

Formal Lexical Entries for French Clitics: PF Dissociations of Single Marked Features

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Abstract: Systems of pronominal clitics for arguments and adverbial adjuncts of verbs in Romance languages have several regular properties that widely accepted grammatical models have yet to account for. The analysis here accounts for (i) orderings among French clitics that do not reflect syntactic phrasal ordering; (ii) the limited “structural distance” between clitics and the interpreted phrases they replace; (iii) why clitics frequently have the same form as strong pronouns; and (iv) the extent to which language-particular clitic paradigms conform to Borer’s Conjecture. This system uses no clitic movements, and expresses all generalizations in terms of formalized, constrained lexical entries. Taken together, clitic properties suggest that groups of clitics are single lexical entries inserted in Phonological Form, with allomorphs specified by the parentheses/brace notations, and a “dissociation” principle called Alternative Realization.¹

1 Twenty-five years ago, Henk van Riemsdijk organized an invitation from the Netherlands Science Foundation for a year of research at Tilburg University. He suggested as a topic for my course that I try to use Alternative Realization to account for Romance clitics. The main results were published in Emonds (1999; 2001). Some puzzles remained, e.g. the Person-Case Constraint, the ordering of *le/la/les*, and what I call here “Missing Exponents.” This essay combines and unifies proposals for all these aspects of French clitics.

I want to belatedly express my gratitude to the patient, critical and yet encouraging participants in the seminar: to Henk, who created it, Hap Kolb, who helped me formulate Alternative Realization as it appears here, Riny Huybrechts, Angeliek van Hout, Bart Hollendbrandse, and several others. Independent of my own efforts, it can be said that those years represented Tilburg’s finest hour. I also thank Markéta Janebová and Monika Pitnerová for help with editing.

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1. Basic Distribution of French Clitics

French clitics are pronouns and “pro-adverbs” that occur in sequence inside and at the left edge of lexical verbs (Kayne 1975, Chap. 2), even though French VPs are uniformly head-initial. Such clitic sequences are underlined in (1).²

(1) (a) Jean, (souvent), [_{VP}il ne me (*souvent) [_Vdit] pas qu’il rentre].
 John (often) he not me (often) tells not that he comes home
 “John (often) doesn’t tell me (often) that he is coming home.”

(b) Marie veut [_{VP}les leur distribuer pendant la réunion].
 Mary wants them to them distribute during the meeting
 “Mary wants to distribute them to them during the meeting.”

Many sources since Perlmutter (1971) give the allowed sequences as in (2). “Person clitics” refer to 1st and 2nd person clitics and 3rd person reciprocal/reflexive *se* (Kayne 1994). More recently, French clitic ordering has been summarized in Veselovská and Vos (1999, 970), who exemplify their categories with the exponents in the third line:

(2) Ordering of French pro-clitics on verbs, plural person forms omitted:
 Subj clitics – neg – person clitics – dir obj 3rd per – ind obj 3rd per – “there” – “thereof”
Il, je, tu, on ne me, te, se le, la, les lui, leur y en

In positions 3 through 7, sequences of more than two clitics are marginal, and four seem excluded. In (3), any two clitics are acceptable, but three of these (non-subject) clitics together are strange at best.

(3) (a) ?Marie te l’y expliquera lundi.
 Mary you it there will explain Monday
 “Mary will explain it to you there Monday.”

(b) Je me l’y mènerai, . . .
 I me him there bring-will
 “I will bring him there just for me, . . .” (Veselovská and Vos 1999, 958)

2 I wish to thank Henri-José Deulofeu for judgments and discussion of many of this essay’s examples. Errors are of course my own.

In only one construction, affirmative imperatives, do these the clitic sequences appear as enclitics, with a very few differences in ordering. I do not focus on these differences in this essay.

1.1 Person Restrictions

There is only one slot for object clitics marked for Person, as defined above (see Section 5). If both direct and indirect objects are +Person, it is often said informally that the sole clitic must be the direct object. However, an undoubled direct object pronoun can appear post-verbally in focus with *que* “only,” leaving the indirect object as a sole pro-clitic:

- (4) *Finalemnt, Marie ne m’a présenté que vous (et votre femme).*
 “In the end, Mary to me introduced only you (and your wife).”

1.2 The Person-Case Constraint

The last 15 years have seen much discussion of a “Person-Case Constraint” (PCC), mostly in terms of combinations of pronoun objects.

- (5) ***Person-Case Constraint.*** French Person clitics cannot occur with 3rd person “dative” clitics.
- (6) (a) **Jean me leur a présenté.*
 “John me to them introduced.”
- (b) **Marie se lut est décrite.*
 “Mary self to him described.”
- (c) *Marie s’est décrite à lui.*
 “Mary described herself to him.”

This essay will return to and explain the Person-Case Constraint in Section 6.

2. Theoretical Advantages of a Lexical Entry/PF Approach

There are four very general and empirically well justified principles that underlie this study’s approach. All have played important explanatory roles in empirical descriptions, though frequently the appeals to them have been rather implicit. It is of course the aim of formal grammar to unequivocally spell out such putative universals of linguistic theory.

The first principle simply names a recognized desideratum, namely that individual morphemes should be paired, at least optimally, with single morpho-syntactic features.

- (7) **Single Feature Exponents.** Optimally, phonological forms (“exponents”) of grammatical items are paired in lexical entries with at most a *single marked feature*.³

This principle also suggests, almost implies, that paradigms in lexical representations are an illusion, if by paradigm is meant some kind of matrix whose entries spell out feature complexes of equal status. Perhaps a good way to understand (7) is to consider a form which is *not* optimal; for example, the German dative plural suffix *-en*, which seems to spell out two marked features, and thus does not conform to (7).

As a reviewer points out, the implication of Single Feature Exponents is that languages should follow what Anderson (1982) names (and also distances himself from), the “Agglutinative Ideal.” While this lexical property may conflict with an (a priori) notion of economy of representation (i.e. that multi-morphemic agglutinative sequences are “less economic” than compact mono-morphemic inflections),⁴ the actual role of (7) is to enhance *lexical economy*, i.e., there are fewer entries overall, and optimally each entry is simple.

- (8) **Parentheses and brace notation.** The linguistically significant generalizations about single exponents are expressed in lexical entries by extensive and crucial use of *parentheses and disjunctive braces*.

Analysts long accustomed to these, structuralists as well as generativists, may overlook the fact that these two notations represent highly contentful claims about the human language faculty (Chomsky 1967; Chomsky and Halle 1968). Here we will see how parentheses and braces in lexical entries elegantly express co-occurrence properties of clitics.

- (9) **Borer’s Conjecture.** Natural languages differ only in their *lexical entries of grammatical items*, i.e., items which have no purely semantic features (for detail, see Ouhalla [1991] and Emonds [2000, Chap. 3 and 4]).

Actually, the source of this working hypothesis for particular grammars (Borer 1984, 29) is phrased in terms of inflections. However, its current widely accepted interpretation is

3 Thus, a 2nd person singular pronoun is specified as +2nd, but not Singular, this being an unmarked value. Similarly, 1st and 2nd person pronouns, and probably pronouns in general, need not be lexically specified as +Definite or +Animate.

4 The idea that inflection is more “compact” or “economic” than agglutination is from Humboldt (1822), who argued that the Indo-Aryan languages were superior to agglutinative languages such as Malay for developing advanced intellectual reasoning. While this dubious consequence has been discredited, his sense of what motivates inflection has not been. Veselovská and Emonds (2016) propose to reconcile the two tendencies by locating the Agglutinative Ideal at LF, thus limiting inflectional economy to PF.

as in (9). Thus, when the not dissimilar verbal pro-clitics in different Romance languages are formally expressed, Borer’s Conjecture predicts that any significant differences will be best represented by their lexical entries. In fact, we will see that of the four lexical entries needed for 20 French clitics, Italian lacks counterparts for one of them and Spanish for two. Moreover, one entry that they largely share (for the Person clitics) is not the same in French as in the other two. In sum, the expectations of Borer’s Conjecture are borne out; the lexical entries involving clitics precisely express the differences of each of three Romance languages.

(10) **Clause-Mate Constraint on clitics.** A clitic on a V/I can be related to only those phrases *that are immediately dominated by a projection of that same V/I*.

This claim contradicts a vast literature on “clitic movement/climbing/raising,” which dates from Kayne’s (1975) classic analysis of French causative constructions. These analyses eventually came to include four sub-types of clitic raising.⁵ These cases are all challenged with counter-analyses in Emonds (1999); see Section 7.3 for an outline of the reasoning and sources.

Alternative Realization (“AR”) is the formal centerpiece of such clause-mate analyses. It is a general structural principle which limits the structural distance allowed between the Logical Form (“LF”) and Phonological Form (“PF”) positions of a single item, i.e., it formalizes the “dissociation” discussed in Embick and Noyer (2001). The formulation of AR used here is cross-linguistically justified for many other syntactic constructions (especially for “inflections”; see Emonds [2000, Chap. 4]). AR thus dispenses with all syntactic movement either to or from clitic positions. Consequently, I claim that French clitics provide no justification for syntax-based feature attraction/probing or agreement, nor for heads or specifiers of clitic-based functional projections. Additionally, *no case features* are needed in the analysis of French. Only PF *allomorphs* of person and place morphemes are required (cf. Parrott 2009).

Throughout, then, this study will show that appropriate lexical entries for clitics have these *SF–PB–AR–BC* properties.

- (11) (a) SF = exemplifies Single Feature Exponents,
 (b) PB = uses Parentheses and Brace notation,
 (c) AR = instantiates Alternative Realization,
 (d) BC = confirms Borer’s Conjecture.

⁵ In addition to Romance causatives, raising analyses were later proposed for complements of (i) restructuring and auxiliary verbs, (ii) adjectives, and (iii) indefinite direct objects.

3. The Position of the French V and Its Subject Clitics

3.1 Singular Subject Clitics

French finite verbs and present participles move to the functional head I (also known as T), while infinitives remain inside verbal projections VP/vP. This difference is motivated by the contrasting placements of negation and adverbials (Emonds 1978). The V moved to I includes any pro-clitic sequence of object and adverbial clitics, including possibly the negative proclitic *ne*. Subject clitics, which never occur with non-finite verbs, are not part of this operation.

This syntactic movement creates [_IV]. Subject clitics, exemplified in (13), are then attached to this I.⁶ They consist of a reference feature D, which also has either marked Person features or an indefinite value +HUMAN in the third person. If a D is not marked for Person (i.e. it is 3rd person and possibly –HUMAN), it can still be overtly marked as ±FEMININE.

(12) *Entry for Subject clitics (preliminary version):*

+__ I, D, { PER { 1st, *je* / 2nd, *tu* / on }, / FEM, *elle* } / *il*

(13) (a) Jean et moi, on [_i [_v ne va]] jamais au cinéma.
 John and me, one not goes ever to the movies
 “John and I never go to the movies.”

(b) Cette femme, est-ce qu'elle t'aime?
 that woman is it that she you loves
 “That woman, does she love you?”

The entry (12) is to be read thus: “D can be a prefix on I, with possibly a marked feature of either Human (PERSON) or Feminine.” Since a D with such features is uninterpretable in the I position, it must “alternatively realize” these features of the nearest interpretable D. In particular, such clitics “double” a separate full DP in subject position (De Cat 2002). The doubled features of clitics, unlike French agreement features, suffice to license null subject DPs. That is, if a clause has a subject clitic on I, its lexical DP subject can be null, as in fact exemplified in (15) below.⁷

As for the SF–PB–AR–BC properties: Entry (12) crucially uses the brace notation (PB). This entry in the French grammatical lexicon also conforms to Borer’s Conjecture, because e.g. Standard Spanish and Italian lack subject clitics, making the entry language-particular.

6 There is no need in the system of this essay to specify the nature of this attachment.

7 Note that the alternatively realized subject clitics involve *no movement* and *no case feature*.

In accord with Single Feature Exponents (SF), every exponent in (12) is listed with at most one feature not shared by less marked morphemes. Previous treatments take for granted that the French subject clitic paradigm is unpredictably skewed and asymmetric. E.g. the second person clitic has no special feminine form. But the formulation of entry (12) shows rather that the subject clitic system is not skewed, but is rather a perfect example of Single Feature Exponents (7).

I now introduce the general formal statement of AR.

- (14) **Alternative Realization.** A feature F of an interpreted closed class item α can also be phonologically realized under a γ^0 outside α^0 , provided that some projections of α and γ are sisters.

In the AR for subject clitics, (i) the F are the person and gender features of D in (12), (ii) α^0 must be a D head of a DP so that the F can be interpreted, and (iii) $\gamma^0 = I$. The subject DP and I' are the only projections of α^0 and γ^0 that satisfy the condition that both are sisters.⁸

A French V can move over the subject clitic in questions, since V itself can move from I to C (Roberts 2010, Chap. 3), as follows:

- (15) (a) Tu – [_I[_V ne – la – vois]] jamais.
 you – not – her – see never
 “You never see her.”
- (b) [_C[_V Ne – la – vois]] – tu jamais?
 not – her – see – you never
 “Don’t you ever see her?”

In order for this I to C movement to work, pre-verbal object clitics should be left sisters of V , and then grouped with V as a derived V , as seen in the bracketing in (15). The subject pro clitics do not move with V to C .⁹

8 A reviewer insists that e.g. clitics are “interpreted,” and in a pre-theoretical sense they are. The claim here is that their LF interpretation arises formally because of their link to canonical positions. Thus, *la* “her” in (15a) is interpreted as a direct object exactly like *her* in *I see her*. Only their PF positions are different.

9 The fact that French clitics spell out both under I and under V does not mean that cliticization is “two processes,” but only that it occurs in positions specified differently in two lexical entries. The difference is motivated by I to C movement, ordering relative to *ne* “not,” and the ability of the types to freely co-occur.

The minimal general interpretation of the category P is “Location,” simply a semantically flavored name for the interpretation of this category. *De* differs from *à* by the marked feature +SOURCE. The common uses of these most basic Ps seem to indicate that if the directional Goal component of meaning is removed, what semantically remains is Static Location in Space/Time, and if the directional Source content is removed, what remains is Possession.¹¹

4.1 Clitic Placement of *en* and *y*

French PPs composed of *à* + pronoun and *de* + pronoun can often be replaced by verbal clitics. These adverbial or PP clitics (Kayne 1975, Chap. 2) are *y* “(to) there” and *en* “from/of there.” That is, *y* replaces a minimal [P, (GOAL)], and *en* replaces the features [P, SOURCE]. These replacements take place whether or not the P has LF content; sometimes these P serve only to assign case.

Distributionally, *the P pro-clitics immediately precede the verb* and must follow any pronominal clitics. Here are some examples from Veselovská and Vos (1999, 925):

(20) (a) Il y pense souvent.
 he to-it thinks often
 “He often thinks of it.”

(b) Il en a déjà parlé.
 he of-it has already spoken
 “He has already spoken about it.”

Beyond this basic point, several analyses have discussed whether and when *y* and *en* co-occur on one V. The two do readily co-occur in the impersonal existential construction *il y a* “there is,” as in (21a). On the other hand, many speakers do not accept non-idiomatic combinations such as (21b).

(21) (a) De bons vins, il y en aura peu ce soir.
 of good wines it there thereof have-will few this evening
 “Of good wines, there will be few this evening.”

¹¹ French and probably Universal Grammar (UG) contain many configurations where P and P, SOURCE lack any locational sense. Thus, unmarked P *à* and *de* often indicate pure possession, and P, SOURCE is used for purely syntactic linking in partitive and pseudo-partitive constructions. In all these uses, the non-locational Ps possibly have no role other than to assign oblique case.

- (b) ??Marie y en a déjà parlé.
 Mary there thereof has already spoken
 “Mary has already spoken of that there.”

For capturing the productive usage in lexical terms, I leave aside the idiom *il y a* and propose a single disjunctive entry for these two clitics:

(22) **Entry for PP clitics.** + ___ V, P, { SOURCE, *en* / *y* }

Let us see how well this entry conforms to the formal characteristics expected in (11):

- SF: Entry (22) clearly conforms to the *Single Feature Exponents Principle* (7);
- PB: Lexical entry (22) uses the *brace formalism* to express a disjunction;
- BC: (22) confirms *Borer’s Conjecture*: while Italian has a close counterpart, Spanish lacks PP clitics altogether.
- AR: According to AR, lexical entries specify clitics in their surface positions, and thus express the fact that the PP clitics have no (non-idiomatic) interpretations attributable to their PF positions.

I next go into some detail to compare this PF account of French *en* and *y* in terms of AR (14) with proposals to derive them from some kind of movement.

4.2 *En* and *y* as Phrase-Mates of V

First, I consider whether movement of these P-clitics might be motivated by some non-local “distance” (greater than that allowed by AR) between these clitics and their base or interpreted PP positions. For example in (23), the clitic *en* is linked to empty categories *e* that seem to be *inside* indefinite object DP sisters of its verbal host.

- (23) (a) Il en prendra [six litres e] pour sa famille (, de ce vin excellent).
 he of it will take six liters for his family (of that excellent wine)
- (b) Il en veut [deux e] tout de suite (, de litres de vin).
 he of it wants two right away (of liters of wine)
- (c) Il en prendra [(beaucoup) e] plus tard (, de votre vin blanc).
 he of it will take (a lot) later (of your wine white)

However, long held conclusions that these *en* must “move over” intervening heads of object DPs, i.e., that *en* is not a clause mate of its PP source, are simply wrong. Emonds (2001) shows that the uses of French *en* in (23) (similarly for Italian *ne*) depend

on these languages *independently allowing extraposition* of *de*-phrases to the end of VP. Such overt extraposed PPs are shown in parentheses in (23), making the *e* inside DP the traces of this rightward movement. *Such extraposition is totally excluded in Spanish*. Consequently, Spanish has no counterpart to these PP-clitics, as the locality imposed by AR correctly predicts. Emonds (2001) concludes that French *en* and Italian *ne* never directly “climb” out of direct object projections into the higher VPs. Rather, PP complements of N or Q must first extrapose, and then become available for clause-mate AR by adverbial clitics.

There is also much literature on the possible raising of *y* out of infinitival complements of some grammatical causative verbs, studying for example the contrast in Veselovská and Vos (1999, 1005) between embedded adjunct interpretation as in (24a) and excluded embedded complement interpretation in (24b).

(24) (a) Cela y fera aller Jean.
 that there make-will go Jean
 “That will make John go there.”

(b) *Jean y fera comparer cette sonatine à Paul.
 Jean to it make-will compare that sonata to Paul
 cf: “Jean will make Paul compare that sonata to it.”

Section 7.3 will review argumentation in favor of AR and against any “climbing” in such constructions.

4.2 Comparison of AR with Mechanisms of Movement

In current movement accounts, separate sets of probe features, as in Adger and Harbour (2007, Sect. 4), Roberts (2010, Chap. 3), or Preminger (2014, Chap. 4), are located on functional heads that are always empty, i.e., both phonetically and semantically unrealized (Kayne 1994, 42–46). This in itself would seem to be a formalized expression of “ad hoc” or “redundant,” but yet this doubling of features that insure movement (that is, “attraction to probes”) is currently so widely accepted that pointing out this problem will probably do little to remedy it.

So let us next consider which feature(s) on PP sources of *en* and *y* might trigger movement (toward functional category “probes” on or above V). These attracted features must be the most basic features of P, as in (19), such as P itself, and/or GOAL, and/or SOURCE. Now the fact is, *other full PPs* e.g. of location *also have these same features*, and yet these are never “attracted” to the probe(s), even when the PPs are single words,

e.g. *dehors* “outside,” *là* “there.” Movement accounts are silent on how this more general movement is prevented.¹²


Even if theoretical elaboration might circumvent these two general problems, the attracted feature(s) of the P sources of *en* and *y* still cannot be plausibly specified. In the probe-attract framework, the attracted features, unlike those of the probe, are taken to be “interpretable,” that is, they have some recognizable content. For example, if a “moved” clitic *en* is attracted to a probing functional head just above V, the only non-ad-hoc candidate for the attracted feature on *en* would be SOURCE. But the problem is, *en* often lacks any SOURCE interpretation, and so cannot be considered to have an “interpretable feature.”

Perhaps then some feature other than SOURCE could be assigned to *en* and attracted to its pre-verbal position. But no unified interpretive content, however vague, can be associated with the various uses of *en*:

- *En* can stand for complements of verbs and adjectives introduced by an empty *de* “of”: *fier de* “proud of,” *loin de* “far from,” *remercier de* “thank for,” *parler de* “talk about.”
- *En* can stand for adjuncts of “place from” with verbs such as *arriver de* “arrive from,” *revenir de* “come back from,” and *descendre de* “come down from.”
- A meaningless *en* can be linked to extraposed complements of (underlined) N, Q, and V, as in (23).
- *En* can be used to indicate existence, in the impersonal idiom *il y a* “there is” (25).

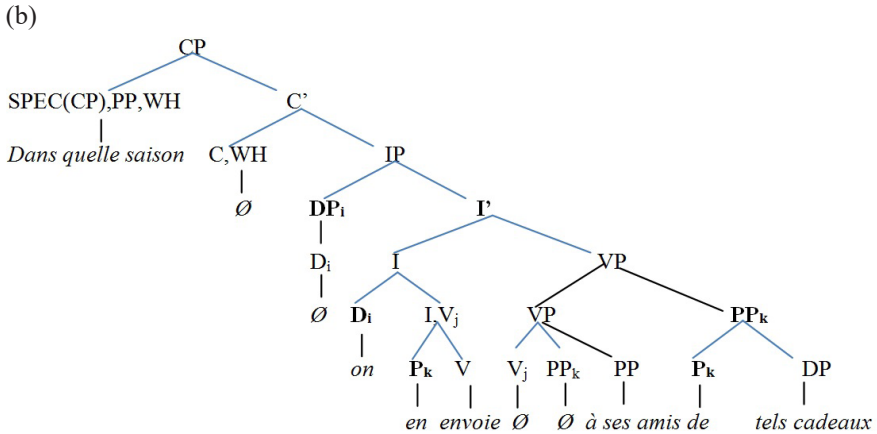
(25) Existe-t-il des bébés qui ne pleurent pas? Oui, il y en a.
 “Are there babies that don’t cry? Yes, there are.”

In sum, the great *advantage of AR* for P clitics is that it expresses their compatibility with *any clause mates of V introduced by the Ps à and de*. They are correctly predicted to be unrelated to syntactic or semantic differences among these phrases; the construct of “(un)interpretable” plays no role.

I conclude this section with an example of AR for a subject clitic and a P-clitic, the two types I have so far discussed and written lexical entries for. The pairs of AR morphemes and their sources in LF are in bold. Pk satisfies AR *before V*  es to I.

¹² Of course, the same problem arises with any “movement” limited to any subsets of closed class items, such as English finite copula raising, “affix movement,” or any variant of “clitic placement.” This is why AR rather than movement should be used to account for all of them (Emonds 2000, Chap. 4).

- (26) (a) Dans quelle saison, on en envoie à ses amis, de tels cadeaux?
 In which season, one thereof sends to one's friends, of such presents
 "In which season does one send to one's friends such presents?"



For justifying V_j movement to finite I, see Emonds (1978).

5. Object Clitics Expressing Person

The French clitic system treats the following pronouns as a special group: the 1st and 2nd person pronouns, a reflexive *se* and an indefinite subject clitic *on*. To express this, I have adopted Kayne's (2000) proposal that they all realize a marked (but perhaps unvalued) feature PER not shared by non-reflexive 3rd person pronouns. Any pronoun specified for PER is always +HUMAN.

A fundamental fact about the person proclitics is that they always precede object clitics and the P clitics analyzed in Section 4.¹³ For the latter combination, see again (3).

- (27) (a) Elle nous l'expliquera en français.
 she us it explain-will in French
 "She will explain it to us in French."

¹³ Curiously, the ordering in (27) is reversed in Standard French affirmative imperative enclitics:

- (i) Explique le nous en français!
 "Explain it to us in French!"
- (ii) Ces vers, répétez les vous chaque fois que vous pensez à lui.
 "These verses, repeat them to yourselves each time that you think of him."

- (b) Ces vers, vous devriez vous les répéter chaque fois que vous pensez à lui.
 these verses you should you them repeat each time that you think of him
 “These verses, you should repeat them to yourself each time that you think of him.”
- (c) Anne s’en disait très fière.
 Anne herself thereof said very proud
 “Anne said herself to be very proud of it.”

The Person clitics are notably unspecified with any kind of case-like feature which might indicate their grammatical relation to the verb, though their non-subject status is indicated by their context feature +__V rather than +__I. The following preliminary entry specifies their singular forms.

(28) *Object clitics of Person* (preliminary). +__(P) V, PER, { 1st, *me* / 2nd, *te*, / *se* }

The feature content of *se*, namely the single feature [PER], can be taken as “unvalued for a specific person.” I assume that Universal Grammar requires that it have a clause-mate antecedent if it can (i.e. *se* is an alternatively realized bound anaphor). Analogously, the same feature PER characterizes the subject clitic *on*. In support, note that *se* is the reflexive object required by a subject *on*, and hence must share its features: *Dans cette famille, on se critique rarement.* “In that family, one criticizes oneself rarely.” Not accidentally, in Italian and Spanish, which lack subject clitics, this spelling of PER in the context +__V is uniformly *si/se*, even when this *si/se* translates the French indefinite subject *on*.

Like subject clitics, the plural PER clitics have the same exponents as their free morpheme counterparts, namely *nous* “us” and *vous* “you.” As with plural subject clitics, Missing Exponents (16) exempts these forms from being repeated in the lexical entry for the clitics in the context +__V. The strong forms *nous/vous* occur equally well as free forms, bound subject clitics, and bound object clitics.

(29) *Object clitics of Person* (final). +__(P) V, PER, $\left\{ \begin{array}{l} \text{1st, } \{me / PL\} \\ \text{2nd, } \{te / PL\} \\ \text{ } se \end{array} \right\}$

Entry (29) alternatively realizes *any direct or indirect object pronoun with the feature PER* as a verbal proclitic. Since the single feature PER can be spelled out only as a *single clitic*, the well-known ban on two co-occurring non-subject Person clitics follows.¹⁴

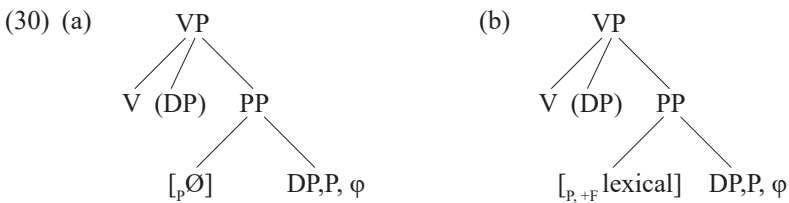
14 When both direct and indirect objects are +PER, the indirect object must usually be in a PP: thus, **Marie m’a présenté vous.* “Mary introduced you to me.” As observed in Section 1.1, however, under certain conditions these positions can be reversed.

As French traditional grammar has long recognized, the clitic ordering PER – P – V does not reflect or derive from any “direct – indirect” object order or from the fact that adjuncts follow complements in phrasal syntax. When the clitic *en* represents a partitive or indefinite direct object, it still follows indirect object and “dative of interest” adjunct clitics.

6. Third Person Indirect Object Clitics

6.1 Alternatively Realized Indirect Objects

Indirect objects are DPs case-marked by a P that has *no other feature*. These P are empty at Spell Out and so allow their object to formally “be a” sister of V.¹⁵ As a result, indirect object closed class DPs (pronouns) can potentially be alternatively realized under V (30a). If, however, a P has additionally a content feature F, the P is spelled out rather than null and hence visible in Logical Form, so that its own object DP is not the only spelled out daughter of PP (30b). This DP thus fails to satisfy the defining sisterhood condition on AR in (14), and as a result this DP sister of a lexical P cannot be alternatively realized as a clitic on V, a well-known generalization.



Rephrasing: the P on the DPs is abstract oblique Case. In (30a), the oblique DP “is a” sister of V, so its features [P,φ] can be alternatively realized under V, as a verbal clitic. In (30b), because of the lexical P, the oblique DP is *not* a sister of V, so its features cannot be alternatively realized under V.

French indirect object DPs include PER clitics. Besides these, which lack case features, indirect objects can also be the 3rd person non-reflexive clitics *lui* (singular) and *leur* (plural), both unmarked for Gender.¹⁶ As Definite (and otherwise unmarked) appears with all indirect object pronouns, the *single lexical feature* of these exponents, in conformity with (7), is an alternatively realized “case-feature” P.

15 This formalism is from Chomsky’s early work, and is further explained in Emonds (1999). The main idea is that A “is a” B if all the phonological material under B is also under A.

16 Though both these forms are homophones with free pronouns (*lui* = free strong form “him”; *leur* “their”), I take only the former as related to the lexical entry of the clitics. The clitic *lui*, like the strong and clitic homophones *nous*, *vous*, and *elle(s)*, is the same as the free form, except for lacking +FEMININE.

Like other object clitics, *lui* and *leur* must *precede* the P-clitics *y* and *en*, as in (32a, c). The optional P in (31) allows these P-clitics between *lui/leur* and the latter's verbal host. The opposite ordering in (32b, d) is excluded by the immediate adjacency of P clitics to V mandated by (22).

(31) **Indirect object clitics** (tentative). + ___(P)V, DEF, P, {PL, *leur* / *lui*}

(32) (a) Luc lui en a parlé.
 Luke to-him of-it has spoken

(b) *Luc en lui a parlé.

(c) Elle leur y donne des sous souvent.
 she them there gives money often

(d) *Elle y leur donne des sous souvent.

Another often puzzling property of the indirect object clitics is captured by the parentheses notation in (31). In particular, when P clitics are present, the *longest insertion context* ___P-V in (31) *must* be chosen, as argued in Chomsky and Halle (1968). This yields e.g. *leur-y-V* and *lui-en-V*, while correctly excluding **y-leur-V* and **en-lui-V*.

Because of the Missing Exponents Convention (16), the entry for indirect object clitics need not spell out *lui*, since *lui* also serves as the free form for unmarked (masculine) third person pronouns. Moreover, while the strong form pronoun has a marked Feminine counterpart (*elle*), this feature is not alternatively realized on the clitic. We thus arrive at the following revision:

(33) **Indirect object clitics**. + ___(P)V, DEF, P, (PL, *leur*)

If the parenthesized Plural is not chosen, then a singular “dative” definite pronoun *lui* can be alternatively realized in the context ___(P)V, i.e., on a verb with or without an adverbial proclitic.

6.2 The Person-Case Constraint (PCC)

A much discussed restriction of French grammar, noted as a problem in Perlmutter (1971), is that a direct object *Person clitic cannot co-occur with indirect object clitics such as lui/leur*. Other Romance languages exhibit similar restrictions, though language-particular details differ. Rivero (2004, 498) provides this Spanish example:

(34) Ella se le entregó cuerpo y alma.
 she herself him gave body and soul
 “She gave herself to him body and soul.”

Due to the PCC, the French counterpart is ungrammatical: **Elle se lui est livrée corps et âme*. Cardinaletti (2008, Sect. 3.2 and 4.3) also provides Italian examples in which both a verb’s direct and indirect objects are Person proclitics, whose exact French counterparts (with *me te V*) are ungrammatical.¹⁷

Several studies since Anagnostopoulou (2003) and Béjar and Řezáč (2003) have accounted for the PCC in terms of some restriction on probe features originating on Verbs or functional heads adjacent to V. For example, Adger and Harbour’s account of the PCC (2007, Sect. 5) is a construction-particular restriction on how uninterpretable features on empty functional heads fh⁰ can search for their interpretable counterparts (for them, fh⁰ is the Applicative Phrase head that unites direct and indirect objects in a single constituent). It is hard to imagine other grammatical phenomena that might serve to independently justify such a highly particularized restriction (or help a child to learn it). So I remain unconvinced by these attempts to use UG to account for language-particular restrictions, which at the same time leave aside the lexical statements required to make Borer’s Conjecture into something more than a vague statement of belief.

Instead, I propose that a single lexical entry with braces expresses the French *complementary distribution* of Person clitics with a (3rd person) indirect object clitic (33). This is a crucial and yet maximally simple use of the brace notation, the main formal device that expresses “A or B but not A and B.”

(35) *Person and indirect object clitics* (automatically expresses the Person-Case Constraint).

$$+ \text{___}(P)V, \text{DEF, } \left\{ \begin{array}{l} \text{PER, } \{1\text{st, } \{me / PL\} / 2\text{nd, } \{te / PL\} / se\} \\ P, (PL, \textit{leur}) \end{array} \right\}$$

I assume that in a given context, here $\text{___}(P)V$, a lexical entry can be used only once. By virtue of the *brace notation* in this entry, it is impossible to have *simultaneous AR* both of a Person DP and an indirect object DP as verbal clitics. Entry (35) thus easily expresses the French PCC and its language-particular character (BC).¹⁸

17 Cardinaletti (2008, Sect. 7) presents other counterexamples to the PCC from Old Italian, which she attributes to clitic orders. French excludes a Person clitic with any 3rd person indirect object clitic.

18 The same disjunction holds for the somewhat differently ordered enclitics in affirmative imperatives.

7. Third Person Direct Object Clitics

French direct object clitics have the same form as definite articles: Fem Sg *la*, Plur *les*, and unmarked “Masc Sg” *le*. When they appear as definite pronoun object clitics, they also precede the PP clitics *en* and *y*. French direct object clitics should thus *alternatively realize* as prefixes on V the free morphemes for the feature DEF.

(36) ***Direct object clitics.*** + ___ (P)V, DEF, ({FEM/ PL})

Due to the Missing Exponents Convention (16), this entry need not stipulate any bound form exponents for the clitic, because these exponents are precisely those specified for free form definite articles in their base or interpretable position.

(37) ***Definite article entry.*** DEF, {(FEM, *la*) / (PL, *les*) / *le*}

Alternatively the parenthesis notation should perhaps extend to contexts in lexical entries, which would allow us to economically combine (36) and (37):

(38) ***Definite article entry (extended).*** DEF, (+ ___ (P)V), {(FEM, *la*) / (PL, *les*) / *le*}

7.1 The Ordering of Third Person Direct Objects and Person Clitics

Using only the lexical entries formulated so far, these two groups would not co-occur, since insertion of either in the context ___ (P)V would remove the adjacency required for the subsequent insertion of the other.

In fact, only one of these two orders is grammatical, namely PER – DEF – (P) – V:

(39) (a) Des garçons me les ont apportés hier.
 some boys me those brought yesterday
 “Some boys brought me those yesterday.”

(b) Je vais vous la décrire.
 I will you her describe
 “I will describe her to you.”

(c) * Des garçons les m'ont apportés hier.
 * Je vais la vous décrire.

We can accommodate this ordering by treating the third person direct object clitics as infixes in the clitic sequence. If Person clitics are inserted, they become part of the “longest context” in (40), so that *le*, *la*, *les* can only be inserted on their right.

(40) **Definite articles.** DEF, ((PER)___ (P)V), {(FEM, *la*) / (PL, *les*) / *le*}

There is no way to generate the examples in (39c) because the alternatively realized Person clitics are not specified with a (dative) P feature to serve as a right context for the direct object clitics.

7.2 The Ordering of Third Person Object Clitics

Many previous analyses, spanning Kayne (1976) and Adger and Harbour (2007), have sidestepped specifying ordering among clitics. In contrast, the language-particular lexical entries of the present study succinctly account for clitic ordering.¹⁹ For example, two long standing formal puzzles have been, what accounts for the ordering contrast *le–lui*, *la–leur* etc. vs. **lui–le*, **leur–la* (41), as well as the marginality of three clitic sequences (3)? (They are OK for some, * for others.)

(41) Marie *la leur* donne *le samedi*. *Marie leur la donne le samedi.
 Mary it them gives the Saturday
 “Mary gives it to them on Saturday.”

In fact, the content of the entries formulated so far, (33) and (36), and the lexical PB notations themselves have already answered these questions.

- (i) If a direct object clitic *le*, *la*, *les* is first inserted in ___(P) V, yielding ___DEF–(P)–V, the insertion context for an indirect object clitic is no longer satisfied, so no combination can result.
- (ii) If the indirect object clitic *lui/leur* is first inserted in ___(P) V, this yields ___P–(P)–V, into which direct object clitics can be inserted, yielding the correct *le–lui/leur–V*. (The direct object cannot appear in P___V because a longer context must always be chosen).
- (iii) Some speakers may be able to interpret a sequence P-P-V as satisfying ___P–V, yielding e.g. *le leur y donne* “give it to them there.” Other speakers interpret the context feature more strictly, excluding this last phrasing.

¹⁹ As a number of studies observe, clitic orders do not reveal anything about the complement vs. adjunct status of the phrases they spell out. For example, the Person clitics that precede French *le/la/les* can express either adjuncts (“datives of interest”) or complements, and the adverbial clitics *y* and *en* can also realize either adjuncts or complements; for the latter, see (20) and (23).

As indicated at the end of Section 3, the plural *-s* that follows both clitics and articles is probably a sequentially separate and independent morpheme and hence not part of the entries for clitics.

This AR of P on both *lui/leur* and on P-clitics thus means that direct object clitics that lack P must precede them all, due to the requirement that a longer context feature have precedence; ___P – V is longer than ___V. These considerations together yield correct sequences and exclude sequences such as **lui-le-V* and **en-le-V*.²⁰

7.3 No Clitic Climbing

Many generative studies, beginning with Kayne (1975), have proposed that clitics can raise out of phrases where they originate into higher clauses. Emonds (1999) undertakes a full critical investigation of four different types of putative “climbing” of Romance clitics:

- (42) (i) obligatory raising of clitics to auxiliary verbs,
- (ii) optional raising of clitics out of restructuring and causative infinitives,
- (iii) clitic movement of *en/ne* out of object nominal phrases, as exemplified in (23),
- (iv) clitic movement out of adjective phrases to their selecting verbs, as in (43).

- (43) (a) Paul en semblait très fier.
- Paul thereof seemed very proud
- “Paul seemed very proud of it.”

- (b) Je lui suis reconnaissant.
- I him am thankful
- “I am thankful to him.” (Veselovská and Vos 1999, 1008)

That investigation provides arguments for replacing all clitic climbing with analyses using Alternative Realization, in accord with arguments based on the empirical paradigms of these clitics.

- (44) **Phrase Mate Hypothesis.** Romance clitics on V_i are related to only XP sisters to some projection V^k of V_i . (Emonds 1999, 314)

I thus claim that counter to “climbing,” clitics on a verb arguably realize only phrase-mates of that verb. Thus in an Italian restructuring sequence, when a clitic on a main verb, underlined below in Rizzi’s example, realizes an object of the verb’s infinitive complement, *no VP node intervenes* between the matrix VP and the phrasal complements of that infinitive (Rizzi’s conclusion in 1978, Section 7.1). That is, *no separate VP* is


²⁰ A reviewer asks is there is some deeper reason for why “longer contexts win out.” I can only refer the reader to the rather strong defense of this convention in Chomsky (1967).

comprised of the sequence *parlare al piu presto*; the two verbs, of which the first must be in a closed class, are in a single maximal VP.²¹

- (45) Questi argomenti, dei quali ti verrò a parlare e_i al piu presto, . . .
 these topics of which you come-will-I to talk at most soon
 “These topics, about which I will come to talk to you as soon as possible, . . .”

According to further argument in Burzio (1986), Italian and French infinitive complements of a closed class of causative and perception verbs, which exhibit similar “raised” clitics, have the same structure as Italian restructuring verbs. Thus, in at least one structure for these French constructions, *the two underlined complements of the second verb in (47) are in fact also sisters of the bold first one.*

- (46) (a) Marie a vu distribuer les prix aux étudiants par le propriétaire.
 Mary has seen distribute the prizes to-the students by the owner
 “Mary has seen the prizes distributed to the students by the owner.”
- (b) Marie a fait planter des fleurs dans mon jardin.
 Mary has made plant some flowers in my garden
 “Mary has made someone plant some flowers in my garden.”

On the basis of these structures, the Phrase Mate Hypothesis (44) predicts that all French cliticization of complements and adverbials on verbs selecting infinitives, **as exemplified**  (47), should be subsumed under AR. The verbs, containing AR clitics, then raise to finite I, as in Section 3.

- (47) (a) Marie [_I les_i a] **vu**[_V distribuer] e aux étudiants par le propriétaire.
 Mary to-them-has seen distribute to-the students by the owner
- (b) Marie [_I y a] **fait** [_V planter] des fleurs e.
 Mary there-has made plant some flowers
- (c) Béatrice [_I le fera] [_V rediger] e à l’auteur.
 Beatrice it make-will edit to the author
 “Beatrice will make the author edit it.” (Veselovská and Vos 1999, 997)

²¹ This implication is part of each of Rizzi’s nine arguments for this flat structure, but sometimes slips into the background in his discussions. His final cited section nonetheless makes this structural conclusion crystal clear.

The Phrase Mate Hypothesis (44) for the clitic climbing cases (42) in fact involves nothing more radical than drawing out the natural structural conclusions of the robustly empirical and converging arguments of Rizzi and Burzio.²²

There remain the possible instances of climbing in (42iii–iv). Section 4.2 here has summarized the argument in Emonds (2001) against the movement of *en*. As for (42iv), verbal clitics can correspond to complements of adjectives (*Paul en semble fier* ‘Paul thereof seems proud’). This is because, in French as well as English, phrasal complements to adjectives can optionally appear as sisters of the selecting verb rather than of the adjective itself: *How proud he seemed of his medal*. As sisters to this selecting verb, these complements can be alternatively realized by this verb’s phrase-mate clitic *en*. For more detailed presentations of these arguments against all the proposed sub-cases of clitic climbing, see Emonds (1999).²³

7.4 The Default Use of the Clitic *le*



The unmarked French verbal clitic *le* in (36) has an important use whereby it can replace obligatory complements of *any extended projection* other than DP, namely IP, CP, NP, PP, and AP. It is thus a *default AR* in the context ___(P)V of any phrase XP. This *le* never varies in person, gender or number, even when its antecedent is an NP:

- (48) (a) On dit que Henri est coupable, mais je ne le pense pas. (*le* replaces IP)
 One says that Henry is guilty, but I-not-it-think not
 (‘. . . , but I don’t think so.’)
- (b) Marie m’assure qu’elle est fiable, mais je me le demande. (*le* replaces CP)
 Mary assures me she is reliable, but I-me-it-wonder
 (‘. . . , but I wonder about it.’)
- (c) Anne est institutrice, et Marie et Françoise le sont aussi. (*le* replaces NP)
 Ann is teacher and Mary and Frances it-are too

²² These well supported conclusions squarely contradict the generative literature motivated by imposing a priori binary branching and small clause structures. The gap between this literature and the predictive power of the Phrase Mate Hypothesis should contribute to not letting theoretical preferences override the data, and to asking instead why so often the former have such a tenacious hold.

²³ The system here retains transformational Head-to-Head Movement. However, it cannot duplicate AR by moving D or P to functional heads in a verbal projection. Head Movement is limited to moving (all) items of a given category under the condition that a head β^0 can have the landing site α^0 only if α^0 and β^0 are heads in the same extended projection.

- (d) Anne est de bonne famille, et Marie et Françoise le sont aussi. (*le* replaces PP²⁴)
Ann is of good family, and Mary and Frances it-are too
- (e) Tu es plus content que nous les femmes le sommes. (*le* replaces AP)
You are more satisfied than we the women it-are

This default usage of *le* suggests that category in (40) should be “underspecified” as in (49), where X stands for any phrasal head category D, N, I, V, A, or P.

(49) **Definite articles** (final). X, DEF, ((PER)___ (P)V), {(FEM, *la*) / (PL, *les*) / *le*}

If any non-contextual features of the Definite Article in (49) are used when choosing this entry, they ensure that X = D, since these features are specified in this entry only in combination with DEF.²⁵

8. Inventory of Final Lexical Entries and Conclusions

The analysis of French verbal proclitics in this study has exploited Lieber’s (1980) word-internal subcategorization, the parentheses and brace notation (PB), and the principle of Single Feature Exponents (7). The lexical entries proposed here parsimoniously express ordering and other restrictions within clitic sequences. Moreover, the principle of Alternative Realization (14) correctly limits the structural distance between the interpreted and pronounced positions of clitics to single structural clauses, in accord with the empirically supported Phrase Mate Hypothesis. Two of the entries, for PP and subject clitics, are clearly language-particular, consistent with Borer’s Conjecture. And even though the French entry (49) is basically the same as in Spanish, it is certainly language-particular (BC), being found rarely if at all outside Romance. Similarly, the highly specific verbal proclitic positions of (35) are a marked language-particular option.

(17) **Entry for all Subject clitics.**

$$+ _ _ I, D, \left\{ \begin{array}{l} \text{PER, } \{ \text{1st, } \{ \textit{je} / \text{PL} \} / \text{2nd, } \{ \textit{tu} / \text{PL} \} / \textit{on} \} \\ \textit{il} / \text{FEM} \end{array} \right\}$$

(22) **Entry for PP clitics.** +_ _ V, P, { SOURCE, *en* / *y* }

24 The more specific entry for a locational pro-PP, namely +_ _ V, P, *y*, blocks using *le* as a default pro-PP for physical location.

25 If the unmarked combination X, DEF, *le* is chosen in non-clitic position, it is in a canonical (= LF) position, and so X, DEF requires interpretation. Then, if X ≠ D, the feature DEF is undefined, rendering the structure containing [X, D] ill-formed (i.e. it violates Full Interpretation).

(35) **Person and indirect object clitics**

(subsumes the PCC)

+___(P)V, DEF, $\left\{ \begin{array}{l} \text{PER, \{1st, } \{me / \text{PL}\} / \text{2nd, \{te / \text{PL}\} / se\}} \\ \text{P, (PL, leur)} \end{array} \right\}$

(49) **Definite articles** (final). X, DEF, ((PER)___ (P)V), {(FEM, *la*) / (PL, *les*) / *le*}

The results of this study in terms of formal grammar is that the distribution of French clitics in all constructions (in so-called causatives, auxiliaries, pseudo-partitives, etc.) reduces to these four lexical entries.

There is quite a notable difference between this essay and much other work which nominally adheres to Borer's Conjecture (the claim that the functional category lexicon is the sole source of language-particular grammars). Very few of these studies actually formulate any results in terms of the explicit language-particular lexical entries or parameters that the Conjecture calls for. Most give no hint, much less justification, of how possibly related groups of language-particular morphemes (such as the c. 20 French verbal clitics) appear in such entries; this task is left to the side as somehow not central to the generative enterprise. Here in contrast, I have formulated four such entries. These formulations eliminate syncretism and redundancy, and all conform to four plausible universal principles of Lexical Economy: (i) Missing Exponents, (ii) Alternative Realization, (iii) Parenthesis and Brace notation, and (iv) Single Feature Exponents.

This contrast results from the fact that most generative syntax has forgotten the methodological motivation for postulating Universal Grammar. Namely, the seemingly impossible task of children quickly and flawlessly learning the highly complex system of a given language was greatly simplified—they need only learn the residues of particular languages $\{R_i\}$ that are not part of UG. But after a sharpening of this proposal, namely Borer's Conjecture, a strange thing happened. Although most Chomskyans quickly accepted the Conjecture without argument, almost no contentful proposals emerged for modelling these R_i . Even as studies of UG flourished, whose purpose was to greatly simplify $\{R_i\}$, very few studies actually formalized the latter. Such has been the state of grammatical affairs that this essay has tried to remedy. Without fragments of formalized language-particular grammatical lexicons, such as the example set in Ouhalla (1991), research in Universal Grammar is losing its empirical footing.

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