in terms of conditions on movement. At around the same time, Rizzi (1982) provided an influential account of clitic climbing in so-called restructuring constructions. In languages like Italian, as opposed to French, long movement of clitics can be seen not only in causative contexts, but also in a number of modal/aspectual ones, as in (3b); compare this with (3a), which presents ordinary short cliticization:

- (3) a. *Voglio farlo*
 want-1s do-it
 b. *Lo voglio fare*
 it want-1s do
 'I want to do it'

Rizzi (1982) argues that the long clitic movement in (3b) is related to other behaviors of the matrix verbs under consideration, which point to the matrix verb and the embedded verb having undergone a "restructuring" operation; the net effect of this on clitic movement is to reduce what appears to be clitic climbing to ordinary local cliticization. Notice that in Rizzi's (1982) conception no real optionality is involved in clitic climbing. If the matrix verb restructures, clitic climbing is obligatory; if it does not, clitic climbing is impossible. In turn what Rizzi (1982) conceives of as the optionality of the rule of restructuring can easily be reconstructed as the optionality of certain lexical specifications on the matrix predicate, i.e. as a difference in numerations in the minimalist sense (Chomsky 1995).

Another strand of research gave rise to deeper controversy. As is well known by now, in languages like French, pronominal clitics are in complementary distribution with full NPs, but this is not the case in languages like Spanish (or Romanian or a host of non-Romance languages) where the pronominal clitic can double a full NP, as in (4):

- (4) *Lo vio a Juan*
 him saw-3s to Juan
 'He saw Juan'

Kayne's (1975) movement analysis for clitics predicts their complementary distribution with full NPs in French, but is directly contradicted by the phenomenon of clitic doubling in (4), since the full NP seems to fill the very position that the clitic ought to have moved from. One possible solution to this state of affairs consists in assuming that clitics are base-generated in the position where they surface, i.e. adjoined to the finite V (Jaeggli 1982; Borer 1984). If so, the theoretically interesting question is by which mechanisms the clitic and the full NP come to share one theta-role and at least in some languages, one Case between them. A number of binding mechanisms can be postulated to this effect, but the fact remains that none of them is independently present in the grammar. An alternative analysis consists in maintaining clitic movement in doubling environment as well: in this case, the doubled NP cannot but be treated as some kind of adjunct (Aoun 1985). Interestingly enough, this analysis has exactly the same general problem as the previous one, namely that the clitic and the adjunct NP must come to share a number of properties without any movement having taken place from one to the other.

3. *Clitics as functional heads*

Before proceeding further with the theory of cliticization, it is useful to backtrack to at least another set of data, whose theoretical importance emerged in the 80's, though they were typically discussed under the heading of the null subject parameter rather than that of cliticization. In French (1), the object *le* is not the only clitic element in the sentence: phonologically, at least, the subject *il* is equally characterizable as a clitic. Kayne (1975) sought to establish that *il* was only a phonological clitic; thus by contrast with *le* no syntactic movement was involved in its derivation. Whether this is correct or not for French, there are other Romance languages in which cliticization of the subject clearly cannot be reduced to a phonological process. In particular, in a number of Northern Italian dialects, whose theoretical significance was first pointed out by Brandi and Cordin (1989), the

obligatorily realized subject clitic systematically doubles the lexical subject, as exemplified in (5) by the Modena dialect (the author's own):

- (5) *La Maria la vi:n*
 the Mary she comes
 'Mary comes'

As concerns the null subject parameter, the consensus eventually emerged (Rizzi 1986) that Northern Italian dialects are null subject languages. What interests us here however is not this conclusion in itself but rather the structural analysis it relies on. In essence, the subject clitic of Northern Italian dialects is treated as a piece of a discontinuous inflectional head, which also includes the verbal ending; sharing of properties with the lexical subject, when the latter is present, is therefore a straightforward matter of Head-Spec agreement within IP, as roughly illustrated in (6):

- (6) $[_{IP} \text{ la Maria } [_{I'} \text{ la vi:n } [_{VP} \text{ vi:n la Maria}]]]$

The analysis in (6) has the interesting property that on the one hand the subject clitic is base-generated in the position where it surfaces; if anything it is the verb that moves to pick it up together with its inflectional ending. At the same time, movement is involved in the derivation of the doubling configuration, in that the lexical NP *la Maria* moves to SpecIP from a VP-internal argument position under standard assumptions. In case no lexical NP is present, the theta-Criterion is satisfied by *pro* at DS; exactly like a lexical NP, *pro* then moves to SpecIP at SS.

While the structural schema in (6) presupposes the existence of one functional projection I above the VP, the introduction of the so-called Split-Infl Hypothesis, makes a further refinement of the theory possible (Cardinaletti and Roberts 1991). Thus the subject clitic need not be conceived as a piece of the verbal inflection, but can be associated with its own functional head, say AgrS, as in (7):

- (7) $[_{AgrSP} \text{ la Maria } [_{AgrS'} \text{ la } [_{IP} \text{ vi:n } [_{VP} \text{ vi:n la Maria}]]]]]$

There is abundant empirical motivation for this latter move: in particular in contexts which are independently known to trigger the raising of V to C, such as questions, the clitic appears not to the left but to the right of the finite verb, as in (8a). The structure in (7) allows for the simplest possible account of this state of affairs, since movement of the verb from I to C automatically strands the subject clitic in AgrS, as indicated in (8b):

- (8) a. *Vi:n-la?*
 comes-she
 'Is she coming?'
 b. $[_{CP} \text{ vi:n } [_{AgrSP} \text{ la } [_{IP} \text{ vi:n} \dots]]]$

Of course, it is by no means impossible to account for the order in (8a) under the structural hypothesis in (6); nevertheless an additional theoretical device is required, namely the assumption that after incorporating into I, the verb excorporates to move to C. The problem with excorporation is not represented by the operation itself, which is simple enough, but by the necessity to constrain it in such a way as to allow it only in a highly restricted set of cases. It is the difficulty of achieving this objective in a principled way that essentially rules out excorporation as a theoretical device.

I have already observed that analyses of Northern Italian subject clitics, inspired by a theoretical interest in the null subject parameter, have not generally cross-fertilized with analyses of complement clitics. Nevertheless at the end of the 80's, two important contributions by Kayne connect the theory of object clitics to that of verbal inflections, specifically past participle agreement (Kayne 1989a) and the null subject parameter once again (Kayne 1989b). As for past participle agreement, Kayne (1989a) effectively proposes the existence of an AgrO category (though not in these terms) that mediates agreement between the participial form of the verb, which is attracted to its head position, and the clitic, which moves through its Spec, as schematically illustrated by the Italian example in (9):

- (9) a. *Li ho visti*
 them have-1s seen-MP
 'I saw them'
 b. $[_{IP} [li\ ho] [_{AgrOP} \bar{t}] [_{AgrO}'\ visti] [_{VP} \dots]$

This apparently straightforward proposal implies in reality a radical departure from previous theories; indeed though V and the clitic may end up as adjoined to one another in I, they travel the space in between independently of one another, the clitic in particular targeting Spec positions prior to its final cliticization to V in I. Thus the clitic is not strictly speaking attracted by V, but rather by I itself, i.e. not by a lexical but by a functional category. In the same vein, Kayne (1989b) proposes that clitic climbing of the type of Italian (3b) can be analyzed without recourse to a restructuring rule, if it is true that at least in null subject languages the clitic can move to the embedded I even when the verb does not (as in infinitivals). At this point the embedded I moves to the matrix I (this latter step presumably representing the residue of "restructuring" within the theory), yielding roughly the structure in (10):

- (10) $[_{IP} [I_0-I] voglio] \dots [_{IP} [I_0-I] \dots]$

The connection now established between cliticization and the functional projections of the sentence also lays the ground, I believe, for the resolution of the long-standing clitic doubling problem. Torrego as reported by

Uriagereka (1995) was first to notice that the hitherto problematic agreement of the clitic with the full NP in doubling constructions automatically follows if the two are in a Head-Spec configuration at some point in the derivation. Torrego, and Uriagereka (1995), go on to propose that the clitic is the head of a DP of which the doubling NP constitutes the Spec; the whole DP is generated in thematic position and the clitic eventually moves out of it to reach the inflectional domain of the sentence. Thus the derivation for Spanish (4) is roughly as indicated in (11):

(11) $[_{IP} \text{ lo vio } [_{VP} \text{ vio } [_{DP} \text{ a Juan } [_{D'} \text{ }]]]]$

An alternative analysis is proposed by Sportiche (1996); this is similar to (11) in that the agreement of the clitic and the full NP is taken to depend on their being in a Head-Spec configuration at some point of the derivation. However for Sportiche (1996) the nature of the relevant configuration is quite different. In particular, in a sentence like Spanish (4), it is only the lexical NP that is generated in thematic position. The clitic is merged as an autonomous functional head Voice, in this case AccV (Accusative Voice), positioned somewhere between I and V. The agreement configuration between the clitic and the doubling NP is created by movement of the lexical NP to the SpecAccV position, as indicated in (12). Note that (12) does not represent the last step of the derivation; the finite V still must raise to I, as must the clitic which surfaces immediately to its left:

(12) ... $[_{AccVP} \text{ a Juan } [_{AccV'} \text{ lo } [_{VP} \text{ vio } \text{ a Juan}]]]]$

It is clear even from superficial inspection that both the theory of Sportiche (1996) and that of Torrego/Uriagereka (1995) successfully solve the fundamental problem posed to previous theorists by clitic doubling constructions. Exactly as in the case of subject clitics examined before, the sharing of thematic, Case and phi-properties is a byproduct of the existence of a Head-Spec configuration at some point of the derivation. It is fairly obvious, furthermore, that the case in which no doubling lexical NP is present can be reduced to (11) by postulating that the Spec position of the clitic is empty, and to (12) by postulating that an empty category *pro* moves to it. At the same time, the two analyses just reviewed manage not to give up the advantages of a movement solution. Thus in (11) the clitic moves very much as in the theory of Kayne (1989b). In (12), while the clitic need not move, the full NP, be it a lexical NP or a *pro*, always does; thus movement constraints on cliticization, be they the Specified Subject Condition or any of its successors, hold of the lexical NP and of its trace. The latter incidentally is true whether NP-movement is overt, or covert (as presumably it is in Spanish).

Despite the fundamental similarities just reviewed, the theories in (11) and (12) give rise to quite different empirical predictions. For Torrego/Uriagereka (1995) the clitic is the head of an argumental projection, DP; thus we expect that there should be a fundamental similarity between clitics and argument DPs. Indeed for Uriagereka (1995), cliticization is motivated by the need for the specificity feature of D to be satisfied, as is the case for certain types of DP-movement, for instance scrambling. In a theory such as Sportiche's (1996), on the contrary, the clitic has essentially the status of an inflectional projection of the verb. In principle therefore we expect that full DP arguments and clitics may display all sorts of asymmetries; viceversa at least some of the properties of clitics make them more similar to the inflectional categories of the verb.

Before proceeding to check these predictions it is worth commenting briefly on the status of the *pro* category that at least Sportiche's (1996) theory appears to crucially require. The point of note here is that a number of recent works concerned with the null subject parameter have argued that *pro* can and must be dispensed with. In particular, given a derivation of the type in (8), Manzini and Savoia (1997) argue that the only reason to have *pro* in the absence of a lexical DP subject is that the *pro* would be necessary to fill the VP-internal argument position, something that the clitic, being generated as an inflectional head, cannot do. As amply motivated by Hornstein (1997), however, it is only within a GB framework that the architecture itself of the grammar imposes a one-to-one match of arguments and theta-roles at Merge; indeed DS is by definition the level at which the Theta-Criterion is satisfied by trivial chains. Within a minimalist grammar only additional assumptions can force the same state of affairs to hold; thus Chomsky (1995) essentially stipulates that thematic properties must be satisfied by Merge configurations. Suppose instead that theta-roles are features and that as features they can abstractly move, among other things. It is then perfectly possible to eliminate the last residual role for *pro* in subject clitic configurations in the way sketched in (13). The subject clitic is base generated as before in an inflectional-like position, call it conventionally AgrS; there its nominal features act as attractors for theta-features, yielding movement of the latter to the AgrS domain. Under the schema of derivation in (13), no *pro* is required any longer; at the same time ordinary movement constraints are predicted to hold because of feature-movement. Needless to say, if such a derivation can be made to hold for subject clitics, it can equally well be extended to object clitics in a conception where the latter are essentially inflectional in nature.

- (13) $[_{AgrS} Th-1a [_{IP} v_i:n [_{VP} v_i:n (Th)]]]$

Kayne's (1994) approach to clitics, while keeping faith with the basic movement approach inaugurated by Kayne (1989b, 1991) actually gives results which are equivalent to those of Sportiche's (1996). Thus it is a theorem of the LCA of Kayne (1994) that only one head can adjoin to another head. Consider then Kayne's (1989b, 1991) proposal that clitics adjoin to I. Because in the normal course of events the lexical verb will adjoin to its Tense inflection in I during the derivation, this excludes the possibility that any clitic (or clitic cluster) can adjoin to I itself. The one possibility left open therefore is that clitics do in fact adjoin to an I head, but an I head which is quite distinct from the I head targeted by V-movement. The result can be seen to be once again one-to-one association of the clitic with a dedicated inflectional position.

But is there any argument that object clitics are inflectional heads (Sportiche 1996), as opposed to argument heads (Torrego/Uriagereka 1995)? The basic arguments in favor of the former position are briefly mentioned by Sportiche (1996); in illustrating them, I shall draw from my own recent work with L. Savoia (Manzini and Savoia 1998b, 1999, forthcoming a, b). Because all of the examples we have considered so far involve only one (object) clitic, we have had no opportunity of seeing one of the most obvious properties of clitics, namely that they occur in a rigidly ordered string. Throughout more than two decades of discussions on the syntax of clitics, the implicit or explicit assumption was that the order in which they appear is determined by a filter, as originally proposed by Perlmutter (1972), or in any event by some post-syntactic mechanism. Given the general approach of Sportiche (1996), however, we actually expect that clitics should appear in rigidly ordered strings, since functional hierarchies in the sentence are rigidly fixed (for each language or universally). By the same token, we expect that the order in which the clitics appear does not necessarily match, or mirror, that of DP arguments generated in predicate-internal position. By and large these predictions turn out to be true, favoring the idea that clitics correspond to specialized functional heads.

It is not difficult to give an idea of the special problems that the ordering of clitics currently pose to theorists. Consider French again; while the 3p object clitic *le* precedes the 3p dative clitic *lui*, it follows the 1/2p clitics *me* etc., used as indirect objects, as illustrated in (14). By comparison in French as in English full pronouns have the same distribution as non-pronominal DP's independently of whether they are 1/2p or 3p:

- (14) a. *Je le lui donne*
 I it him give
 'I give it to him'

- b. *Je te le donne*
 I you it give
 'I give it to you'

A host of other differences between 1/2p clitics and 3p clitics (such as the fact that the latter but not the former are specified for accusative or dative) point to the conclusion that the internal structure of the clitic string is not entirely dictated by thematic (and eventually Case) considerations, as is generally assumed to be the case for VP-shells; rather purely inflectional features such as Person (or lack thereof) play a role as well (Manzini and Savoia 1998b, 1999, forthcoming a, b).

Another very robust set of facts that points in the direction of the inflectional status of clitics is represented by the existence of impossible clusters, often "repaired" by having recourse to some independently existing combination. One classical example is Perlmutter's (1972) Spurious *se* Rule. In Spanish, specialized accusative and dative forms exist in the language, and are used in isolation, as in (15a) and (15b) respectively; however the combination of these two forms is barred, and Spanish has resort instead to the reflexive/impersonal form *se* to express the dative, as illustrated by the contrast between (15c) and (15d):

- (15) a. *Lo compré*
 it bought-1s
 'I bought it'
- b. *Le dió el regalo*
 him gave-1s the gift
 'I gave him the gift'
- c. *Se lo dió*
 himself it gave-1s
 'I gave it to him'
- d. **Le lo dió*
 him it gave-1s

In the context of a syntactic treatment of clitics, facts such as these clearly suggest that accusative and dative clitics in Spanish, as opposed to their argumental counterparts, compete for a single "slot". Once again the latter seems most easily characterizable in inflectional terms, as a 3p position. Of course, the possible occurrence of the reflexive/impersonal *se* in (15c) shows that this form is associated with a different "slot" (Manzini and Savoia 1998b, 1999, 2001, forthcoming a,b).

Having mentioned the *se* clitic of Spanish, it is worth pointing out that the syntax of these impersonal/reflexive elements is one of the most enduring problems in Romance linguistics; what is understood of it, how-

ever, once more points in the direction of a functional head status for clitics. Consider Italian; *si* is not only the 3p reflexive as in (16a), but also an impersonal, as in (16b), an element inducing passive, as in (16c), or unaccusativity, as in (16d):

- (16) a. *Gianni si lava*
 John SI washes
 'John washes himself'
- b. *Si va*
 SI goes
 'One goes'
- c. *Gli spaghetti si mangiano con la forchetta*
 the spaghetti SI eat with the fork
 'Spaghetti are eaten with a fork'
- d. *La luce si spegne*
 the light SI extinguishes
 'The light goes off'

Faced with the state of affairs in (16), Burzio (1986) postulated the existence of at least two homophonous *si*'s, namely a reflexive and an impersonal, the latter also responsible for passives: unaccusatives were a lexical variant of passives. This theory however misses the point that the various *si* constructions in (16) form a natural class, typically picked up in other languages by specialized verbal inflections. Following this observation, various attempts have been made in the literature at unifying the two *si*'s of Burzio (1986). One line of thought essentially aims at reducing reflexives to passives. Remember that passive is standardly analyzed along the following lines: the passive morphology, in this case *si*, becomes associated with the external theta-role of the predicate; this forces the internal argument to externalize, yielding the typical promotion of object to subject in (16c). If reflexive *si* as in (16a) is thought of as the exact counterpart of a reflexive full pronoun *se stesso* ("himself"), the derivation cannot but be different; indeed *si* cannot but become associated with the internal argument of the verb (Burzio 1986). Crucially however because a reflexive predicate is by definition symmetric, we have no way of knowing whether *si* in fact corresponds to the internal or to the external argument of the verb. Suppose that, exactly as passive *si*, reflexive *si* is associated with the external argument of the predicate (Marantz 1984); the derivation that ensues is identical to that of passive, with promotion of the object to subject position providing for a unification of the two *si*'s. The relevant derivation is illustrated in (17):

- (17) [_{IP} Gianni [_{I'} si lava [_{VP} lava Gianni]]]

What is particularly instructive from the point of view of the line of argument being developed here is that a unification of *si* does not appear to be possible if the parallelism between reflexive *si* and full DP reflexives is maintained; but it becomes possible if *si* is viewed as part of a layer of organization of the sentence that may have more in common with verbal inflection than with DP arguments. As it turns out, the discussion surrounding *si* is far from settled. Thus the theory just sketched, reducing reflexive to passive, cannot easily account for the impersonal uses of the type in (16b), since (16b) surely involves associating *si* with an internal argument slot. Indeed this type of treatment was developed for languages like French which crucially lack the impersonal construction. Dobrovie-Sorin (1998), attempts the unification of *si*-type elements from the opposite direction, i.e. assuming that they are systematically to be identified with objects; but once again this unification is achieved in reference to Romanian, where the impersonal type in (16b) is lacking. Extending the solution to a language with the properties of Italian would then imply as many difficulties as extending the alternative analysis in (17). Having said this, it is worth pointing out that as discussed in detail by Manzini and Savoia (2001), in all of the Italian dialects which allow for the full paradigm in (16), and also lexicalize a set of subject clitics, *si* has all of the morphosyntactic behaviors of an object clitic, rather than of a subject one. One may be tempted to take this evidence to tip the scales in favor of the view of *si* as object clitic.

A host of empirical problems of the type surveyed in (14)–(16) arise in the Romance languages. It seems to me that the success of the approach to clitics as inflectional heads rests on its predictive power precisely with respect to such facts. Much work remains to be done in this domain. Indeed the paradigms in (14)–(15) are already incompatible with the idea that clitic heads are characterizable simply in terms of Case, as suggested by terms such as *AccV* in Sportiche's (1996) theory. Given minimalist assumptions that phrase structure is projected from lexical specifications, the categorial properties of clitics are crucial for determining their position in the sentence, and hence for addressing questions such as relative order, compatibility and incompatibility patterns. Morphological attempts at mapping complex clitic systems in full detail assume that clitics are characterized by properties of Case, Person, Number and Gender, as well as the existence of mechanisms of underspecification and default. Manzini and Savoia (forthcoming a, forthcoming b) take a completely different approach, namely that the categorization of clitics should be entirely syntactic and correspond to such well-established syntactic categories as for instance Q for plurals, and to a restricted number of newly introduced ones, such as P for Person. This kind of research is of necessity confronted by the type of non-syntactic approaches that I briefly dismissed at the begin-

ning, such as the morphological one. In the final section of this article, I shall return full-circle to those approaches, at least to establish succinctly where the potential disagreements lie, and what kind of evidence can be brought to bear on them.

4. *Morphological and prosodic treatments*

Let us consider the morphology/syntax interface. Though the morphological literature presents several theories of cliticization, the comparison is most easily drawn between current minimalist syntactic theory and the morphological theory of Halle and Marantz (1993) which is intended to be broadly compatible with such a model. In this vein, Bonet (1991, 1995) deploys in favor of a morphological treatment of clitics very much the same type of argument that I have sought to put forward in favor of the inflectional treatment. Thus Bonet (1991, 1995) points out that the surface order of clitics does not in any way correspond to what may be taken to be the underlying order of arguments. But this does not necessarily mean that morphology needs to intervene post-syntactically, for the reasons that I have briefly sketched above. Similarly, Bonet (1991, 1995) insists that a great range of variation is to be seen in clitic systems, which does not correspond to any difference in the system of full DP and PP arguments or adjuncts. But this again can be taken as an argument in favor of a specialized inflectional structure for clitics, as above, and need not count as an argument in favor of a post-syntactic treatment.

Similarly, Halle and Marantz (1994) illustrate the rules of their post-syntactic morphology component with a phenomenon of Caribbean Spanish that involves the infixation of pronominal clitics between the stem of the verb and its plural suffix in the imperative, as illustrated in (18b); the standard Spanish in (18a) by contrast presents simple enclisis of the clitics on V:

- (18) a. *Den-me-lo*
give-Pl-me-it
- b. *De-me-lo-n*
 give-me-it-Pl
 ‘Give(Pl) it to me!’

Halle and Marantz (1994) assume that the syntax provides a structure whereby the clitic cluster is right adjoined to the cluster formed by the verb and its inflectional specifications, as in (19a). In the morphological component the clitic cluster is then moved to left-adjoin to the Plural specification of the verb, roughly as illustrated in (19b):

- (19) a. [_{AGR} [_T de] n] [_D me lo]
 b. [_{AGR} [_T de] [_D me lo] n]

It seems to me that the question here is not one of descriptive adequacy, but rather of explanatory adequacy or ultimately of simplicity of the theory. Thus it is perfectly true that clitic infixation of the type in (19b) can be achieved by a post-syntactic movement rule internal to a specialized morphological component. The same infixation however can also be easily derived by the ordinary syntactic rule of movement, even if we put ourselves within a fairly restrictive framework such as the minimalist one. To begin with, there are independent reasons to believe that the postverbal position of the clitics in (18a) is not derived by right adjunction of the clitics to the verb. On the contrary (and this is a point to which I shall return immediately below) it is possible to argue that ordinary enclisis simply derives from leftward movement of the imperative to C, which strands the clitics in postverbal position; in a minimalist perspective this movement of the imperative to C is dictated by the modal properties of this verb form. What we have therefore in the case of simple enclisis, as in (18a), is a structure of the type in (20):

- (20) [_{CP} den [_{CIP} me [_{CIP} lo [_{IP} den ...

At this point all that is needed in order to account for the infixation in (18b) is the assumption that only the verb stem moves to C in the relevant dialects, leaving behind not only the clitics but also the number inflection as schematized in (21):

- (21) [_{CP} de [_{CIP} me [_{CIP} lo [_{IP} n ...

This solution is motivated by Manzini and Savoia (forthcoming b) for Italian dialects which present even more complex forms of infixation. But the directly relevant point here is that in the absence of any empirical argument to the contrary, the purely syntactic derivation in (21) surely must count as simpler than the double, syntactic and morphological derivation in (19). To be more precise (21) requires a simpler grammar than (19b): under a pure syntactic derivation the operation of movement is identified with the syntactic component. Under the morphological derivation, the operation of movement in the syntax is actually duplicated by an operation of movement in the morphology: to the extent that the two operations have the same properties, a redundancy arises; to the extent that they differ, the grammar is considerably enriched. It seems fair to conclude that the burden of proof is on morphologists to demonstrate the need for morphological operations, and that no strong motivation for them is forthcoming from (Romance) clitics.

The brief mention of enclisis and of what is sometime known as mesocclisis in the discussion surrounding (18)–(21) also provide a useful introduction to the debate involving the other interface relevant to cliticization, that between syntax and phonology. Most of the illustrative examples of cliticization in Romance provided above involve proclisis, which can be interpreted either in terms of left adjunction of the clitic to the verb or in terms of the inflectional Cl categories being higher than the I position of the verb itself (contra Sportiche 1996). Two different examples of enclisis have also been given, in (8) and (18a). In both cases enclisis can be tied to the independently motivated movement of the finite verb to C, which leaves the clitic to its right, an account once again pioneered by Kayne (1989b, 1991). Similarly, mesocclisis as in (18b) can be accounted for as enclisis, i.e. as resulting from the movement of the verb to the left of the clitic, provided this movement can cross and hence leave to the right inflectional material as well, an account first suggested in a different empirical context by Lema and Rivero (1991).

Needless to say, there is ample cross-linguistic motivation for movement from I to C in questions, as in (8). But independent motivation for the account of imperatives presupposed by structures such as (20)–(21) is also not difficult to find, following the lead of Rivero (1994a, b). Thus in many Romance languages, which show the enclisis pattern of standard Spanish in (18a), the imperative cannot be negated. Instead, the so-called negative imperative is expressed by a suppletive form of the verb, typically an infinitive as in Italian, or a subjunctive as in Spanish (22):

- (22) a. *Da-me-lo*
 give-me-it
 ‘Give it to me’
 b. *No me lo des*
 not me it give-Subj
 ‘Don’t give it to me’

Rivero (1994a,b) argues that the impossibility of negating the imperative reflects the blocking effect that a Neg head, generated somewhere between I and C, has on V-movement to C. The reason why Neg has such a blocking effect, while clitic or other inflectional positions do not, can be sought in some version of Relativized Minimality, as first proposed by Roberts (1994), or currently in the Minimal Link Condition. Thus an operator element like Neg interferes with movement to an operator position such as C; non-operator heads such as clitics or agreement material, do not. Naturally, under this kind of theory we expect that blocking of V-movement to C in negative contexts should be visible in Northern Italian dialects of the type in (8) as well; indeed this has been shown to be the

case (see Zanuttini 1997 and Manzini and Savoia 1998a for different accounts).

In short, proclisis-enclisis (mesocclisis) alternations in Romance questions and imperatives receive a simple and revealing syntactic treatment in terms of V-movement to C. But this same type of alternation has given rise to linear and prosodic accounts as well. Consider for instance Portuguese, which has preserved regular enclisis-proclisis alternations in matrix sentences, a situation reported to have held of most Romance languages in the Middle Ages. Very much the same arguments that have been deployed so far in favor of a syntactic account of enclisis-proclisis alternations in questions/imperatives, can be adapted to account for the Portuguese alternations. Thus, suppose that enclisis results from the V2 character of Portuguese, i.e. from the systematic movement of the verb to C. Proclisis is actually predicted to arise if the verb is forced to remain in I because of the presence on its movement path of operators such as Neg. Indeed the list of elements that induces proclisis does include Neg as well as other operators such as Focus, as seen in the paradigm in (23); a syntactic account seems to be ideally placed to provide an explanation of these facts:

- (23) a. *O Pedro encontrou-a*
 the Peter met-her
 b. *O Pedro não a encontrou*
 the Peter not her met
 'Pedro didn't meet her'
 c. *Isso lhe disse eu*
 this him told I
 'It is this that I told him'

In this case, the alternative that syntactic accounts have to contend with is not morphological but rather phonological, since it invokes prosodic or linear considerations that have no place in the syntax. Indeed the earliest proposals in the historical linguistics literature concerning the position of clitics are in essence linear/prosodic in nature; such is the case for the Tobler-Mussafia Law relating to medieval Romance languages, and for the Wackernagel Law relating to Indo-European languages in general. It seems to me that what we know about the Romance languages leaves very little doubt that syntactic treatments are not only feasible, but indeed require hardly any extra stipulations, leaving very little room for any attempt at arguing for alternative solutions on empirical grounds. It seems to me furthermore that on theoretical grounds, the purely syntactic solution has the upper hand; why allow other components of the grammar, such as PF, to have the power of (re)ordering syntactic constituents (or ter-

minal nodes) if the criterion of descriptive adequacy is met by a theory which leaves (re)ordering entirely to the syntactic movement operation? This said, it is true that most of the actual debate concerning the borderline between syntax and phonology is played out not in the Romance domain, but rather in the Slavic one. The question is whether theories honed on the complex Romance system of clitics can be extended to the Slavic or other systems; or whether even admitting that some cliticization systems are mainly governed by syntax, it must be concluded that there are fundamentally different systems governed by phonology instead. Both theoretical positions are represented in the current debate (as reflected by Halpern and Zwicky 1996); on principles of general simplicity of the grammar one would desire, and expect, the former to be true.

5. Conclusion

The development of syntactic approaches to cliticization in generative grammar is marked by few but important passages. The first of these is Kayne's (1975) proposal that cliticization is a movement rule, and that as such it obeys syntactic constraints on movement. The importance of this development was picked up by a number of studies between the end of the 70's and the beginning of the 80's, concentrating both on the properties predicted by the model, such as clitic climbing, and on the problems for it, such as clitic doubling. The second important development, which took place between the end of the 80's and the beginning of the 90's, was the realization that cliticization should not be targeting the lexical head of the sentence, V, but rather its inflectional structure. Once again Kayne (1989a, 1989b) pioneered this analysis, while the single most important departure from the Kaynian model was Sportiche's (1996) proposal that clitics should be seen as inflectional heads themselves. In this perspective it is not clitics that move, but rather a lexical DP or a *pro* that raises to the Spec of the clitic category.

Assuming that the analysis of clitics as inflectional heads is correct, one of the crucial frontiers of clitic research now is represented by the attempt to provide a clear structural map of the clitic positions in the sentence and of the parameters associated with them. Two other important areas of research are indicated by the comparison just sketched between syntactic approaches and morphological or prosodic ones. As far as morphology is concerned, the single most interesting question is how far a syntactic account of the type provided for Romance clitics can be carried into the domain of what are traditionally rendered as agreement morphemes (cf. for instance Nash 1995 on Georgian). At the PF interface, the challenge is

also clearly defined. Assuming that Romance clitics are hard to explain prosodically, it remains for syntacticians to show that other languages obey the same fundamental conditions, and to set the parameters that account for any relevant differences.

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