

CLITIC PRONOUN CLUSTERS

PIETER A. M. SEUREN

0. The following essay is an attempt to solve a particularly troublesome problem in the theory of Transformational Grammar: the problem of ordering and combining clitic pronouns. Perlmutter (1971) shows that the syntax of clitic pronouns in (South-American) Spanish and French cannot be handled by transformations in the ordinary, well-known sense. Universal linguistic theory must, therefore, be enriched, and Perlmutter proposes the addition to Transformational Grammar of a notion 'surface structure constraint' (SSC). SSC's consist of moulds, or templates, which the transformational products must fit in order to be grammatical: any product which does not fit the template is 'rejected'. SSC's act as filters on the surface structure output of the grammar.

While accepting that the existing notion of 'transformation', universally constrained in a number of non-trivial ways, with input and output structurally defined by means of Phrase-markers (trees) and node-labels, and, possibly, with global conditions of applicability (Lakoff 1970), is insufficient to account for the syntax of clitic pronouns, one feels that Perlmutter's solution in terms of SSC's is also inadequate. Section 1 is devoted to a detailed criticism of Perlmutter's theory.

In Section 2 an alternative way is proposed for dealing with clitics. The proposal implies that Transformational Grammar is extended with a system whereby numerical values ranging from 1 to 4 are assigned to pronouns that are to be cliticised, according to whether they are first, second, or third person, animate or inanimate, dative or accusative. The transformational rules of Clitic Movement will then be constrained in various ways by certain simple calculi. The system makes a number of correct predictions in cases which have hitherto looked erratic and strangely exceptional. It enables one to detect certain connections between the seemingly irregular behaviour of Italian impersonal *si* in clitic clusters and the perplexing syntactic and semantic properties of Italian impersonal constructions. On the other hand, a few residual

uncertainties remain, in particular with French and Spanish reflexive/impersonal *se*. And, moreover, nothing much is said with respect to adverbial clitics, such as French *y* or *en*, or Italian, *ci* or *ne*. These uncertainties, however, in no way contradict the proposals made here. The difficulty is, rather, that it has not, as yet, become clear in what precise way, out of a number of possible ways, the remaining cases are best fitted in. In general, the remaining uncertain cases are precisely those whose transformational origin is largely opaque.

The extension to Transformational Grammar proposed in Section 2 is to be taken with a good grain of salt. The material provided from French, Spanish, Italian and Modern Greek is hardly sufficient to convince one that this functional calculus is an adequate and correct description of the way linguistic competence is organized with respect to clitics. A theory such as this relies heavily on descriptive success in a large number of different languages, since it makes strong universal claims. Yet, the claim seems justified that of the theories available at present, the one proposed here is the best in the technical sense that it makes a significant number of correct predictions in cases where other theories either resort to taxonomic listing or make incorrect predictions. We have here an example of a theory which can claim to be, objectively speaking, the best available, although it may fail to convince subjectively many of those who acquaint themselves with it. (I do not know what it is that makes a theory convincing, nor do I think this is at all well understood in the context of methodology and philosophy of science.)

It may well be that, in the light of further evidence from a number of different languages, the functional calculus for clitics proposed here will have to be modified or even totally rejected. Since, however, it has greater explanatory force than any other theory in existence today, it would seem to deserve some attention.

1. The difficulties connected with clitic pronoun clusters are mainly of two kinds. They consist in the ordering of the clitic pronouns in their clitic position, and in their combination. Thus, in French, (1)a is ungrammatical, but (1)b is grammatical:

(1)a. *Il le me donnera.

b. Il me le donnera. (He will give it to me.)

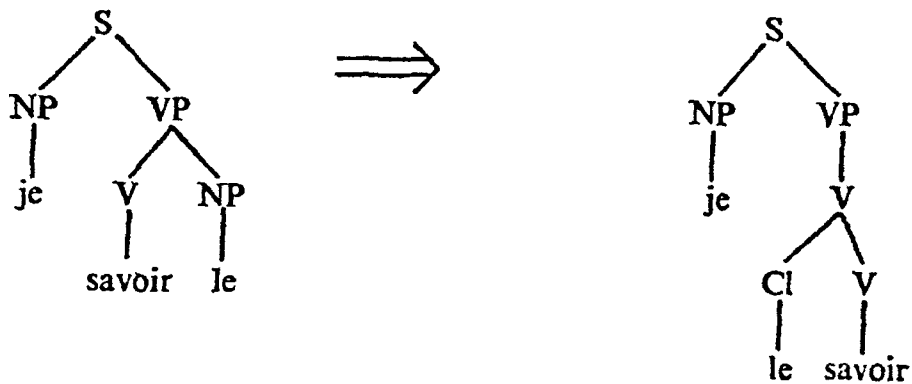
Likewise, the combination *vous lui* is ungrammatical, as in (2)a; the dative pronoun *lui* must remain uncliticised, as in (2)b:

(2)a. *Je vous lui présenterai.

b. Je vous présenterai à lui. (I shall introduce you to him.)

It is generally agreed that clitic pronouns are the result of Clitic Movement rules, which are postcyclic and move unstressed, unemphatic pronouns from their canonical position of object, indirect object, etc. to their clitic position, which in the cases concerning us is the position just before the finite verb form.¹ What the resulting constituent structure is, after Clitic Movement, is usually left open. Although this question has no crucial bearing upon our argument, I shall, for the sake of elegance, propose that the clitics are Chomsky-adjoined to the left of the verb, in the following way:

(3)



for the sentence *Je le sais* (I know it.). In Italian and other languages, pronouns which bear some special stress, because of emphasis or contrast, are treated as ordinary, full nouns and are not cliticised. In French, a periphrastic construction is used in such cases. Such pronouns are, anyway, never cliticised.

Perlmutter seeks to solve the problems posed by the ordering and the combination of clitics in clusters by proposing that, for every language which has clitic pronouns, there exists a chart, table, or template, consisting of columns in some fixed order. Each column contains a specification of certain clitic forms. The chart implies that never will there be a cluster containing two clitics from the same column, and a clitic from column n must precede a clitic from column m if $n < m$. Such a chart is a *surface structure constraint*, or output condition. Clitic Movement rules move clitics to their clitic position in more or less random order; only those combinations and those orderings which are permitted by the SSC will pass; the others are filtered out. When a particular combination is never possible in any order at all (e.g., when

two clitics are combined which are in the same column), there is no way in the language to express in a wellformed surface structure what is otherwise a perfectly normal sentence.

For French Perlmutter gives the following chart:

(4)	I	II	III	IV	V	VI
	ne	me	le	lui	y	en
		te	la	leur		
		nous	les			
		vous				
		se				

where *ne* is the negative particle; *me*, *te*, *nous*, *vous* and *se* correspond to 'me', 'you sg.', 'us', 'you pl.' and the third person reflexive, respectively, whether dative or accusative; *le*, *la* and *les* are the third person accusative pronouns for masc. sg., fem.sg. and masc./fem. pl., respectively; *lui* and *leur* are the singular and plural dative third person pronouns; *y* pronominalizes, in principle, inanimate prepositional phrases with *à*, and *en* prepositional phrases with *de*.

For Spanish he provides the SSC:

(5)	I	II	III	IV
	se	2	1	3

where the Arabic numbers refer to person (irrespective of case), and *se* stands for the reflexive/impersonal third person, but also for the so-called 'spurious' *se*, which is the form dative third person (d3) takes when accompanied by accusative third person (a3), as in:

(6) *Se lo diré.* (I shall say it to him.)

There are several major objections to Perlmutter's theory of SSC's. There is, first of all, the fact that both sentences of (7) are ungrammatical:

- (7)a. **Il me vous présentera.* (He will introduce me to you/you to me.)
 b. **Je vous lui présenterai.* (I shall introduce you to him.)

Whereas the ungrammaticality of (7)a follows from SSC (4), where *me* and *vous* are both in column II, the ungrammaticality of (7)b does not follow at all from (4). In order to have (7)b declared ungrammatical, Perlmutter resorts to so-called 'non-global constraints' (pp. 60-65), which are valid only for particular clusters. This solution is not only ad hoc, it also fails to account for the facts. It is ad hoc because it fails to bring out the fact that (7)a and b are ungrammatical for the same reason and

also because it does not provide a reason why similar, though not identical, restrictions are valid for Spanish and Italian (the SSC for Spanish, i.e., (5), does not rule out the corresponding forms of either (7)a or b, although the correlate of (7)b is ungrammatical).

That (7)a and b are ungrammatical for the same reason appears from the fact that there is, in both cases, a grammatical version where the dative pronoun has remained uncliticised:

- (8)a. Il me présentera à vous. *Or*: Il vous présentera à moi.
 b. Je vous présenterai à lui.

The versions with the accusative pronouns uncliticised are ungrammatical (Clitic Movement rules are obligatory):²

- (9)a. *Il vous présentera moi. *Or*: *Il me présentera vous.
 b. *Je lui présenterai vous.

This clearly shows that the ungrammaticality of the two sentences of (7) is due to a single factor, and not to two unrelated factors, as in Perlmutter's theory. This theory, furthermore, leaves it entirely unexplained why (7) should have grammatical counterparts (and not be unexpressible), and why these should be as in (8), and not as in (9).³ To this extent it does not do justice to the facts, apart from being *ad hoc*.

The principle which makes both sentences of (7) ungrammatical can be formulated, provisionally, as follows: when the pronouns of column II of (4) occur in the accusative they do not allow any dative pronoun to join them in clitic position; datives then remain uncliticised. It is easy to see that we can obtain the correct results by stipulating that Accusative Clitic Movement (ACM) precedes Dative Clitic Movement (DCM) in the grammar of French, and by formulating DCM in such a way that it does not apply when there is already, in clitic position, a pronoun of column II. (We shall propose below an alternative way of preventing DCM from applying when there is already a column II pronoun in clitic position: this restriction will not be built into the rule, but will follow from a general constraint on Clitic Movement.)

There is, furthermore, the fact that Italian and Spanish have constraints on the rule of DCM which are clearly reminiscent of those valid for DCM in French. In Italian, the rule is constrained in exactly the same way as in French, except that accusative third person reflexive (*si*) does not put an obstacle in the way of DCM:

- (10)a. Mi si presentò. (He introduced himself to me.)
 b. Gli si rifiutò. (She refused herself to him.)

Otherwise, all accusative pronouns of the first and second persons (a1, a2) do not tolerate a dative in the same cluster:

- (11)a. *Gli mi devi presentare.
 b. Mi devi presentare a lui. (You must introduce me to him.)

In Spanish, the restriction holds only between a1 or a2 pronouns and third person datives (d3), not d1 or d2:

- (12)a. *Me le presentaste. (You introduced me to him.)
 b. Me presentaste a él.

The following, however, is accepted even though it is considered a little 'heavy' and not very elegant:

- (13) Te me presentò. (He introduced me to you/you to me.)

It must be added that there are standard varieties of Spanish and Italian where DCM is not constrained in the ways indicated. While four informants from Spain rejected (12)a, one informant from Mexico accepted it without reservation. Speakers from Southern Italy accept, on the whole, sentences such as (11)a, or:

- (14)a. (*)Ti mi ha segnalato. (He pointed me out to you.)
 b. (*)Mi ti ha segnalato. (He pointed you out to me.)

The varieties in question are not dialects in the commonly accepted sense of that term. Their speakers give them the status of 'standard language', and are usually not aware that their 'standard' deviates from other forms of standard. In Italy in particular, the various forms of standard can be seen to form a socially determined hierarchy in their own right, where Northern standard forms attain higher status than Southern forms. I shall, therefore, speak of the former, in a general sense, as 'more normative standard forms' of the language.

The less normative standard varieties of Spanish and Italian are less constrained than the more normative standard forms of these languages: any clitic cluster which is acceptable in the normative standard language is also acceptable in the 'wider' variety, but not vice versa. (I shall, henceforth, use the bracketed asterisk to indicate sentences rejected by the normative standard language but accepted by the less constrained varieties.)

It is difficult to escape from the impression that we have to do here with restrictions on DCM which are valid in certain standard forms but not in others. In Perlmutter's theory, however, one is forced to

conclude that there is no unified system underlying the observed facts. There, the fact that the Mexican speaker accepted (12)a must be due to the lack of a particular 'non-global constraint' in his form of Standard Spanish. But the fact that Southern Italians accept (11)a and (14)a and b would be ascribed to their operating with a different clitic chart from other standard speakers. The generalization that in both these cases certain restrictions on DCM are not operative, is entirely lost in that theory.

Perlmutter's theory also fails to explain, for example, why (12)a, which is rejected by standard speakers of most Spanish speaking areas, but accepted by my Mexican informant, is universally considered far less bad than the horrible sentence which results when the 'spurious *se* rule' is applied:

(15) ***Se me presentaste.*

Nor does that theory explain why, in Spanish, (13) is ambiguous according to whether the one or the other of the two pronouns is taken as dative or as accusative, whereas Italian informants, including those who do not accept (14), tend to take the first of the two clitic pronouns as the dative, and the second as the accusative (see note 4). This is the more surprising since there are cases, in Italian, where the opposite is true:

(16)a. (*)*Mi ti raccomando.* (I recommend myself to you.)
 b. **Ti mi raccomando.*

Even though normative standard speakers do not, on the whole, accept (16)a, they all very clearly prefer it to b, which is accepted by no-one.⁴

Systematic observation shows that it is only the accusative reflexive first or second person (a1-R; a2-R) which can precede a dative clitic pronoun in a cluster: in all other cases the dative precedes the accusative. A theory of SSC's could only *register* these facts. A theory which *predicts*, and therefore, in some sense, *explains* them certainly stands a better chance of giving a correct account of the contents and internal organization of linguistic competence.

In Italian, the grammar of clitic pronoun clusters is considerably more complex than in any of the other languages studied. This language, in fact, provides actual counter-examples to Perlmutter's theory of SSC's in the form of charts, such as (4) or (5), to account for the facts of clitic pronoun clusters. The following sentence is fully grammatical in Italian:

- (17) *Se ne toglie il contenuto dopo cinque minuti.* (One removes the contents from it after five minutes.)

Here the *se* (phonological variant of *si*: see below) is the so-called impersonal *si*, which probably originates, in a special way, as a reflexive ("the contents removes itself from it"), although it must be admitted that its transformational derivation is uncertain: it also occurs with intransitive verbs, such as *partire* (go away, leave):

- (18) *Da Napoli, se ne partirà domani.*⁵ (From Naples, one is due to leave from it tomorrow.)

The *ne* is equivalent to French *en*, and stands, roughly speaking, for 'of it' or 'from it'. Given sentence (17), it is possible to pronominalize *il contenuto* ('the contents') to *lo* ('it'). When we do this, however, the order in which *si* and *ne* occur in (17) is inverted, and *lo* is put between them:

- (19) *Ne lo si toglie dopo cinque minuti.* (One removes it from it after five minutes.)

This 'inversion' of *ne* and *si* does not seem reconcilable with the notion of chart or template as put forward by Perlmutter. Or else, different columns will have to be set up for *si* according to whether it is or is not accompanied by a clitic third person accusative, and according to whether it is the impersonal *si* or the reflexive (dative) *si*. For we have, in Italian, both (20)a and b:

- (20)a. *Lo si toglie.* (One removes it; it is removed.)
 b. *Se lo toglie.* (He removes it from himself; he takes it off.)

In (20)b, the *si* (manifested as *se*) is dative reflexive.

If we wish to set up a chart for the Italian clitics, (21) is about as near as one can get for Standard Northern Italian:

(21)	I	II	III	IV	V	VI
	mi	ci/vi	si	ne	lo	si
	ti	(adv.)			la	
	gli				li	
	le(dat.)				le(acc.)	
	ci					
	vi					

The pronouns in column I stand for 'me', 'you sg', 'him dative', 'her dative', 'us', 'you pl.', respectively. Column II contains the two equiva-

lent forms *ci* and *vi*, which correspond to French *y*, i.e., they pronominalize inanimate prepositional phrases with *a*, including locatives. Column III and column VI both contain the troublesome *si*; it is placed in column VI only when it is both impersonal and accompanied by an a3 pronoun, i.e., from column V. The *ne* in column IV corresponds to French *en*. It derives either from prepositional phrases with *di* ('of'), or from prepositional phrases with *da* ('from'). Column V contains the third person accusative pronouns: masc. sg., fem. sg., masc. pl., fem. pl., respectively. There is no clitic pronoun for dative third person plural 'to them': that pronoun (*loro*) always remains uncliticised.

For the less restricted variety of Italian, the chart would be rather more elaborate:⁶

(22)	I	II	III	IV	V	VI	VII	VIII
	mi } ci } a1-R	mi } ci } d1	mi } ci } a1	ci/vi (adv.)	si	ne	lo } la } li } le } a3	si
	ti } vi } a2-R	ti } vi } d2	ti } vi } a2					
	mi } ci } d1-R	gli } le } d3						
	ti } vi } d2-R							
	si d3-R							

where the first three columns divide up column I of (21) according to the functions of the clitic pronouns.

Apart from these charts, there would be further, arbitrary looking, additions, such as the fact that a combination of *ne* followed by an a3 pronoun is possible only when *ne* derives from *da* + NP (i.e., 'from'), and not when it derives from *di* + NP (i.e., 'of'). Thus Italian admits, although it is perhaps slightly archaic:

(23) Ne lo tolse. (He removed it from it.)

But not:

(24) *Ne lo ringrazio. (I thank him for it.)

where the *ne* is derived from a prepositional phrase with *di*, since 'to thank for' is *ringraziare di*.⁷

It would have to be specified, somehow, that in the more normative standard varieties of Italian (25)a, b and c are fully acceptable, whereas (25)d is more acceptable to speakers of the Southern standard variety:

- (25)a. Non mi ci si vedrà più. (One will not see me there any more.)
 b. Non vi ci si può sedere. (One cannot sit down there.)
 c. Di gambe mi se ne è spezzata una sola. (lit.: Of legs, only one broke itself on me of them. I.e., I've only broken one of my legs. – example quoted from Lo Cascio (1970: 124).)
 d. (*)Non mi se ne parla. (One does not speak about it to me.)

It is far from clear how an SSC theory could account for the acceptability conditions of clusters of three clitics other than by adding more and more taxonomy.

Not only in Italian, but in Spanish as well, there are cases of unacceptable clusters which seem quite out of keeping with the theory of surface structure constraints. Perlmutter reports the ungrammaticality of:

- (26) *Te me escapé. (I escaped from you.)

where *te* is dative and *me* reflexive accusative: the verb for 'escape' is the inherently reflexive *escaparse*. Instead of (26) one says:

- (27) Me escapé de tí.

The ungrammaticality of (26) is remarkable in the light of chart (5), since the combination *te me* is acceptable when other functions are attached to the clitics, as we saw in (13), or as appears from:

- (28) Te me escapaste. (You escaped from me.)

where *te* is reflexive accusative and *me* is dative.⁸

It appears, on the whole, that Perlmutter's theory of surface structure constraints for clitic pronoun clusters must be considered inadequate. Whereas we can agree with him when he states that existing transformational theory is unable to provide an explanation for the facts of clitic pronouns, we also have to admit that the solution he proposes hardly stands a reasonable chance of being a correct account of the contents and the internal structure of the native speakers' knowledge of their language.

2. In view of the facts observed it is hard to escape from the impression that there must be some more powerful system underlying them than the one proposed by Perlmutter (which is essentially an incorporation of traditional grammatical views on clitics into a transformational frame). The fact that although the languages considered differ significantly in their syntax of clitics, the differences are clearly not arbitrary, suggests in its turn the existence of general constraints on clitic systems.

In the following I shall attempt to formulate different systems for French, Spanish, Modern Greek and Italian, respectively, while seeking to keep these systems as uniform as possible, despite their inevitable differences. The systems consist of a numerical calculus, which is grafted onto the transformational rules of Clitic Movement.

Before the rules of Clitic Movement start to operate, each pronoun is given a numerical value which we shall call its *functional load*. Cliticising languages tend to have a limit to the total functional load of a cluster of clitics: if the cluster becomes too 'heavy' the Clitic Movement rules stop operating. There are also cliticising languages, however, which do not have such a maximum limit, such as Southern Standard Italian, or the Spanish of my Mexican informant.

Apart from its functional load, each pronoun is also assigned an *index*, which determines its linear position in a series of clitics. When two pronouns turn out to have the same index, the Clitic Movement rules will cliticise the first one which is up for cliticisation, but not the second; i.e., they will stop operating when a pronoun would be added to a clitic cluster with an index equal to that of a clitic already in the cluster. In most cases (in fact, in all cases considered here), both the index and the functional load are calculated on the basis of a table consisting of a few parameters and their values. Often the index is the same as the load, but sometimes it differs. Whereas the load is read directly from the table, the index is sometimes affected by additional numerical operations.

The systems given will concentrate mainly on pure personal pronouns, which are the central core of clitic systems, and much less on adverbial clitics, such as French *ne*, *y*, *en*, or Italian adverbial *ci* or *vi*, or *ne*. How these acquire their index and/or load is not gone into here. Their syntactic behaviour is, anyway, badly understood at present. Any attempt to fit these into calculi such as those proposed below will call for a detailed observational study of their rather complex behaviour, which is clearly beyond the limits of this paper. It will become clear, however, that the adverbial clitics can easily find their place in the system, even though their precise place remains unargued for.

Let us begin with French, and propose the following table for French pronouns:

(29)	first person	.....	3
	second person	.....	3
	third person	.....	3
	animate	.....	2

Pronouns of first, second or third person are assigned, as part of their functional load, the values specified for them in the table. The value '2', for animate, is assigned only to those pronouns which cannot occur in the function they have in the sentence in question without referring to, or at least implying, an animate being. First and second person pronouns, therefore, automatically add the value for 'animate' to their functional load. Third person pronouns only do so when they are dative, not when they are accusative. (We will see in a moment that a3 reflexive pronouns present complications here.) There is a maximum of 9 to the total functional load of a cluster of clitics.

This predicts the ungrammaticality of the sentences of (7) and (9), assuming, as we did before, that ACM precedes DCM. In (7)a and b the total load of the clusters is 10, since both pronouns are assigned the values for 'person' and for 'animate'. After the application of ACM, DCM cannot now apply, and the dative pronouns remain uncliticised, as in (8). (9) would be correct if DCM preceded ACM.⁹

The index of the pronouns is based on the same table (29). On the whole, the index will equal the load, but sometimes there are additional operations: they will be set out below. *The pronoun with the higher index will precede the pronoun with the lower index in the cluster.* Assuming that a tree structure such as (3) ensues after Clitic Movement, we can give the original V an index of 0, and stipulate that Clitic Movement Chomsky-adjoins a pronoun with index n to the left of a V dominating an element with an index m such that $m < n$. We thus understand the ungrammaticality of (1) a and grammaticality of (1) b: *Il me le donnera. Me* has both a load and an index of 5; *le* lacks the value for 'animate' and has 3. The total is below 9 and the order is *me le*.

There are two additional operations for the calculation of the index. The first affects the index of non-reflexive third person dative pronouns in those languages, such as French, Spanish or Modern Greek, where the parameter 'dative' does not figure in the functional table. *In these languages, the value for 'person' is subtracted from the load of non-reflexive d3 pronouns to form the index.* The result will be that the index of d3 pronouns in such languages consists of no more than the value for 'animate'. The functional load, however, remains unaffected. For French, this means that the d3 pronouns *lui* and *leur* have a load of 5, but an index of only 2. We thus predict that these pronouns follow the others, as in:

(30) Je le lui donnerai. (I shall give it to him.)

Here, the total load is 8; *le* has the index 3, and *lui*, which is d3, has the index 2.

The second of the two operations has to do with reflexives. We stipulate that *the index of reflexive pronouns equals the functional load plus, again, the value for 'person'*. For these pronouns, therefore, the value for 'person' is doubled in the index, but the functional load remains unaffected. This would explain the fact that, in French, of the two sentences of (31), which are both ungrammatical, the first is decidedly less bad than the second:

- (31)a. *Je me vous présenterai. (I shall introduce myself to you.)
 b. **Je vous me présenterai.

In the first sentence, only the maximum total load of 9 has been exceeded: the total load of the cluster is 10. But in (31)b the serial ordering is also incorrect: *vous* has an index of 5, but *me*, which is reflexive, has the index 8.

There is a complication with the third person reflexive *se*. It forces dative pronouns to remain uncliticised, as appears from:

- (32)a. *Il se vous présentera.
 b. Il se présentera à vous. (He will introduce himself to you.)

The difficulty is solved if there is a reason to assign *se* the value 2 for 'animate': without that value the cluster in (32)a would have a total load of 8 and would be acceptable. I shall try to argue that French *se* does indeed require the value for 'animate', but many problematic aspects of this pronoun will remain unclarified.¹⁰

French *se* has a range of possible meanings, as appears from the four-fold ambiguity of:

- (33) Les étudiants se trouvaient à Paris.

This sentence can mean 'One could find the students in Paris; (the) students were to be found in Paris'. In this case we speak of the impersonal *se*. It can also mean 'The students were (found themselves) in Paris', or 'The students found/came upon themselves in Paris' (for example as a mode of saying that they found their own identity there), or, finally, 'The students found each other in Paris'.

Impersonal *se* is highly restricted. It only occurs with transitive verbs, and only in generic sentences: *Jean se trouve à Paris depuis deux jours* cannot mean 'One has been able to find John in Paris for two days', but only 'John has been in Paris for two days'. But whatever its

restrictions, it necessarily implies, in the semantics of the sentence, a human subject, in the form of 'one' or the like. It cannot stand for an implied first or second person, contrary to the much less restricted *on* ('one'), or, as we shall see below, the Italian *si*, which can stand in for first or second persons:

(34) *On va arriver bientôt.* (We will arrive soon.)

There is some reason, therefore, to assign this *se* the values for 'third person' and 'animate'.

The other uses of *se* do not seem to occur with a dative unless, again, there is a personal subject, overtly or implied in the semantics of the sentence. Thus, one finds French speakers still accepting:

(35) *Les livres de poche se vendent plutôt aux étudiants.* (Paperbacks are sold mainly to students.)

where the semantic subject of *vendent* ('sell') is the unexpressed vendor or vendors of paperbacks. But then, whereas (36)a is felt to be awkward, (36)b, which contains an additional dative, tends to be rejected:

(36)a. ?*La solution ne s'est jamais montrée.* (The solution has never shown itself, has never come to light.)

b. **La solution ne s'est jamais montrée à mon oncle.* (The solution has never become clear to my uncle.)

One notices, furthermore, that the reflexive *s'échapper* ('escape') can only occur with an animate subject, as in:

(37) *Le prisonnier s'est échappé de la prison.* (The prisoner escaped from prison.)

and that the non-reflexive *échapper* is used for non-animate subjects:

(38) *La solution m'échappe à ce moment.* (The solution escapes me right now.)

Italian behaves differently in this respect. There, the reflexive *si* does occur with datives in the absence of an animate (semantic) subject:

(39) *A mio figlio, le gambe gli si rompono ogni volta che fa lo sci.*
(My son breaks his legs every time he goes skiing. *Literally,*
To my son, the legs break themselves on him every time he goes skiing.)

In the absence of a more precise insight into the principles underlying the behaviour of the third person reflexive, let us assume that French re-

flexive *se* must have the value for 'animate' when flanked by a dative, whereas its Italian counterpart need not. This will, at least, relate the fact that (36)b does have a grammatical Italian equivalent but (39) does not have a grammatical counterpart in French with the fact that French *se* excludes datives in the same cluster whereas Italian *si* does not. This difference in the clitic systems of the two languages would thus not be an isolated idiosyncrasy, but an organic consequence of the different character of the third person reflexive pronoun in these languages.

It is to be noted, in this context, that French *se* does not cliticise in the normal way, i.e., through the postcyclic Clitic Movement rules. Kayne shows (1969:180-1) that ordinary reflexive *se* is cliticised in the cycle, whether dative or accusative. This appears from the *faire*-construction: the causative verb *faire* ('make', 'do') raises the embedded verb and Chomsky-adjoins it to its own right.¹¹ When there is no object in the embedded S the lower subject becomes direct object in the higher S; otherwise it becomes dative and the lower object remains direct object in the higher S. The process is cyclic.

Pronouns are cliticised, postcyclically, to the position in front of *faire*:

(40) Je le lui ferai voir. (I shall get him to see it; I'll show it to him.)

Yet, the reflexive *se* occurs between the form of *faire* and the following infinitive:¹²

(41)a. Je le ferai se raser.

b. Je lui ferai se faire la barbe.

(both: I shall get him to shave himself.)

The position of *se*, as well as the fact that *le* in (41)a is accusative, and not dative, show that *se* has been cliticised (and become part of the V-node to be raised together with *raser*) in the cycle, and, therefore, before Predicate Raising on the next S.¹³

The same argument can be given for the third person reflexive pronouns in Spanish and Italian.

Let us now consider the Spanish clitics. The following table appears to yield the correct results:

(42)	first person	.....	1
	second person	.....	2
	third person	.....	3
	animate	.....	3

Here, too, the maximum total load of a clitic cluster is 9 (except for varieties, such as that represented by my Mexican informant). It thus becomes clear why (12)a is rejected by all informants except the one from Mexico: the cluster 'me to him' is too 'heavy', the total load being 10. But the cluster in (13) just passes: 'You to me' or 'me to you' carries a total of 9.

It is now also predicted that *te me* should be ungrammatical in (26), but grammatical in (28). In (26) *me* is reflexive and, therefore, carries an index of 5; *te* is not reflexive, and its index is also 5. Serial ordering is now impossible, and only the reflexive pronoun is cliticised, as in (27).

When we apply our theory to the Spanish non-reflexive third person dative (*le* for singular; *les* for plural), we hit upon a complication which has not come up earlier. Sometimes, by pure coincidence, clitic systems exclude certain combinations which are, nevertheless, in heavy demand, or frequently called for. One such case was quoted in note 6: in Italian, where the impersonal *si* is very widely used, the situation often arises that impersonal *si* occurs with a reflexive verb, so that two consecutive occurrences of *si* are called for. (We shall see below how their indices are calculated.) Yet, there is a universal constraint on clitic clusters which rules out two consecutive occurrences of phonologically identical clitics. As was indicated in footnote 6, Italian gets around this difficulty by changing the first *si* into *ci*.

A similar difficulty arises with third person dative feminine in Italian, which is phonologically identical with third person accusative plural feminine: both are *le*. Yet, the combination 'them (fem.) to her' occurs very frequently, and it would be frustrating not to be able to use normal clitics for this combination. Italian gets around this obstacle by changing the feminine dative *le* to *gli*, the masculine dative, when it is followed by another clitic beginning with *l-* or *n-*. Instead of the impossible **le le*, Italian thus has *glielle*, which now means 'them (fem.) to him' or 'them (fem.) to her'. It appears that, in general, when a clitic system rule or constraint is violated by some grammar for reasons of convenience, the violation is 'concealed' by a phonological change.

This, now, is precisely what we observe in Spanish. There, the combination "it to him" would be impossible because both pronouns would have the same index so that they could not be serially ordered. A pronoun a3 would have the index 3, equal to its functional load, and a pronoun d3 would have a load of 6 but an index of 3, since the value for 'person' would be subtracted. Spanish gets around this problem by not applying the subtraction of the value 3 for 'third person' when d3 co-occurs with

a3. Instead, it changes the pronoun to *se* (Perlmutter's 'spurious' *se*). This change is not arbitrary since the reflexive *se*, when accusative (and this is by far its most frequent case), also has the index 6. We thus view sentence (6) in a more explanatory light: *se* ('to him') now has index 6, equal to its load, and *lo* has 3 for both index and load. We also understand why in (12)a the d3 pronoun *le* has not changed to *se*: there is no need for this to happen. In fact, as we saw above, the use of 'spurious' *se*, in this case, results in the doubly starred (15), which Spanish speakers do not even find interpretable.

The surface structure constraint as given in chart (5) is now seen to be a simple consequence of functional table (42) together with the calculus of load and index as set out above. The anomalies, however, which had to be treated as idiosyncratic exceptions in Perlmutter's theory, are now seen to be systematic.

Perlmutter presents (p. 29) the first sentence of (43) as grammatical, but (p. 70) the second as ungrammatical:

- (43)a. ?A Sarita *se la* permitiò dormir toda la mañana, pero a mi no *se me lo* permitiò. (Sarita was allowed to sleep the whole morning, but I was not allowed to do so. *Lit.*: but to me, one did not allow me it.)
- b. *A tu hijo la guerra *le* complicò la vida, pero a mi hijo no *se me la* complicò. (Your son, the war complicated his life, but to my son, it did not complicate it to him.)

My informants felt doubtful about the a-sentence, but agreed with Perlmutter that the b-sentence is ungrammatical. (My Mexican informant was not very happy with either; he preferred expressions with no more than two clitics, with which the others agreed.) In (43)a *se* is impersonal ('one'), but in the b-sentence it is the 'spurious' *se* standing for d3 'to him'. In the latter, moreover, *me* is a so-called 'ethical' dative, untranslatable into English, and expressing the speaker's involvement in what is said. Here, not only the facts are unclear, but also the issues involved. We do not know, for example, how to deal with ethical datives, whose origin, both semantically and syntactically, is entirely mysterious. (cp. also the difference between (25)c and d; in c, *mi* is an ethical dative.) Under any count, the total functional load on the clitic clusters of both sentences would be too high. Cases such as these, however, are too marginal and too much in a limbo of uncertainty to constitute sound evidence for or against any theory.

In order not to remain exclusively within the domain of the Romance

languages, let us consider the clitic pronoun system of Modern Greek. The Greek clitic system is fairly simple. It lacks adverbial clitics as well as any counterpart of the impersonal or reflexive *se/si*: for this, verbal endings are used rather than pronouns. The dative precedes the accusative, but, as in French or Italian, a dative does not tolerate a first or second person accusative in the same cluster: when there is such an accusative, the dative remains uncliticised. I rely on two educated informants from Athens.

The following table suffices for Modern Greek:

(44)	first person	.....	2
	second person	.....	2
	third person	.....	2
	animate	.....	3

Again, the total functional load of a cluster must not exceed 9. We thus have, predictably:¹⁴

- (45)a. *Mou to ípe.* (He said it to me. Lit.: to me it.)
 b. *Tou to ípa.* (I said it to him. Lit.: to him it.)
 c. *Sas ton sistisa.* (I introduced him to you. Lit.: to you him.)
 d. *Sas sistisa se aftón.* (I introduced you to him.)

and not:

- (46)a. **To mou ípe.*
 b. **To tou ípa.*
 c. **Ton sas sistisa.*
 d. **Tou sas sistisa.*

In (45)a, *mou* has 5 for both index and load, and *to* has 2. In (45)b, *tou* has a load of 5, but an index of 3; *to*, again, has 2 for both. In (45)c, *sas* and *ton* are as *mou* and *to*, respectively, in (45)a. In (45)d, the dative *se aftón* ('to him') cannot be cliticised since the total load of the cluster would then be 10. In (46)a, b and c we observe an incorrect ordering of the clitics. In (46)d, the dative has been, incorrectly, cliticised and, moreover, been given the wrong place.

It should be noticed that a SSC in the form of a chart consisting of consecutive columns is by no means a natural way of presenting the facts of Greek clitic clusters, even though the Greek system is simpler than that of the other languages investigated. In such a chart the dative pronouns would occupy the first column. There would be no more than two columns, since clusters never contain more than two clitics, which are

then always dative and accusative. The second column would have to contain only the pronouns a3, i.e., *ton, tin, to, tous, tis, ta*. It would then not be clear where the pronouns a1 and a2 should go: they always occur alone.

Let us now, finally, turn to Italian. It appears that the complicated facts of Italian clitic clusters are naturally accommodated into a functional calculus of the type considered for the other three languages. The main difference between Italian and the other languages is that two more parameters are operative in Italian, i.e., 'dative' and 'accusative'. The table which predicts the facts correctly is the following:

(47)	first person	2
	second person	2
	third person	2
	animate	3
	dative	4
	accusative	3

The total functional load of a cluster must not exceed 16, i.e., the well-known 9 from the other languages plus the values for 'dative' and 'accusative'. For the speakers of Southern standard varieties, this limit of 16 does not exist. Otherwise, their grammar of clitics does not differ from that of the more normative standard speakers.

In the other languages, as we have seen, the index of non-reflexive third person dative pronouns is calculated by taking the functional load and subtracting the value for 'person'. Italian lacks this particular subtraction operation for d3 pronouns, possibly because 'dative' occurs as a parameter in the table. Reflexives, on the other hand, have the value for 'person' doubled in their index, as happens in the other languages.

Looking back at chart (22), we see that the pronouns d1/2/3-R have a load of 9 and an index of 11. The pronouns a1/2-R take 8 and 10, for load and index respectively. Since, for semantic reasons, they can never co-occur in the same cluster, these two groups can be put into one column in SSC (22). Datives of all three persons (when not reflexive) have 9 as both their load and their index. They form column II in (22). The pronouns a1 and a2 follow with 8 for load and index alike. Since the lowest total of a combination of any of the pronouns from these first three groups, or columns, is a load-value of 17, the more normative forms of Standard Italian will never have such a combination, and, in these varieties of the language, the three columns coalesce, as in (21).

It is now easy to see that the observations made earlier in (10), (11), (14) and (16) follow directly from our system. In (10)a and b, the dative pronouns carry a load/index value of 9, the reflexive *si* has an index of 7 but a load of 5. (11)a has a cluster which is correct but for being too heavy: *gli* gets 9 points and *mi* 8, so that the total exceeds 16. The same applies to the two sentences of (14), where our system also predicts that the first of the two pronouns in the clusters is the dative, and the second the accusative pronoun (see note 4).

It is, furthermore, clear that, in spite of the otherwise absolute rule that dative pronouns precede accusatives in Italian clitic clusters, first and second person reflexive accusatives precede datives (which cannot then be reflexive), as in (16)a. There, the cluster is too heavy, but it is quite clear for all Italian speakers that the order is as in (16)a and not as in (16)b.

We also see that the a3 pronouns have a load/index figure of 5. The question remains how impersonal *si* fits into the system. Reflexive *si* creates no problem, as we have seen: when dative it takes a load of 9 and an index of 11; when accusative it takes 7 and 5, respectively. The difficulty consists in the other *si* which we call impersonal.

Let us first make it clear how impersonal *si* is recognised, and distinguished from reflexive *si*. The following seems to be a reliable test. Whenever *si* is impersonal, there is always a parallel form with an a3 pronoun preceding *si*. When *si* is reflexive this is never possible. When *si* is preceded by an a3 pronoun, we also consider it impersonal.

In view of the unusual character of impersonal *si* in Italian (see note 10), a little explanation is called for here. Given the following sentence:

(48) *Un libro prestato si deve rendere.* (A borrowed book must be given back.)

there is a parallel sentence:

(49) *Un libro prestato, lo si deve rendere.* (A borrowed book, that must be given back.)

We cannot simply say that *lo* in (49) pronominalizes *un libro prestato*. Various observations make it clear that *un libro prestato* functions as the surface structure subject in (48), but not in (49). This appears from the fact that the finite verb form is plural when the subject is plural as in the following sentence, which is analogous to (48):

(50) *I soldi prestati si devono rendere.* (Borrowed money must be given back.)

but singular in (51), which is structurally like (49):

- (51) I soldi prestati, li si deve rendere. (Borrowed money, that must be given back.)

In (49) and (51), the first NP, which corresponds in case, number and gender with the a3 pronoun, must be accusative.

When the verb is intransitive, it takes singular with impersonal *si*:

- (52) Si parte subito. (We are leaving immediately.)

But with the verb *essere* (be) adjectival concord is plural although the finite verb form is singular:

- (53) Si è partiti da diversi giorni. (They have been away for some days.)

That *si* in (52) and (53) is rightly considered the impersonal *si* appears from:

- (54) Partire, lo si fa subito. (Leaving, that one does immediately.)
 (55) Partiti, lo si è da diversi giorni. (Away, they have been that for some days.)

It is clear that the a3 pronoun is not simply a pronominalization of the subject NP in the parallel sentence. Although the correspondence between the two types of sentence is absolute, it is more complex than that between sentences which contain a pronominal or non-pronominal NP. There is, in all likelihood, some transformational link between these types of sentence, though the precise rules are not known. Let us, in the absence of more precise knowledge and for the sake of terminological convenience, speak of the *a3-Rule* which converts (48) into (49), (50) into (51), (52) into (54), (53) into (55).

It furthermore appears that impersonal *si* is, semantically speaking, not bound by person (just as French *on*), so that we have sentences such as (52), which is naturally translated (depending on context) as 'we are leaving immediately', or even (quoted from Lo Cascio (1974)):

- (56) Noi, il cervello si avrà piccino, ma lo sappiamo adoperare. (We, we may have little brain, but we know how to use it.)

Impersonal *si* is impossible, however, when no human subject is semantically understood. Although the sentence:

- (57) La soluzione si mostrerà in un istante.

is ambiguous between the reflexive and the impersonal *si* (it means either 'The solution will show itself in a moment' or 'One/we will show the solution in a moment'), when it passes through the a3-Rule it can only mean 'The solution, one/we will show that in a moment':

(58) La soluzione, la *si* mostrerà in un istante.

On the basis of this evidence it seems reasonable that impersonal *si* should be assigned the value for 'animate', but no value for 'person'. As for case, we shall regard it as accusative before the a3-Rule: in some special way it can be taken to act as an accusative reflexive for that part of the sentence which is isolated and fronted by the a3-Rule. After this transformation, however, impersonal *si* seems to have lost its case value altogether: the accusative function has been taken over by the a3 pronoun resulting from the a3-Rule.

We therefore assign impersonal *si* the value 6 ('animate' plus 'accusative') for both its load and its index in all cases except when it is preceded by an a3 pronoun. In that case it takes a load/index figure of only 3, for 'animate'. Reflexive doubling of the value for 'person' to calculate the index does not come into play at all for impersonal *si*, since it never takes the value for 'person'.

If this is correct, there must be a difference in load/index value between the occurrences of *si* in the following two sentences:

- (59)a. Non mi *si* informa più della situazione. (One no longer informs me of the situation.)
 b. Non lo *si* informa più della situazione. (One no longer informs him of the situation.)

The a-sentence has not undergone the a3-Rule. When it does, it comes out as:

- (60) Informarmi della situazione, non lo *si* fa più. (Inform me of the situation, one no longer does that.)

The b-sentence, on the other hand, has been through the a3-Rule. Before that rule (and with *Giovanni* as subject), it corresponded to:

- (61) Giovanni non *si* informa più della situazione.

which is ambiguous, like (57), between 'Giovanni no longer keeps himself informed about the situation' and 'One no longer informs Giovanni of the situation'. The matter is complicated by the fact that the a3-Rule is free to operate in a number of different ways. Applied to

(61), with *Giovanni* pronominalized, the result is not only (59)b, but it may also be:¹⁵

(62) Informarlo della situazione, non lo si fa più. (Inform him of the situation, one no longer does that.)

Yet, whereas (62) is derived from a structure directly underlying (61) in its second (impersonal) reading, the structurally identical (60) does not derive from:

(63) Io non mi informo più della situazione.

which is structurally identical to (61) but not ambiguous. (63) can only have the reflexive reading: 'I no longer keep myself informed about the situation'. (60), as we said earlier, is derived from (59)a by the a3-Rule.

In the theory presented here, the *si* of (59)a has a load/index of 6, but the *si* of (59)b takes the value 3. This difference is reflected in their different behaviour when the prepositional phrase *della situazione* is pronominalized to clitic *ne*. As we have seen, this particle has two different origins. It either derives from a prepositional phrase with *di* ('of') or from one with *da* ('from'). For the grammar of clitics they are not entirely equivalent, since, as we saw in (24), *ne (di)* cannot be combined with a pronoun a3, but *ne (da)* can, as in (19) or (23). Since, furthermore, both *ne*'s follow the impersonal accusative *si* (i.e., before the a3-Rule), as in (17), (18), or:

(64) Se ne parla spesso. (It is often spoken of.)

where *ne* derives from a *di*-phrase ('to speak of' is *parlare di*), the values of both *ne*'s cannot be the same. *Ne (da)* must lie between impersonal accusative *si* (6) and the pronouns a3 (5). This leaves no other index value for *ne (da)* than 5½. The other *ne*, which is derived from *di*, is now given the index 5, so that it clashes with the a3 pronouns. This explains the ungrammaticality of (24).

When we pronominalize *della situazione* of (59) into *ne (di)*, we observe that for (59)a the cluster becomes too heavy for normative standard speakers, but otherwise acceptable, whereas for (59)b there is no solution: it is ungrammatical no matter where *ne* is placed:

(65)a. (*)Non mi se ne informa più.

b. * Non $\left\{ \begin{array}{l} \text{ne lo si} \\ \text{lo se ne} \\ \text{lo ne si} \end{array} \right\}$ informa più

Predictably, when we have *ne (da)* instead of *ne (di)*, as in (19), the order is *ne lo si*, i.e., $5\frac{1}{2}$, 5, 3.

The difference between the two *si*'s in (59) now appears clearly. If *si* in (59)a had the same value as that in (59)b, i.e., 3, one would expect, instead of (65)a:

(66) *Non me ne si informa più.

with the successive index values 8, 5, 3. But (66) is irredeemably ungrammatical. Speakers accept, however, (65)a, even though it may be a little heavy: 8, 6, 5.

The sentences (17)-(20) now no longer pose any problems. In (17), the cluster *se ne* takes the values 6, $5\frac{1}{2}$, in the interpretation given for it above, with *ne (da)*. The sentence can also mean, however, 'One removes its contents after five minutes', in which case the respective values are 6 and 5. In (20)b, which has the cluster *se lo*, *se (d3-R)* takes the index 11, and *lo* 5. The total load of the cluster is 14.

We are now also in a position to decide which of the two occurrences of *si* in (67) is the reflexive and which is the impersonal *si*.¹⁶

(67) Ci si sveglia presto in montagna. (One wakes up early in the mountains.)

The impersonal *si* carries the values for 'animate' and 'accusative', i.e., 6. The reflexive *si* has a load of 5 (third person, accusative) and an index of 7. It thus appears that *ci* represents the reflexive, and *si* the impersonal *si*.¹⁷

All that remains now is to accommodate the adverbial particles *ci/vi* (column II in (21)), which pronominalize prepositional phrases with *a* (in many different meanings, including the locative) and an inanimate NP. We have not fitted them into our calculus, so far, because their semantic or syntactic origin is far from clear, so that we do not know on what basis to calculate their load and/or index. All we can do at this stage is observe their behaviour with respect to the other clitics, which are better understood, and fit them into the system.¹⁸ As appears from the charts (21) and (22), they occur between the pronouns *a1/2*, which take the index 8, and the reflexive *si*, whose index is 7. The only possible value for these particles is thus $7\frac{1}{2}$. On the other hand, it was observed in (25)a and b that the triple clusters found there are fully acceptable to all Italian speakers. Their total functional load must, therefore, not exceed 16.

(25)a. Non mi ci si vedrà più. (One will not see me there any more.)

b. Non vi ci si può sedere. (One cannot sit down there.)

The successive indexes of (25)a are: 8, $7\frac{1}{2}$, 6. Those of (25)b are: $7\frac{1}{2}$, 7, 6 (i.e., adverbial locative *vi*, reflexive *si*, impersonal *si*). If the index of $7\frac{1}{2}$ were to equal the functional load of *ci/vi*, the total load of the clusters would be too heavy. (25)a would have a total of $21\frac{1}{2}$, and (25)b a total of $18\frac{1}{2}$. The maximum functional load which can be given to *ci/vi* without violating the theory set up so far, is 2. No independent criteria are available, however, to decide whether their load is indeed 2 or, perhaps, less.

University of Nijmegen

NOTES

- ¹ More precisely, in French the pronouns are moved to the position just before the V of their own VP, so that we have, e.g. *Je veux le faire* (I want to do it.). In Italian, either this rule applies, or the pronouns go to the position just before the main verb, so that we have both *Lo voglio fare*, and *Voglio farlo* (a later rule swivels the clitic pronoun cluster around the verb form when the latter is non-finite). These refinements, however, do not concern us here.
- ² The sentences of (9) are not even grammatical when the accusative pronouns bear special stress: although such pronouns are treated as full, non-pronominal NP's, French imposes a periphrastic construction in such a case: "it is us who ...".
- ³ It should be observed that there are cases in French, as well as in other languages, where cliticisation is not only blocked, but where no corresponding surface structure exists, as, e.g., **Je lui ferai parler Jean*, which is as ungrammatical as **Je ferai parler Jean à lui*, both meaning "I'll get John to speak to him". See my "Zero output rules" (1973) for these cases.
- ⁴ Grammarians of the Italian language differ in their acceptance of datives with al or a2 pronouns in the same cluster: Hall (1971) and Lo Cascio (1970) take the lenient view; Battaglia & Pernicone (1951) give both views. In literature, the less restricted usage of pronoun clusters is very widely attested. Lo Cascio (1970:116) quotes the following example from G. Rohlfs' *Historische Grammatik der italienischen Sprache* (1949-54, Vol. II, p. 201), taken from the novel *Fantasia* by Matilde Serao: "Tuo padre non mi ti darebbe", which can only mean "Your father would not give you to me", with dative preceding accusative. (The quote occurs on p. 73 of the 1892 edition, Casanova, Turin. Matilde Serao, though born in Greece, was of Southern Italian origin.)
- ⁵ Casagrande's statement (1967:495) that impersonal *si* follows *ne* when the latter means 'from there' was not confirmed by any of my informants. It seems to reflect a dialectal or antiquated form of the language.
- ⁶ For all forms of Standard Italian there is a rule by which final *-i* of a clitic is changed into *-e* when followed by another clitic which begins with *l-* or *n-*. Furthermore, as in the other languages considered, successions of identical clitics are not permitted: **Ne ne riempi due* (He filled two of them with it.), except when there are two consecutive occurrences of *si*. When this happens, the first *si* is changed into *ci* (probably because this combination is frequently called for): *Ci si sveglia presto in montagna* (One wakes up early in the mountains.) These are, however, nothing but marginal phenomena.
- ⁷ Hall (1971:160) erroneously accepts (24) as grammatical.

⁸ Contreras and Rojas (1972:387) observe that *Te me entregué* (I gave myself to you) is grammatical, which was confirmed by my informants. Apparently, ungrammaticality of *te me* results only with inherently reflexive verbs, as in (26). With other verbs a reflexive object can be interpreted either referentially or as part of a reflexive function, as appears, e.g., from the ambiguity of *I held my head, and she did so too*. We might surmise that in *Te me entregué* the pronoun *me* is interpreted referentially, and not reflexively. Further systematic observation would be in order, however.

⁹ Perlmutter informed me, in private conversation, that in Serbo-Croatian (a language which, unfortunately, I have been unable to take into account) the corresponding forms of (7) are equally ungrammatical as in French, but that the equivalents of both (8) and (9) are correct. This, he said, is generally the case when the uncliticised forms of the pronouns have case endings (especially for dative), rather than prepositions. On the face of it, it would appear that in such languages ACM and DCM are not ordered with respect to each other.

¹⁰ We will see below that Italian *si* is even more complex. Casagrande (1967) gives a convenient and, on the whole reliable, survey of the major features of the syntactic behaviour of Italian impersonal *si*. Contreras & Rojas (1972) provide some interesting food for thought on Spanish *se*.

¹¹ See also Seuren (1972), where it is shown that Kayne's treatment of the *faire*-construction amounts to a form of Predicate Raising in an NP-VP scheme.

¹² Martinon (1927:302) considers such occurrences of *se* slightly inelegant. He acknowledges, however, their acceptance by contemporary native speakers.

¹³ This argument only applies to the truly reflexive *se*: impersonal *se* does not occur in the *faire*-construction, and neither does *on*.

The sentence:

(i) Je ferai *se* couper les cheveux chaque mois.

cannot mean 'I shall make sure that one cuts one's hair every month', but only the odd 'I shall make sure that the hairs cut themselves (or: each other) every month', in spite of the fact that:

(ii) Les cheveux *se* coupent chaque mois. (One cuts one's hair every week.)

is a perfectly normal sentence. Likewise, although we have:

(iii) On travaille le dimanche. (One works on Sunday.)

embedding under *faire* results in the grossly ungrammatical:

(iv) *Je ferai travailler on le dimanche.

The conclusion that, therefore, impersonal *se* and *on* arise after the cycle would be incorrect, however, since Equi-NP-Deletion clearly shows their cycle origin:

(v) Les cheveux doivent *se* couper chaque mois. (One must cut one's hair every month.)

(vi) On doit travailler le dimanche. (One must work on Sunday.)

It simply appears that *faire* does not allow for tensed embedded S's, and that, on the other hand, impersonal *se* and *on* only occur in tensed S's. Their origin is clearly in the cycle.

¹⁴ The Greek clitic pronouns are:

Dative	Accusative
mou (me)	me (me)
mas (us)	mas (us)
sou (you sg.)	se (you sg.)
sas (you pl.)	sas (you pl.)
tou (him)	ton/tin/to (him/her/it)
tous (them)	tous/tis/ta (them)

Se afión is non-cliticised 'to him'.

¹⁵ In the same way we have, next to (51): *I soldi prestati, renderli lo si deve*, which corresponds to: 'Borrowed money, give it back, that one must'.

¹⁶ This sentence occurred earlier in footnote 6, where it was explained that the first *si* is changed into *ci* in order to avoid a repetition of phonetically identical clitics.

¹⁷ This is in accordance with Lo Cascio's view (1970:124), which is apparently based on pure intuition. See also Casagrande (1967:496). Note, furthermore, that application of the a3-Rule yields the following alternative results:

- (i) Svegliarsi, lo si fa presto in montagna. (Wake up, that one does early in the mountains.)
- (ii) Svegliarsi presto, lo si fa in montagna. (Wake up early, that one does in the mountains.)
- (iii) Svegliarsi in montagna, lo si fa presto. (Wake up in the mountains, that one does early.)
- (iv) Svegliarsi presto in montagna, lo si fa (senz'altro). (Wake up early in the mountains, that one does (certainly).)

¹⁸ That is, we can only treat *ci/vi* taxonomically. It is to be noted that in the theory of SSC's all clitics were treated in this way.

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RIASSUNTO

I pronomi clitici pongono un problema particolare per la scienza della grammatica in quanto non esiste, finora, una teoria che possa rendere conto in modo adeguato dei fenomeni sintattici e semantici che si osservano nei gruppi clitici. La teoria più

avanzata è quella di PERLMUTTER. Perlmutter dimostra anzitutto che la teoria trasformazionale non è capace di spiegare i fenomeni in oggetto. Basandosi sullo spagnolo, e in parte sul francese (ma non sull'italiano), propone che la teoria trasformazionale sia estesa e arricchita di una nozione: "restrizione della struttura superficiale" (RSS; *surface structure constraint*). Nel caso dei pronomi clitici ciò vuol dire che ogni lingua che ne possiede deve avere, nella sua grammatica, una tabella che specifichi l'ordine in cui occorrono i clitici. Perlmutter lo fa tramite una successione di colonne, ognuna delle quali contiene un gruppo di clitici. La tabella così prescrive che un pronome clitico *a* della colonna *n* deve precedere un altro clitico *b* della colonna *m* se $n < m$. Due clitici della stessa colonna non possono occorrere insieme. Questa teoria non è, infatti, altro che una formalizzazione, una notazione di maggior precisione, di quello che ci insegnano le grammatiche didattiche da molti anni.

Non è difficile dimostrare che questa teoria delle RSS è inadeguata. Anzitutto non rende conto del fatto che certe combinazioni, che dovrebbero essere ammesse secondo la tabella, invece non possono occorrere. Così vediamo che nel francese, che dovrebbe avere la seguente tabella:

I	II	III	IV	V	VI
ne	me	le	lui	y	en
	te	la	leur		
	nous	les			
	vous				
	se				

non sono ammesse delle combinazioni come:

- (1)a. * *Je vous luis présenterai.*
 b. * *Il me vous présentera.*

Il caso di (1b) si potrebbe spiegare tramite la tabella: *me* e *vous* occorrono ambedue nella stessa colonna II. Ma il caso di (1a) non si spiega così. Onde risolvere questo problema (che esiste in forme analoghe anche per lo spagnolo e per l'italiano) Perlmutter si vede costretto a postulare che, oltre alle RSS, esistono delle liste di combinazioni proibite. Questa soluzione è da rigettare non soltanto per il suo carattere ad hoc, ma anche perchè non può esprimere la generalizzazione che l'agrammaticalità di (1a) e di (1b) sia dovuta allo stesso fattore. Cioè, un pronome accusativo della colonna II non si combina con nessun dativo, sia della colonna IV che della II.

Inoltre, l'italiano fa vedere che il sistema stesso di tabelle in forma di colonne per definire l'ordine di pronomi clitici è insufficiente, dato che vi sono casi come:

- (2)a. *Se lo tolse.*
 b. *Lo si tolse.*
 c. *Se ne tolse il contenuto.*
 d. *Ne lo si tolse.*
 e. **Ne lo ringrazio.*
 f. **Ne lo si informa.*

Questi esempi dimostrano che, oltre alla forma fonologica, bisogna prendere in considerazione anche la funzione sintattica e semantica dei pronomi in oggetto.

Lo studio presente contiene lo schizzo di un'ipotesi che cerca di spiegare i fatti dei pronomi clitici. L'ipotesi è limitata ai clitici preverbaliali nel francese, spagnolo, greco moderno e italiano. Si concentra sui clitici strettamente pronominali, escludendo per la maggior parte i clitici avverbiali. Accettando l'insufficienza della teoria trasformazionale nella sua forma presente per i fenomeni dei gruppi clitici, questa ipotesi rappresenta, come la teoria delle RSS, un'estensione rispetto alla teoria trasformazionale stabilita, ma un'estensione diversa da quella proposta da Perlmutter.

L'ipotesi presente comporta un semplice calcolo basato su una tabella di valori numerici assegnati a vari parametri. Per l'italiano la tabella è come segue:

prima persona	2
seconda persona	2
terza persona	2
animato	3
dativo	4
accusativo	3

Il valore "3" per "animato" è assegnato solamente ai pronomi che non possono occorrere nella funzione che hanno nell'enunciato in oggetto senza riferimento ad un essere animato. I pronomi di 1a e 2a persona, quindi, automaticamente assumono questo valore; quelli della 3a persona soltanto nel dativo. Ogni pronome accumula un certo "carico" in base alla tabella. Il carico totale di qualsiasi gruppo clitico non deve superare il valore 16 (almeno per i parlanti settentrionali).

L'ordine successivo dei clitici viene determinato dall'indice di ogni pronome. In genere, l'indice sarà uguale al carico calcolato in base alla tabella. Soltanto per i pronomi riflessivi l'indice differisce dal carico in quanto il valore per il parametro "persona" viene raddoppiato nell'indice, ma non nel carico. Il pronome clitico con l'indice più elevato precede quello con l'indice più basso. Così otteniamo, per esempio:

(3) *Me lo dice.*

dove *me* prende il carico/indice 9 (2 + 3 + 4) e *lo* 5 (2 + 3). Nella stessa maniera:

(4) *Gli si rifiutò.*

con il valore 9 per *gli*, ed un carico di 5, ma un indice di 7 (cioè con raddoppiamento del valore "2" per la 3a persona) per *se*. La seguente combinazione è troppo "pesante" (per i Settentrionali):

(5) (*) *Gli mi devi presentare.*

con i valori 9 e 8 per *gli* e *mi*, cioè un totale di 17. Vi è da notare che:

(6) * *Mi gli devi presentare.*

è più gravemente agrammaticale che non (5). Si noti anche che questo calcolo predice correttamente che l'accusativo deve precedere il dativo in:

(7) (*) *Mi ti raccomando.*

che viene accettato da parlanti del Meridione. L'indice di *mi* è 10 a causa della riflessività; quello di *ti* è 9. Il carico totale è 17, il che è troppo "pesante" per i Settentrionali.

Vari dettagli sono poi elaborati, specialmente per quel che riguarda il *si* impersonale.

Anche se questo calcolo non risolve tutti i problemi in vista, si può sostenere che possiede una forza esplicativa superiore a tutte le altre teorie in esistenza. Se sia adeguata nel senso assoluto (cioè, se rappresenti correttamente il contenuto e l'organizzazione interna della competenza linguistica), è una questione che non si può risolvere che dopo una quantità sufficiente di ulteriori indagini.