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CINQUE'S FUNCTIONAL VERBS IN FRENCH¹

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1. ABSTRACT

This article focuses on the syntax of a number of subcategories of verb in French which are compatible with a following bare infinitive and which express various kinds of grammatical tense, mood, modality, aspect and voice, as well as such (more lexical?) notions as perception, causation and locomotion. The article starts by cataloguing a number of properties that these verbs display, and outlines various traditional accounts. It then sketches recent proposals by Cinque (1999; 2006a) regarding functional clause structure. Finally, the article uses Cinque's framework to account for the properties identified.

2. INTRODUCTION

Subordinate infinitives in French can be dependent upon a matrix predicate of any lexical category, and are typically marked with *de/à* (sometimes with variation), as in (1):

- (1) a. V–*de/à*–V: *continuer de/à travailler* 'to continue to work'
 b. N–*de/à*–V: *capacité/difficulté de/à travailler* 'ability to work'/'difficulty working'
 c. A–*de/à*–V: *apte de/à travailler* 'fit to work'

1. This article is a much extended treatment of issues presented at the conference of the *Association for French Language Studies* in Bristol, UK in September 2006, at the *Romance Linguistics Seminar* in Oxford, UK in February 2007, and discussed in Rowlett (2007: 159–172). Thanks to Jérôme Devaux and Roselyne Edwards for the opportunity to discuss some of the data. Thanks also to Lisa Reed, Marc Authier and three anonymous reviewers for helpful comment on an earlier draft. All inadequacies remain my own.

Less typically, subordinate infinitives are bare. Bare infinitives are only ever licensed by a verb, such as those in (2):²

- (2) a. Modal verbs: *compter* 'to expect', *désirer* 'to desire', ***devoir*** 'to have to', ***faillir*** 'to (only just) fail to', ***falloir*** (impersonal) 'to be necessary to', *oser* 'to dare to', ***paraître*** 'to appear to', ***pouvoir*** 'to be able to', ***savoir*** 'to know how to', *sembler* 'to seem to', (*mieux*) ***valoir*** (impersonal) 'to be preferable to', ***vouloir*** 'to want to'
- b. Perception verbs: (*aperce*)***voir*** 'to see/notice', *écouter* 'to listen', *entendre* 'to hear', *observer* 'to observe', *ouïr* (archaic) 'to hear', *regarder* 'to watch', ***sentir*** 'to feel/smell'
- c. Causative verbs: ***faire*** 'to make', *laisser* 'to let'
- d. Andative verbs: (*ac*)***courir*** 'to run', ***aller*** 'to go', *arriver* 'to arrive', ***conduire*** 'to drive', ***descendre*** 'to go down', (*a/em*)*mener* 'to lead', *entrer* 'to go in', *s'envoler* 'to take off', *envoyer* 'to send', *monter* 'to go up', ***partir*** 'to leave', (*par*)***venir*** 'to come/manage', *passer* 'to pass', *porter* 'to carry', *pousser* 'to push', *rester* 'to stay', *retourner* 'to return', ***sortir*** 'to go out'

I shall refer to these verbs as MPCA verbs. The phenomenon of a superordinate MPCA verb followed by an infinitival subordinate verb without *de/à* marking — V1–V2 — is illustrated in (3)–(6):

- (3) a. Marie compte [lui dire bonjour]. b. Il faut [lui dire bonjour].
 M. expects him say hello it is-necessary him say hello
 'M. expects to say hello to him.' 'It's necessary to say hello to him.'
- (4) Yves regarde [Marie faire la cuisine].
 Y. watches M. do the cooking
 'Y. is watching M. do the cooking.'

2. The list in (2) might be expanded to include morphological variants containing the derivational prefix *re-*. A more detailed analysis would doubtless divide the verbs in (2) into a larger number of subcategories.

- (5) Elisabeth fait/laisse [sortir ses enfants dans le jardin].
 E. makes/lets go-out her children in the garden
 'E. makes/lets her children go out into the garden.'
- (6) a. Anne monte [lui dire bonjour]. b. Pierre descend [le chien faire ses petits besoins].
 A. goes-up him say hello P. goes-down the dog do his little needs
 'A. is going upstairs to say hello to him.' 'P. is bringing to dog down for the toilet.'

In addition to licensing V1–V2, MPCA verbs either *are* or *have been* compatible with clitic climbing. Clitic climbing is found with compound tense paradigms, as in (7), where the clitic in bold relates thematically to the lexical verb but attaches syntactically to the perfective auxiliary:

- (7) a. Elle **le** lui a volé. b. Il **y** est allé.
 she it him has stolen he there is gone
 'She stole it from him.' 'He went there.'

In Modern French modal V1s typically do not license clitic climbing, as shown in (8) (cf. (3)):

- (8) a. *Marie **lui** compte dire bonjour. b. *Il **lui** faut dire bonjour.³

However, clitic climbing with modal V1s *is* found as a marked variant in the modern language, as in (9) (cf. the equivalents without clitic climbing in (10)):

- (9) a. †Aucun logiciel ne **le** peut lire. b. †Tu **lui** peux envoyer un ultimatum.
 no software NEG it can read you him can send an ultimatum
 'No software can read it.' 'You can send him an ultimatum.'
- (10) a. Aucun logiciel ne peut **le** lire. b. Tu peux **lui** envoyer un ultimatum.
 = (9a) = (9b)

3. This example is irrelevantly grammatical if it means 'It's necessary for him to say hello'.

Early discussion of the phenomenon appears in Dauzat (1941) and Dabbs (1948). Goosse (2000: 113) labels the phenomenon in (9) *une recherche d'élégance*. Less marked than clitic climbing of the structural-case-marked (in)direct-object proforms in (9) is clitic climbing of the inherent-case-marked pronominals *y* and *en*, as in (11) (cf. (12)):

- | | |
|--|--|
| (11) a. †les courses que Roger y doit faire | b. †les différents usages qu'on en peut faire |
| the errands that R. there must do | the different usages that-one of-it can do |
| 'the errands that R. has to run there' | 'the various uses to which it can be put' |
| | |
| (12) a. les courses que Roger doit y faire | b. les différents usages qu'on peut en faire |
| = (11a) | = (11b) |

My informants, native speakers educated to postgraduate level, describe the phenomenon in (11) as archaic⁴; indeed in previous stages in the development of the language (as well as other modern Romance varieties), modal verbs readily allow clitic climbing, as in the examples in (13) and (14) from the seventeenth century, when the phenomenon was criticised by language arbiters such as Vaugelas (Ayres-Bennett 2004):

- | | |
|--|--------------|
| (13) Il le doit — faire avec le plus de prudence & de precaution qu'il luy sera possible. | (C17th text) |
| he it must do with the most of prudence and of precaution that-it him will-be possible | |
| 'He must do it as prudently and cautiously as he can manage.' | |
| | |
| (14) L'autre le veut — faire choir d'un rocher. | (C17th poem) |
| the-other it wants make fall from-a rock | |
| 'The other one wants to make him fall from a rock.' | |

In contrast, perception and causative V1s readily allow clitic climbing in ModF, as in (15b) and (16b):

4. Authier and Reed (2007) associate this phenomenon with the variety of French spoken in Wallonia.

- (15) a. La reine dit qu'elle serait heureuse de voir son fils épouser la demoiselle. ⇒
 b. La reine dit qu'elle serait heureuse de la lui voir épouser.
 'The queen said she would be happy to see her son/him marry the maiden/her.'

- (16) a. Pierre demanda de laisser Jacques épouser Marie. ⇒
 b. Pierre demanda de la lui laisser épouser.
 'P. asked J./him to be allowed to marry M./her.'

(We shall see contexts below where clitic climbing is compulsory.)

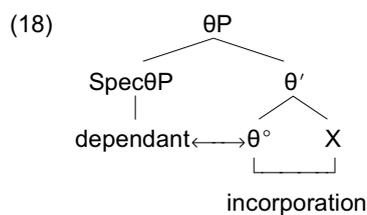
Andative verbs, finally, readily allowed clitic climbing until the eighteenth century, as in (17), examples which are judged archaic in ModF:

- (17) a. †Il était d'usage de l'aller — dire à la chapelle de saint Hervé.
 it was of-usage of it-go say to the chapel of St H.
 'It was customary to go and say it at St H.'s chapel.'
- b. †Je le viens — confirmer encore en sa présence.
 I it come confirm again in his presence
 'I come to confirm it again in his presence.'

A full analysis of clitic placement is beyond the scope of the present article (but for a recent account see Shlonsky 2004). For our purposes it suffices that pronominal cliticisation: (a) is clausebound; and (b) involves 'clustering' of clitics. Thus, the perfective auxiliaries in (7) are deemed to be clausemate with the lexical verb. The situation with MPCA verbs is the core topic of the following sections, which are organised as follows: section 3 sets out some basic theoretical assumptions; section 4 reviews the empirical base, not only with respect to clitic climbing, but also properties which are specific to one or more subcategory of MPCA verb; section 5 presents Cinque's (1999; 2006a) exploded IP; section 6 uses Cinque's framework to account for the French data; section 7 identifies a number of issues which emerge and concludes the article.

3. THEORETICAL FRAMEWORK

The discussion is couched within minimalist syntax (e.g., Chomsky 2000). Lexical items are drawn from the lexicon as fully formed bundles of phonological, semantic and formal features. The mechanisms Merge and Move allow binary syntactic structures to be built in line with the thematic and morphosyntactic features of lexical items, more specifically, for the requirements expressed by those features to be satisfied. Lexical argument structure is projected in syntax via thematic (θ) heads. In order to assign a θ role, a lexical item: (a) merges with a (non-specific) θ head; (b) associates the θ head with the relevant θ role by incorporating into it; (c) merges (as a specifier) the relevant dependant to be θ marked; and, finally, (d) assigns the θ role to the dependant by the mechanism of checking (within a specifier–head configuration). This is illustrated in (18), where X is the lexical item:



Where the θ grid of X contains more than one θ role, as many additional (non-specific) θ heads as required are merged successive cyclically, and, for each one, the sequence of X-to- θ° incorporation, dependant merger, and specifier–head θ checking is repeated. The order in which multiple θ roles within X's θ grid are realised on a θ head above X is determined by the purportedly UG-determined (partial) thematic hierarchy in (19), resulting in a transparent mapping between thematic structure and underlying syntactic structure:

(19) (Partial) thematic hierarchy:

Agent (Ag)>Beneficiary (Be)>Recipient (Re)/Experiencer (Ex)>Instrument (In)>Theme (Th)/Patient (Pa)>
Location (Lo)

Thus, rather than being a mere NP, VP or AP, the minimal syntactic constituent which contains a lexical head and all its θ -marked dependants is actually an exploded hierarchy of θ Ps above the

lexical head, X; I use the notation NP*, VP* and AP* to denote this constituent.

As for the satisfaction of the requirements expressed by the morpho-syntactic features borne by lexical items, relevant for our purposes are verbs and the syntactic structure merged above VP*, namely IP, split by Pollock (1989) and exploded in Cinque (1999). I return to this in section 5.

4. THE EMPIRICAL BASE

Quite apart from licensing V1–V2, illustrated in (3)–(6), and clitic climbing, illustrated in (9), (11), (13), (14), (15b), (16b) and (17), the different subcategories of MPCA verb display various intriguing properties. Morphologically, a cursory look in a verbal conjugation guide shows that a number of MPCA verbs (in bold in (2)) are irregular. If: (a) irregularity is a morphological vestige reinforced by high frequency of occurrence (Pinker 1995), and (b) high frequency of occurrence correlates with general rather than specific meaning, and (c) general meaning correlates with auxiliary/grammatical status, then the morphological irregularity of (a high proportion of) MPCA verbs is indirectly suggestive of grammatical, as opposed to lexical, status.⁵ This idea is explored from section 5 onwards. In the rest of section 4, I consider the empirical details relating to clitic climbing as well as a number of other properties of MPCA verbs.

4.1. CLITIC CLIMBING

As we have seen, MPCA V1s (used to) license clitic climbing as in (20a)–(23a) alongside alternative configurations without clitic climbing, as in (20b)–(23b):

- (20) a. †Il le peut faire. b. Il peut le faire.
 he it can do he can it do
 a, b: 'He can do it.'

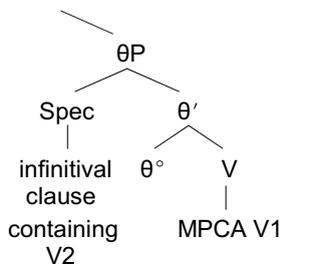
5. See also in this context Cardinaletti and Shlonsky's (2004) discussion of the regular infinitival marker [e] in Italian.

- (21) a. Elle la_i lui_j voit épouser. b. Elle le_j voit l'_iépouser.
 she her him sees marry she him sees her-marry
 a, b: 'She can see him marrying her.'

- (22) a. Je les_i lui_j laisse écrire. b. Je le_j laisse les_i écrire.
 I them him lets write I him lets them write
 a, b: 'I am letting him write them.'

- (23) a. †Je le vais chercher. b. Je vais le chercher.
 I him go fetch I go him fetch
 a, b: 'I'm going to fetch him.'

In the (b) examples, without clitic climbing, V2 appears to project IP structure containing a target site for pronominal cliticisation, independently of V1. This suggests a biclausal structure in which V2 heads an infinitival IP dependant of the MPCA V1, merged in a regular θ position above V1, as in (24):

- (24)  (biclausal)

In the (a) examples, clitic climbing onto V1 of the pronominal dependants of V2 suggests that there is no IP structure above V2 able to attract pronominal cliticisation independently of the IP structure above V1. We therefore appear to have a monoclausal structure, a phenomenon variously referred to as clause union (Aissen and Perlmutter 1983), restructuring (Rizzi 1976), or complex-predicate formation (see Guasti 1997 for an overview): V1 and V2 form (underlyingly or derivationally — this distinction is ignored here) a single verbal predicate within VP*, projecting a single (composite) lexical argument structure, as in (25):



Since there is a single V, there is also a single IP, and pronominal cliticisation targets a single (cluster of) cliticisation site(s), with attachment above V1 rather than V2. I return to the biclausal–monoclausal distinction in section 4.3.

4.2. MODAL VERBS: INFINITIVAL PLACEMENT

Modal verbs appear to have unique infinitival verb-placement patterns. In Rowlett (1996; 1998), as part of a study of French negation, I noted that infinitival modal verbs can be distinguished, from the auxiliaries *être/avoir* on the one hand and lexical verbs on the other, in terms of their position with respect to the negative markers *pas* and *plus*. All three subcategories of infinitive (auxiliary, modal, lexical) can follow *pas/plus*, as shown in (26):

- (26) a. ne pas/plus être/avoir b. ne pas/plus pouvoir, etc. c. ne pas/plus fumer
 NEG not/no-longer be/have NEG not/no-longer be-able-to NEG not/no-longer smoke
 ‘not to be/have (any longer)’ ‘not to be able (any longer)’ ‘not to smoke (any longer)’

However, they differ in their readiness to *precede*, as shown in (27) and (28):

- (27) a. n’être/avoir pas b. ?ne pouvoir, etc. pas c. *ne fumer pas

- (28) a. n’être/avoir plus b. ne pouvoir, etc. plus c. ?ne fumer plus

Assuming constant unmarked *pas/plus* placement, an unmarked picture of maximal infinitival verb placement emerges along the lines of (29):

- (29) [_S . . . (ne) . . . être/avoir . . . pas . . . pouvoir, etc. . . . plus . . . fumer . . . [_{VP} . . .

Given the pattern of question marks in the data in (27) and (28), there appears to be a further marked option of *pouvoir*, etc. raising to the left of *pas*, and of infinitival lexical verbs raising to the left of *plus*, but no possibility (any more) of infinitival lexical verbs raising to the left of *pas*. Thus, in terms of their unmarked syntax within IP*, modal infinitives appear to be unique (but possibly not in an entirely homogenous way).

For the contrast between the IP* syntax of auxiliary and lexical infinitives, Pollock (1989) refers to thematic structure, hypothesising that infinitival auxiliaries move higher within his split-IP than lexical verbs precisely because they are athematic. Under such an approach the intermediate positioning of modals would be attributed to their intermediate thematic status (as raising/control verbs?). This idea is extended and recast within Cinque's exploded IP below.

4.3. PERCEPTION VERBS: TWO CONFIGURATIONS⁶

The empirical details relating to perception verbs are more complex than those relating to modal verbs. Consider (30), which illustrates one of two configurations licensed by perception verbs:

- (30) a. Jean voit Marie manger (le gâteau). b. Jean voit Marie le manger.
 J. sees M. eat the cake J. sees M. it eat
 'J. can see M. eating (the cake).'
- c. Jean la voit manger (le gâteau). d. Jean la voit le manger.
 J. her sees eat the cake J. her sees it eat
 'J. can see her eating (the cake).'

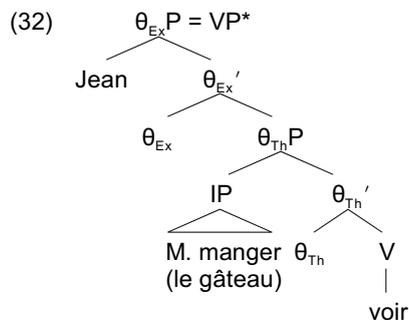
Unlike modal V1s, perception V1s are transitive, that is, they can check accusative case, and

6. The discussion in this section is actually almost entirely relevant to causative V1s, too; there is however a brief separate discussion of causative V1s in section 4.4 because of some subtle details relating to causative *faire*.

therefore license Exceptional Case Marking (ECM).⁷ The more straightforward (and more ECM-like) configuration is illustrated in (30a). The grammaticality of the example of dislocation in (31) suggests that *Marie manger le gâteau* in (30a) can be a constituent underlyingly:

- (31) Marie manger un gâteau, j'ai jamais vu ça!
 M. eat a cake, I-have never seen that

Thus, in (30a) *voir* is a dyadic verb with a nominal Experiencer (*Jean*) and a clausal Theme⁸ (*Marie manger (le gâteau)*), as represented in the underlying VP* structure in (32) (cf. (24)):



Since the underlined Agent of *manger* in (30a) cannot be case-licensed within its containing infinitival clause, it needs instead to exploit the transitivity of the superordinate verb.⁹ Structurally, this means that *Marie* raises out of its containing infinitival clause and into the IP above *voir* to be licensed as a direct object. This is the classic ECM phenomenon. Support for the notion that *Marie* in (30a) is realised as the direct object (of *voir*) comes from two sources. First, when pronominalised, it is

7. That modal V1s are *not* transitive is illustrated by the ungrammaticality of (i):

- (i) *Jean veut Marie manger (le gâteau).

J. wants M. eat the cake

‘J. wants M. to eat (the cake).’

8. I have used the label Th for the θ role of the internal argument; the exact nature of this role is however not important for our purposes.

9. In the dislocated example in (31) *Marie* needs to be case licensed from outside its dislocated infinitival clause. This is true for all dislocated constituents.

realised as a direct-object clitic on *voir*, underlined in (30c, d). Second, where the form of *voir* is taken from a compound verb paradigm, and *Marie* precedes (due to cliticisation or wh fronting), past-participle agreement (PPA) is triggered, as in (33):

- (33) a. Marie, Jean l'a vue manger (le gâteau).
 M. J. her has seen.F eat the cake
 'J. could see M. eating (the cake).'
- b. Quelle fille Jean a vue manger (le gâteau)?
 which girl J. has seen.F eat the cake
 'Which girl could J. see eating (the cake)?'

As for the optional Theme, *le gâteau*, of the V2, *manger*, the (non-clitic-climbing) pronominalisation pattern in (30b, d) suggests that it, too, is a direct object. If pronominal cliticisation is clausebound and targets a single (cluster of) cliticisation site(s) within a given IP (see above), then the presence of two direct-object clitics (one 'regular', one due to ECM), each attached to a different verb, suggests a biclausal rather than a monoclausal structure, exactly as expected given the underlying structure in (32).

The biclausal analysis correctly predicts that negation can appear in either clause independently (or – albeit less naturally – both), as in (34):

- (34) a. Jean **ne voit pas** Marie manger (le gâteau).
 J. NEG sees not M. eat the cake
 'J. can't see M. eating (the cake).'
- b. Jean voit Marie **ne pas manger** (le gâteau).
 J. sees M. NEG not eat the cake
 'J. can see M. not eating (the cake).'

c. !Jean **ne voit pas** Marie **ne pas manger** (le gâteau).

J. NEG sees not M. NEG not eat the cake

'J. can't see M. not eating (the cake).'

The oddness of (34c) is pragmatic rather than syntactic; the grammar allows negation to be associated with either verb because there are two clauses.

For some speakers¹⁰ perception V1s are not restricted to the configuration in (30). Consider the alternative in (35) and (36):¹¹

10. My informants were generally less comfortable with the examples in (35) than those in (30). This may be related to finiteness. Internet searches picked up considerably more examples along the lines of (35) with infinitival perception V1s than with finite ones:

(i) a. En effet, le Conseil de l'Europe a un rôle à jouer même si d'autres ne souhaitent pas le lui voir jouer.

(. . . voir jouer ce rôle au Conseil de l'Europe)

in effect the council of the-Europe has a role to play even if of-others NEG wish not it it see play

(. . . see play this role to-the council of the-Europe)

b. Il lui abandonnait le capital comme un joujou à un gamin, quitte à le lui voir briser. (. . . voir briser le joujou au gamin)

he him was-abandoning the capital like a toy to a child, even to it him see break (. . . see break the toy to-the child)

c. . . . celui-ci lui avait présenté ce même concerto afin de le lui entendre jouer (. . . entendre jouer ce concerto à Mozart)

. . . this-one him had presented this same concerto for of it him hear play (. . . hear play this concerto to M.)

The relationship between finiteness and clitic climbing is mentioned in the context of Italian in Cardinaletti and Shlonsky (2004: 520 fn 1).

11. Example (36b) is superficially identical to (30c) (without *le gâteau*), but the two differ in terms of their derivation: in (36b) *la* is the pronominalised form of the internal argument of the verbal complex *voit manger*; in (30c) it is the pronominalised form (via ECM) of the external argument of the subordinate simple verb *manger*.

- (35) a. Jean voit manger le gâteau à Marie. b. Jean le voit manger à Marie.
 J. sees eat the cake to M. J. it sees eat to M.
 ‘J. can see M. eating the cake.’ ‘J. can see M. eating it.’
- c. Jean lui voit manger le gâteau. d. Jean le lui voit manger.
 J. her sees eat the cake J. it her sees eat
 ‘J. can see her eating the cake.’ ‘J. can see her eating it.’
- (36) a. Jean voit manger Marie. b. Jean la voit manger.

The ungrammaticality of the examples of dislocation in (37) suggest that *manger le gâteau à Marie* in (35a) and *manger Marie* in (36a) are *not* underlying constituents:

- (37) a. *Manger un gâteau à Marie, j’ai jamais vu ça! b. *Manger Marie, j’ai jamais vu ça!
 eat a cake to M., I-have never seen that eat M., I-have never seen that

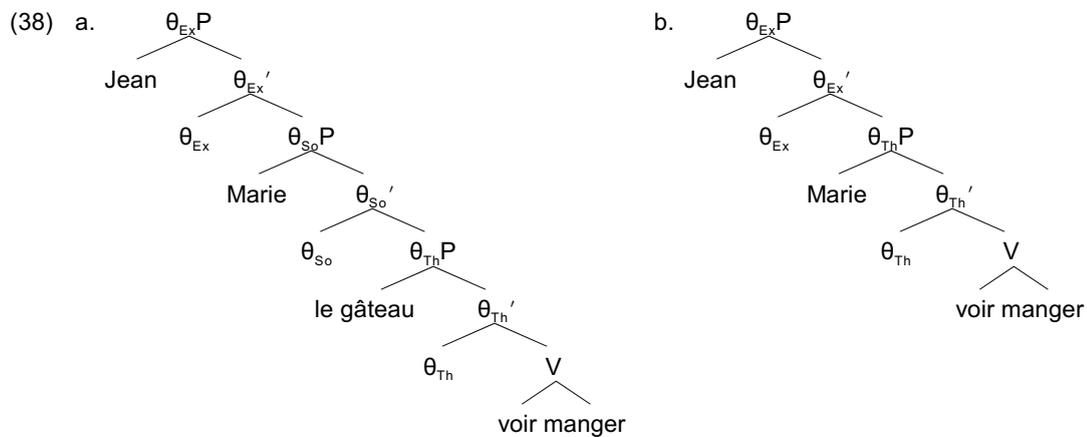
Further, the behaviour of *Marie* and *le gâteau* in (35) suggest that the string *voit manger* (perception V1 followed by V2) functions as a *single* ditransitive verb:

- *le gâteau* behaves like the direct object of *voit manger* in that as a nominal in (35a, c) it follows *manger*, while as a pronominal in (35b, d) it is realised as a direct-object clitic on *voit* (= clitic climbing);
- *Marie* behaves like the *indirect*, that is, *second* object of *voit manger* in that as a nominal in (35a, b) it is marked with *à* and follows *voit manger* (and the nominal direct object), while as a pronominal in (35c, d) it is realised as an indirect-object clitic on *voit*.

The examples in (36) differ from those in (35) in that *le gâteau* is absent. Nevertheless, the behaviour of *Marie* still suggests that the string *voit manger* functions as a *single* verb (albeit mono- rather than ditransitive). *Marie* is realised as the sole (and therefore direct) object: as a nominal in (36a) it follows *manger*; as a pronominal in (36b) it is realised as a direct-object clitic on *voit*.

The behaviour of *voit manger* as a single verb in (35) and (36) points to a dyadic/triadic complex

verbal predicate, as in (38a, b),¹² the result of clause union (cf. (25)):



Apart from the difference between two simplex predicates (*voir*, *manger*) in (32) and a single complex predicate (*voir manger*) in (38a, b), the crucial difference relates to *Marie*. In (32) it is the external argument — the ‘underlying subject’ — of an independent verb *manger*, and realised in (30) as the direct object of *voir* via ECM. In (38a, b), in contrast, it is an internal argument of the complex predicate (*voir manger*), and realised in (35) and (36) as direct or indirect/second object depending on the presence/absence of another internal argument.

The clause-union analysis in (38a, b) of perception V1s makes a number of correct predictions. First, triadic V2s are correctly predicted not to be able to project all their potential arguments simultaneously, since, given the additional θ role associated with the perception V1, clause union would produce a four-argument structure, which is ruled out independently, hence the ungrammaticality of (39)¹³:

12. I've used the θ role So for *Marie* in (38a). The exact nature of the θ role isn't important; what matters is that it is located between Ex and Th in the thematic hierarchy.

13. The situation is actually less straightforward. The example in (i) is just such a sentence.

(i) On lui a vu donner [une petite pension] [à un homme qui a fui deux lieues].
 one to.him has seen give a little pension to a man who has fled two leagues
 'He was seen giving a small pension to a man who had fled two leagues.'

The perception V1 *voir* co-occurs with the ditransitive (= triadic) V2 *donner* 'to give'. The form of the clitic preceding V1 (the indirect-object *lui* rather than the direct-object *le*) suggests clause union. If a biclausal

(39) **/??* Jean voit donner un cadeau à sa maman à Marie.

J. sees give a present to her mum to M.

The only way to express the idea that Jean could see Marie giving a present to his/her mum is to use an underlyingly biclausal structure, as in (40):

(40) Jean voit Marie donner un cadeau à sa maman.

J. sees M. give a present to her mum

'J can see M. giving a present to her mum.'

Second, the kind of narrow-scope negation illustrated in the biclausal construction in (34b) is correctly predicted to be impossible with clause union, as shown in (41) (= the examples in (35) with the addition of narrow-scope negation):

(41) a. **Jean voit **ne pas** manger le gâteau à Marie*. b. **Jean lui voit **ne pas** manger le gâteau*.

c. **Jean le voit **ne pas** manger à Marie*. d. **Jean le lui voit **ne pas** manger*.

This does not mean that material cannot intervene between V1 and V2, as in (42):

structure had underlain the example, the clitic would have been *le (l')*, as in (ii):

(ii) On l'a vu donner [une petite pension] [à un homme qui a fui deux lieues].

one him has seen give a little pension to a man who has fled two leagues

≈ (i)

The grammaticality of (i) is surprising because its non-pronominal equivalent must be something like (iii), which is ungrammatical:

(iii) **On a vu donner [une petite pension] [à un homme qui a fui deux lieues] [à lui]*.

one has seen give a little pension to a man who has fled two leagues to him

For reasons explored in Reed (1996a, b), cliticisation saves an otherwise problematical structure.

(42) Je le lui vois distinctement avaler.

I it him see distinctly swallow

'I can distinctly see him swallowing it.'

Rather, it means that any intervening material is associated with the complex predicate *as a whole*, and that its medial position is due to the fact that V1 moves out of VP* and higher into IP than V2, as in (43):

(43) [_{IP} . . . V1 . . . distinctement . . . [_{VP*} t V2]]

Third, the biclausal–monoclausal distinction accounts for the behaviour of reflexive clitics with perception structures. Consider the data in (44)–(46). (In each set the (a/a') examples are given to illustrate a hypothetical underlying structure, rather than as grammatical sentences.) The first column of examples is based on biclausal structures, the second, monoclausal structures:

- (44) a. (Marc_i regarde Jean peindre Marc_i.) a' (Marc_i regarde peindre Marc_i à Jean.)
 b. Marc_i regarde Jean le_i peindre. b' Marc_i se_i regarde peindre à Jean.
 c. Marc_i le regarde le_i peindre. c' *Marc_i se_i lui regarde peindre.¹⁴
 all examples: 'M_i is watching J. painting M_i'

- (45) a. (Marc_i regarde Marc_i peindre Jean.) a' (Marc_i regarde peindre Jean à Marc_i.)
 b. Marc_i se_i regarde peindre Jean. b' Marc_i se_i regarde peindre Jean.
 c. Marc_i se_i regarde le peindre. c' Marc_i se_i le regarde peindre.
 all examples: 'M_i is watching M_i painting J.'

14. The ungrammaticality of example (44c) is independent of the issues discussed in the text, and has to do with the *se lui* clitic cluster (Rowlett 2007: 128).

- (46) a. (Marc regarde Jean_i peindre Jean_i.) a' (Marc regarde peindre Jean_i à Jean_i.)
 b. Marc regarde Jean_i se_i peindre. b' *Marc lui_i/se_i regarde peindre Jean_i.
 c. Marc le_i regarde se_i peindre. c' *Marc (le_i lui_i)/(se_i le_i) regarde peindre.

all examples: 'M. is watching J._i painting J._i'

The complication of example (44c') notwithstanding, the data sets in (44) and (45) are all grammatical as expected and unproblematic. The interesting data are in (46). In the biclausal examples in (46b, c), the reflexive direct object is bound by an external-argument antecedent; in the monoclausal examples in (46b', c'), in contrast, it is bound by an internal argument, the indirect/second object. The former are grammatical, the latter, ungrammatical. The problem with (46b', c') is expected in the light of the monoclausal analysis; it is independently known that an indirect object cannot bind a direct object, as shown in (47):

- (47) a. (Le roi donne les esclaves_i aux esclaves_i.)
 b. *Le roi leur_i/se_i donne les esclaves_i.
 c. *Le roi (les_i leur_i)/(se_i les_i) donne.

all examples: 'The king is giving the slaves to themselves.'

There is one context where the flexibility between the biclausal structure in (32) and the monoclausal (clause-union) structure in (38a, b) is not available. Consider (48):

- (48) C'est autour des années 1970 qu'on voit construire [le premier centre d'accueil pour les vieillards].

it-is around of-the years 1970 that-one sees build the first centre of-welcome for the pensioners

'It was around the 1970s that we saw the first old people's home built.'

The 'underlying subject' of V2 in example (48) is unexpressed; there is no indication of who built the *centre*. The example looks superficially to be compatible with *either* a biclausal *or* a monoclausal structure: the DP* *le premier centre d'accueil* . . . could be the direct object of the simple V2 *construire* within a biclausal structure (with PRO as the implicit subject in the subordinate clause), or else the direct object of the V1–V2 complex *voir construire* within a monoclausal structure (with no

PRO). However, the examples in (49), in which the DP* *le premier centre d'accueil* . . . pronominalises, suggest that only one of the two structures is actually available:

- (49) a. . . . qu'on le voit construire . . . b. * . . . qu'on voit le construire . . .

The DP* *le premier centre d'accueil* . . . cliticises onto V1 in (49a) in line with a monoclausal structure, and onto V2 in (49b) as expected in a biclausal structure. Example (49b) is ungrammatical, suggesting that (48) *cannot* have a biclausal structure. These data therefore immediately cast doubt on the validity of the traditional PRO analysis of subjectless infinitives. I return to this in section 6.

Despite the way it captures the empirical contrasts set out above, there are a number of problems with the analysis illustrated in (25)/(38), and I'll mention two here. First, there is the issue of the relationship between V1 and V2 within the 'complex predicate'. In (25)/(38) V1 and V2 are sisters of equal standing, and the dominating V node looks either double headed or headless. This is a problem for antisymmetric notions of constituent structure. Second, there is the issue of the morphological wellformedness of V1 and V2: as illustrated in most of the examples reviewed, V1 is morphologically independent of V2. While V1 can be finite, an infinitive, or a compound verb form, V2 is necessarily an infinitive. If V1 and V2 function as a single V within a single clause, as in (25)/(38), it is hard to see how these facts can be captured and accounted for.

4.4. CAUSATIVE VERBS: THE SAME TWO CONFIGURATIONS (NEARLY)

There are two causative verbs in French, namely, *faire* and *laisser*, with a subtle semantic distinction. The syntax of *laisser* is identical to that of perception V1s, and I shall say no more about it here;¹⁵ that of *faire* is more complex. Unlike perception V1s (and unlike causative *laisser*), causative *faire* does not demonstrate the syntactic flexibility illustrated in (30) and (35). Consider (50)–(52):

15. My informants who hesitate with the examples in (35) (with perception *voir*) readily accept them if *voir* is replaced with *laisser*.

- (50) a. *Jean fait Marie (**ne pas**) manger *le gâteau*. b. *Jean fait Marie (**ne pas**) *le* manger
- c. Jean la fait (**ne pas**) manger *le gâteau*. d. Jean la fait (**ne pas**) *le* manger.
- (51) a. Jean fait (***ne pas**) manger *le gâteau* à Marie. b. Jean *le* fait (***ne pas**) manger à Marie.
- c. Jean lui fait (***ne pas**) manger *le gâteau*. d. Je *le* lui fait (***ne pas**) manger.
- (52) Jean fait (***ne pas**) manger Marie.

The examples in (50) look identical, in structural terms, to those in (30), with a biclausal structure, while those in (51) and (52) run parallel to those in (35) and (36), respectively, with a monoclausal (clause-union) structure. As expected, the examples in (51) and (52) are all grammatical (without *ne pas*), just like those in (35) and (36), indicating that causative *faire* licenses clause union. The same is not true of the examples in (50): (50c, d) are grammatical (even with *ne pas*), indicating that causative *faire* licenses a biclausal structure, too; however, (50a, b) are unexpectedly ungrammatical (irrespective of the presence of *ne pas*). The feature distinguishing (50a, b) from (50c, d) is the nominal-versus-pronominal status of the ‘underlying subject’ of V2: the examples with the nominal are ungrammatical,¹⁶ those with the pronominal are grammatical.¹⁷ To my knowledge this empirical

16. The counterexample in (i), from the writings of Lacan, is from Goosse (2000: 138):

- (i) . . . qui fait la femme être ce sujet.
 that makes the woman be this subject
 ‘. . . which makes the woman be this subject.’

Goosse describes (i) as ‘a phenomenon of very literary written language’.

17. In fact, some of my informants reject not only (50a, b) but also (50c, d), as does Marc Authier (personal communication). Interestingly, however, Authier accepts the example in (i), from Reed (1996a: 369), which we expect to have the same structure as (50c):

- (i) Les doutes qu'elle a à son égard l'ont fait ne pas parler à Jean pendant une semaine.
 the doubts that-she has to his respect her-have made NEG not speak to J. during one week
 ‘The doubts she has about him made her not speak to J. for a week.’

The ungrammaticality of local negation (with narrow scope over V2) is something we observed in section 4.3 in the context of perception V1s. There, the unavailability of local negation codistributed with clitic climbing. The situation with andative V1s is different. While local negation of V2 is ungrammatical, short clitic movement is available (in fact, to the exclusion of clitic climbing in ModF), as shown in (54):

- (54) a. Je rentre lui dire bonjour.
 I return him say hello
 'I'm going back to say hello to him.'
- b. *Je lui rentre dire bonjour.
 I him return say hello

Thus, the availability of narrow-scope negation needs to be dissociated from the absence of clitic climbing.

The second way in which the lack of V2 independence can be observed relates to entailment. Consider the data in (55):

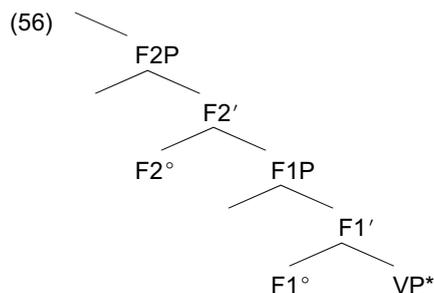
- (55) a. Je suis rentré . . . faire la cuisine.
 pour faire la cuisine.
 I am returned (for) do the cooking
 'I went back (in order) to do the cooking.'
- b. Je suis rentré pour faire la cuisine, mais je ne l'ai pas fait.
 I am returned for do the cooking, but I NEG it-have not done
 'I went back in order to do the cooking but I didn't do it.'
- c. ?!Je suis rentré faire la cuisine, mais je ne l'ai pas fait.
 I am returned do the cooking but I NEG it-have not done

In (55a) the andative V1 co-occurs either with a V2 or with a purpose clause marked by *pour*. The example in (55b) shows that, with a *pour*-marked clause, the content of the purpose clause is not

entailed (it can be denied in the follow-up clause). In contrast, the example in (55c) shows that, with a V2, the content of V2 is entailed, and therefore cannot be denied.

5. CINQUE'S EXPLODED IP

Having set out the peculiarities of the MPCA V1s in (2), as well as some previous accounts, I turn, in the remaining sections, to consider Cinque's recent proposals and how they might account, not only for the empirical details set out in section 4, but also of the unifying property that these V1s share, namely, the V1–V2 construction. In section 3, we saw that lexical items can be associated with a number of θ roles and that these are projected in underlying syntax — in line with the thematic hierarchy — via θ heads, Merge and Move. Beyond thematic structure, the featural make-up of lexical items also encodes morphosyntactic requirements, and these, too, are satisfied on syntactic heads via Merge and Move. In clause structure, specifically, Cinque (1999) extends Pollock's (1989) split-INFL idea and proposes a massively exploded functional structure above VP^* , whereby each of the verb's formal inflectional features (subcategories of tense, mood, modality, aspect, voice, and so on) is associated with a distinct functional head (itself projecting a full phrase), as in (56):



The verb is drawn from the lexicon bearing a number of inflectional features, each of which is checked against an F head, initially non-specific, merged above VP^* . The verb associates with F° by raising, overtly or covertly, to/through it. As many F heads are merged as are needed to check the inflectional features of the verb, resulting in a hierarchy of FPs above VP^* . I shall use the label IP^* to refer to this exploded IP.

The order in which these inflectional features are projected in syntax and checked is, again like θ

roles, determined by a purportedly UG-determined hierarchy. Cinque's inflectional hierarchy has evolved over the last decade, and the order of the inflectional features/heads in (57) is a synthesis of Cinque (2006a: 12, 76, 82, 93):¹⁹

(57) Inflectional hierarchy

MoodP_{speech act}>MoodP_{evaluative}>MoodP_{evidential}>ModP_{epistemic}>TP (Past)>TP (Future)>MoodP_{irrealis}>ModP_{alethic}>
 AspP_{habitual}>AspP_{delayed (or 'finally')}>AspP_{prepositional}>AspP_{repetitive(I)}>AspP_{frequentative(I)}>ModP_{volitional}>AspP_{celerative(I)}>
 TP (Anterior)>AspP_{terminative}>AspP_{continuative(I)}>AspP_{perfect}>AspP_{retrospective}>AspP_{proximative}>AspP_{durative}>
 AspP_{progressive}>AspP_{prospective}>AspP_{inceptive(I)}>ModP_{obligation}>ModP_{ability}>AspP_{frustrative/success}>ModP_{permission/ability}>
 AspP_{conative}>AspP_{completive(I)}>VoiceP>PerceptionP²⁰>CausativeP>AspP_{inceptive(II)}>(AspP_{continuative(II)})>AndativeP>
 AspP_{celerative(II)}>AspP_{inceptive(II)}>AspP_{completive(II)}>AspP_{repetitive(II)}>AspP_{frequentative(II)}

Cinque (1999) bases (an early version of) the inflectional hierarchy in (57) on cross-linguistically robust generalisations about relative order within arrays of overt inflectional morphemes and of higher adverbs. The hierarchy accounts for the ordering constraints on the assumption that the adverbs and suffixes are merged as specifiers and heads, respectively, of functional projections whose purpose is to check the inflectional features of V. The applicability of Cinque's inflectional hierarchy is extended in the studies in Cinque (2006a) on the basis of similar observations, primarily in respect of Italian, relating to various classes of verb which license, for example, V1–V2 and clitic climbing. Cinque observes that certain uses of these verbs are subject to the same ordering constraints as adverbs and suffixes cross-linguistically, and concludes that the same explanation holds: in the relevant uses the verbs do not merge as the lexical head of a regular VP*; rather, just like the inflectional morphemes of Cinque (1999), they merge as F heads within IP*. Cinque uses the label *restructuring verbs* to refer to this use of the verbs. They are *restructuring* in the sense that rather than appearing in their own clause, they appear in the same clause as V2. Haegeman (2006) introduces a useful notation *F-verbs* and *L-verbs* to distinguish between the functional (*restructuring*/

19. Where a given aspectual label appears twice, with (I) and (II), the former relates to sentence aspect, the latter, to VP* aspect (Cinque 2006c: 96 fn. 1).

20. I suggest below that Cinque's Perception category needs to be understood narrowly along the lines of non-agentive *to hear* and *to see* rather than the agentive *to watch* or *to listen*.

monoclausal) uses of verbs and their lexical (non-restructuring/biclausal) uses.

Cinque's analysis of F-verbs as merging within IP* is in fact based on a number of observations.

First, unlike L-verbs, F-verbs are strictly ordered, as in (58), for example:

(58) *solere/usare* 'to use to' > *tendere* 'to tend to' > *volere* 'to want to' > *smettere* 'to stop' > *continuare* 'to continue'

(Cinque's 2006a, ex. 31)

Second, F-verbs trigger clitic climbing, as in (59b): *ti* 'you' is an internal argument of V2 *parlare* 'to talk', yet realised on V1 *verrò* 'will come' (cf. the non-clitic-climbed (59a)):

(59) a. Io verrò a parlarti di questi problemi. (L-*venire*: no clitic climbing; biclausal)

b. Io **ti** verrò a parlare di questi problemi. (F-*venire*: clitic climbing; monoclausal)

'I will come to talk to you about these problems.' (Cinque's ex. 5, 6)

Third, when clitic climbing occurs (and V1 is therefore an F-verb), repetition of a higher adverb like *già* 'already' or *sempre* 'always' is ungrammatical, as in (60b):

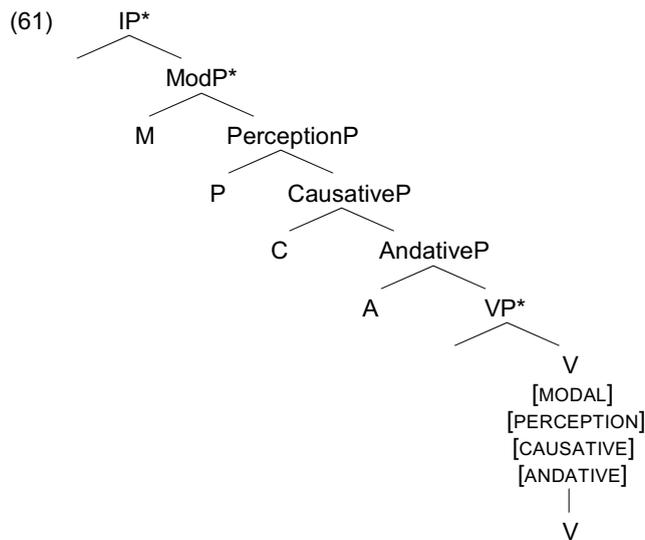
(60) a. Maria vorrebbe già averlo già lasciato. (L-*volere*: biclausal; repetition of *già* possible)

b. *Maria **lo** vorrebbe già aver già lasciato. (F-*volere*: monoclausal; repetition of *già* impossible)

'M. would already want to have already left him.' (Cinque's ex. 23)

Cinque (2006b) concludes, then, that, in these uses, the verbs merge as an F head in IP*, rather than heading a VP* of their own.²¹ Rather than forming a complex V with V2 within VP* (cf. (25) and (38)), the MPCA F-verbs merge directly in IP*, where they can check modal, perception, causative and/or andative features borne by V:

21. Cardinaletti and Shlonsky (2004: 520) call PCA F-verbs *quasi-functional* verbs.



The F- (rather than L-) status of these verbs has implications for their thematicity. Since VP* (rather than IP*) is the locus of θ -role assignment (see section 3), the MPCA F-verbs cannot be thematic. Thus, while the verb *sembrare* ‘to seem’ — when used as an L-verb, merged as V within VP* — is compatible with an internal experiencer argument, as in (62a), it cannot take such an argument in the context of clitic climbing, that is, when used as an F-verb, as in (62b):

(62) a. Gianni non (*ci*) sembra apprezzarlo (abbastanza).

(L-*sembrare*: biclausal; no clitic climbing; experiencer OK)

b. Gianni non (**ce*) lo sembra apprezzare (abbastanza).

(F-*sembrare*: monoclausal; clitic climbing; experiencer not OK)

‘G. doesn’t seem (*to us*) to appreciate it (enough).’

(Cinque’s ex. 41)

The verb *sembrare* in (62a) is an L-verb (with an internal experiencer argument) in a biclausal structure (without clitic climbing), while the presence of clitic climbing in (62b) means that *sembrare* is here an athematic restructuring F-verb in a monoclausal structure, hence the unavailability of *ce* ‘to us’. I return to the athematic nature of F-verbs below.

6. F-VERBS AND THE INFLECTIONAL HIERARCHY IN FRENCH

I now return to French MPCA verbs, and explore how the empirical details set out in section 4 relate to Cinque’s F-verbs and his exploded IP. The idea I wish to pursue is as follows:

- infinitives marked with *de* or *à*, as in (1), are full IP*s;²²
- with bare V2s co-occurring with an MPCA V1 from the list in (2), the situation is less clear cut: if the MPCA V1 is an L-verb, then V2 heads its own IP*; if, instead, the MPCA V1 is an F-verb, then V2 and V1 are clausemates.

Like all functional heads, F-verbs are licensed solely to satisfy checking needs encoded in features borne on the relevant lexical item, in this case, V. Where an argument is realised as the superficial subject of an F-verb, therefore, it is because the F-verb is behaving like a raising verb. This is in fact a perfectly standard analysis of the modal verb *pouvoir*, as in (63):

- (63) a. Jean peut parler. b. [_{IP} . . . [_{ModPability} pouvoir . . . [_{VP} Jean parler]]]

Within the framework of Cinque's exploded IP, we assume here that:

- *parler* bears an ability-modality feature when drawn from the lexicon;
- in order to check this feature, VP* merges with an F head hosting (a finite form of) *pouvoir*;
- *Jean* raises to SpecIP* for case licensing;
- (the finite form of) *pouvoir* raises to I*° to check finiteness;
- *parler* raises out of VP* into IP* to check its infinitival morphology;

thus (63a) is the surface word order derived from an underlying structure along the lines of (63b).

Less standardly, however, the same underlying configuration and derivation characterise other MPCA F-verbs, including those usually analysed as control verbs (like *vouloir*) and those which have an even more complex thematic grid. In the structure underlying (64a), the V2 *parler* bears a volitional-modality feature which is checked against *vouloir*, merged in IP*:

22. Actually, it is not even clear that *de/à*-marked infinitives are IP*s, if clitic climbing is indicative of clause union:

- (i) a. Je te dis que je le viens de voir. b. Je te dis que je viens de le voir.
 I you say that I him come of see I you say that I come of him see
 a, b: 'I'm telling you that I just saw him.'

Not all speakers accept (ia); for Marc Authier (personal communication) it is completely ungrammatical. See however also the Italian example in (88).

- (64) a. Jean veut parler. b. [_{IP}* . . . [_{ModP}vollitional vouloir . . . [_{VP}* Jean parler]]]

The selection restriction (requiring *Jean* to be animate) previously captured by a supposed predicate–argument relationship between *vouloir* and its superficial subject (hence the control analysis) is now captured by the relationship between the external argument of V2 and the volitional-modality feature of V2. *Jean* therefore does not need to have a direct predicational relationship with *vouloir*, which can behave as a raising verb rather than a control verb. This approach avoids the two problems posed by the double-headed VP*s found in other analyses of clause union. First, VP* has a single lexical head, thereby avoiding antisymmetry issues. Second, the F-verbs all merge within IP* where their respective morphological checking needs can be satisfied locally, and independently of those of the lexical verb merged in V.

In section 6.1 I show how French MPCA F-verbs respect the ordering constraints predicted to hold, and in later sections I use F-verbs to account for the empirical details reviewed in section 4.

6.1. ORDERING CONSTRAINTS BETWEEN MPCA VERBS

Exploiting fully the four subcategories of MPCA F-verb in (2) and the inflectional hierarchy in (57), we have the IP* array of F-verbs in (61), a monoclausal structure with an exploded IP which underlies the — strained but grammatical²³ — examples in (65), containing a single lexical verbal predicate (*faire la cuisine* ‘to do the cooking’) and four (ordered) F-verbs (M *vouloir*, P *voir*, C *laisser* and A *partir*):

- (65) a. Je veux voir laisser envoyer faire la cuisine à Jean.
 I want see let send do the cooking to J.
 ‘I want to see (someone) let (someone) send J. to do the cooking.’

23. In fact, my informants and anonymous reviewers are not unanimous in judging the grammaticality of these examples.

b. Je veux la lui voir laisser envoyer faire.

I want it him see let send do

'I want to see (someone) let (someone) send him to do it.'

The lexical verb *faire* bears andative, causative, perception and modal features, and these are checked, in order, by virtue of the presence in IP* of FPs headed by corresponding F-verbs. The F-verbs are athematic (like auxiliaries), and not therefore associated with θ roles or arguments. (See the discussion of Italian *sembrare* in (62).) As a consequence of this, there are limitations on the number of arguments which can be expressed: since there is just one clause headed by just one lexical verb, a maximum of three arguments can be projected. The examples in (65) contrast with those in (66), in which *voir*, *laisser* and *envoyer* are L-verbs rather than F-verbs, and therefore thematic:

(66) a. Je veux voir Marc laisser Anne envoyer les enfants faire la cuisine.

I want see M. let A. send the children do the cooking

'I want to see M. let A. send the children to do the cooking.'

b. Je veux le voir la laisser les envoyer la faire.

I want him see her let them send it do

'I want to see him let her send them to do it.'

While the examples in (65) are possibly strained beyond breaking point, it is possible to test ordering constraints relating to F-verbs using pairs of MPCA verbs, as in the following three subsections:

6.1.1. Modal > Perception

(67) Il veut voir manger le biscuit au chien.

(F-modal>F-voir: OK)

he wants see eat the biscuit to-the dog

'He wants to see the dog eat the biscuit.'

- (68) *Il voit vouloir manger le biscuit au chien. (F-*voir*>F-modal: *)
 he sees want eat the biscuit to-the dog
 'He can see the dog want to eat the biscuit.'

The ungrammaticality of (68), with F-*voir*, contrasts with the grammaticality of (69), with L-*voir*:

- (69) Il voit le chien vouloir manger le biscuit. (L-*voir*>F-modal: OK)
 he sees the dog want eat the biscuit
 = (68)

6.1.2. Perception > Causative

- (70) a. Je vois laisser manger le biscuit au veto/chien. (F-*voir*>F-*laisser*: OK)
 I see let eat the biscuit to-the vet/dog

- b. Je le lui vois laisser manger. (F-*voir*>F-*laisser*: OK)
 I it him see let eat

a, b: 'I can see the vet (him) let (something) eat the biscuit (it).' OR 'I can see (someone) let the dog (it) eat the biscuit (it).'

- (71) a. *Je laisse voir manger le biscuit au veto/chien. (F-*laisser*>F-*voir*: *)
 I let see eat the biscuit to-the vet/dog

- b. *Je le lui laisse voir manger. (F-*laisser*>F-*voir*: *)
 I it him let see eat

a, b: 'I let the vet (him) see (something) eat the biscuit (it).' OR 'I let (someone) see the dog (it) eat the biscuit (it).'

Once again, when the F-verbs are replaced with L-verbs, the problem disappears:

- (72) a. Je laisse le veto voir le chien manger le biscuit. (L-*laisser*>L-*voir*. OK)
I let the vet see the dog eat the biscuit
- b. Je le laisse le voir le manger. (L-*laisser*>L-*voir*. OK)
I him let it see it eat
- c. Je laisse le veto voir manger le biscuit au chien. (L-*laisser*>F-*voir*. OK)
I let the vet see eat the biscuit to-the dog
- d. Je le laisse le lui voir manger.²⁴ (L-*laisser*>F-*voir*. OK)
I him let it to-it see eat

a–d: ‘I let the vet (him) see the dog (it) eat the biscuit (it).’

6.1.3. Causative > Andative

- (73) a. Elle laisse envoyer manger le biscuit au chien. (F-*laisser*>F-*envoyer*. OK)
she lets send eat the biscuit to-the dog
‘She lets (someone) send the dog to eat the biscuit.’
- b. *Elle envoie laisser manger le biscuit au chien. (F-*envoyer*>F-*laisser*. *)
she sends let eat the biscuit to-the dog

6.2. MPCA VERBS AND VOICE

In this section I consider passivisation. Only a small subset of F-verbs passivise. Cinque (2006c: 69)

24. This is an example of the kind of partial clitic climbing discussed in Cardinaletti and Shlonsky (2004). As they suggest, the partial nature of the climbing is illusory; given that the verb to the left is an L-verb (and therefore in a higher clause), the clitic has indeed appeared at the highest clitic position within its clause.

accounts for this with reference to his inflectional hierarchy in (57) and the way this maps onto IP* structure. He assumes (a) that the active–passive distinction is articulated by the feature Voice which is below the various modal features (Mod*>Voice) but above the PCA features (Voice>PCA), and (b) that, in order to passivise, a verb, be it F- or L-, needs to raise overtly or covertly to Voice[°]. Crucially, only verbs which merge below Voice[°] are predicted to passivise. In fact, this logic actually undermines Cinque’s approach to the explosion of the FPs within IP*. If, as Cinque claims, every inflectional feature is projected in syntax as a distinct inflectional F[°], irrespective of whether the value of that feature is marked or unmarked, then F-verbs which merge above Voice are expected to be incompatible with both active and passive voice; in other words, they should never be grammatical! The fact then that, in the case of French modals, for example, they are compatible with active but not passive voice is actually unexpected. Rather, it supports the alternative notion of inflection features and the inflectional heads they are checked against whereby the heads are only merged if warranted by the presence of a feature with a marked value which cannot be checked against another head.

As expected within Cinque’s approach, modal F-verbs do not passivise, as shown in (74b), but do embed passives, as in (75b):

- (74) a. Jean a compté lire le livre. b. *Le livre a été compté lire (par Jean).
 J. has expected read the book the book has been expected read by J.
 ‘J. expected to read the book.’

- (75) a. Jean a été réveillé avant midi. b. Jean a compté être réveillé avant midi.
 J. has been woken before noon J. has expected to woken before noon
 ‘J. was woken before noon.’ ‘J. expected to be woken before noon.’

Much less clear is the situation with respect to the interaction between Voice and the features associated with PCA F-verbs, all of which are below Voice in (57), and therefore predicted (a) to be passivisable, but (b) not to embed a passive, a prediction apparently met in Italian.

Pollock (1994: 302) (cited in Miller and Lowrey 2003: 153) maintains that perception F-V1s do *not* passivise, as illustrated in (76b), corresponding to the active sentence in (76a):

- (76) a. Quelqu'un a vu Jean manger une pomme. b. *Jean a été vu — manger une pomme.
 someone has seen J. eat an apple J. has been seen eat an apple
 'Someone saw J. eating an apple.'

Veland (1998) also notes that perception F-V1s are 'in principle' incompatible with passivisation in the modern language (although they were possible previously):

- (77) a. *Paul a été vu/entendu sortir.
 P. has been seen/heard leave
 'P. was seen/heard leaving.'
- b. *Le ministre a été entendu — dire que ces mesures seraient reportées.
 the minister has been heard say that these measures would be postponed
 'The minister was heard saying that these measures would be postponed.'

However, a Google search turned up examples such as those in (78) (see also Miller and Lowrey 2003: 154–155):

- (78) a. Hurley et Grant ont été vus — faire des emplettes ensemble.
 H. and G. have been seen do of.the purchases together
 'H. and G. were seen out shopping together.'
- b. Pierre Nicolas a été vu — faire des tours de terrain bien après minuit.
 P. N. has been seen do of.the rounds of field well after midnight
 'P. N. was seen running around the pitch well after midnight.'

And Veland (1998) gives the examples in (79):²⁵

25. Miller and Lowrey (2003: 155) report that informants are sometimes uneasy about accepting these examples, and suggest inserting *en train de* 'in the process of' immediately before the infinitive to improve acceptability. Veland (1998) says that the infinitive is supposed to be replaced by a present participle in the

- (79) a. . . . ayant été vu tomber de quinze cents mètres.
 having been seen fall of fifteen hundred metres
 . . . having been seen fall fifteen hundred metres.’
- b. . . . si une banshee venue d’Irlande n’avait pas été entendue pleurer.
 if a Banshee come of-Ireland NEG-had not been heard cry
 ‘ . . . if a banshee from Ireland hadn’t been heard crying.’

There would appear, therefore, to be uncertainty as to whether or not perception F-V1s passivise.

Comments from my own informants suggest these examples are slightly odd but that, at worst, they deserve a question mark rather than a star.

I suggest, though, that a number of these examples are in fact irrelevant to the issue at hand. The inflectional hierarchy makes predictions about the interaction of features checked in IP*, only. This is important because, as we have seen, some F-verbs have (semantically subtly different) L-equivalents. If, in the above examples, the passivised perception verbs are actually L-verbs, the data are irrelevant (although interesting in their own right). It is therefore necessary to ensure that the perception verbs in the examples under consideration are well and truly F-verbs. In fact, from the perspective of the inflectional hierarchy and the predictions it makes, it is possible to immediately discard the examples in (76), (77b) and (78), since they undisputably contain L- rather than F-perception verbs. As such, these passive sentences are expected to be grammatical, and their slight oddness is unexplained.

Further, the examples in (77a) and (79) are only relevant if they are derived in a certain way. For example, if (77a) is derivationally related to (80a), then the perception verb is an L-verb, and the example is therefore irrelevant: L-verbs are expected to passivise:

- (80) a. . . . a vu/entendu Paul sortir b. . . . a vu/entendu sortir Paul

passive structure.

- (81) Le professeur les fera le lire/y aller. (Baschung and Desmets 2000: 210)
 the teacher them will.make it read/there go
 'The teacher will make them read it/go there.'

Note that the examples which appear to contain causative *L-faire* all involve cliticisation of the underlying subject of V2. In the problematic examples, (50a, b), in contrast, the underlying subject of V2 is nominal. This observation lends support to an idea from Bouvier (2000), who suggests that, unlike causative *laisser* and other perception L-verbs, causative *L-faire* is morphologically defective in that the IP* structure which merges above VP* is unable to mark accusative case or trigger past-participle agreement.²⁷ In other words, unlike *laisser*, causative *L-faire* is not an ECM verb. The idea that the relevant issue is morphology is supported by the fact that past-participle agreement does not take place in (82), even though the structure suggests that it should, and even though the parallel structures with the other PMC verbs *do* have past-participle agreement²⁸:

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- (iii) Je lui ai fait lui téléphoner / y aller / le lui donner / lui en parler.
 I to.him have done to.him telephone/to.it go/it to.him give/to.him of.it speak
 'I made him telephone him/go there/give it to him/speak to him about it.'

The status of these examples is unclear.

27. Recall that one of the arguments in support of the biclausal analysis of PMC verbs was the fact that the 'underlying subject of the infinitive' triggers past-participle agreement.

28. According to Baschung and Desmets (2000: 226) the past participle of causative *faire* does show overt morphological agreement 'in non-standard French', as in (i):

- (i) La secrétaire, le patron l'a faite pleurer.
 the secretary the boss her-has made.F cry
 'The boss made the secretary cry.'

Note, though, that in Québécois the final orthographic consonant in past participles like *fait(e)* is pronounced in m and f contexts alike: *fait(e)* = [fɛt].

subject' of V2. In fact, there is no 'underlying subject' of V2, indicating — see the discussion of (48) — that we have a monoclausal structure with *F-faire* rather than a biclausal structure with *L-faire*.

The raised nominal is the internal argument of V2. Note further that the raised nominal in the passive sentences in (85) has default M.SG ϕ features. Where it has marked F or PL ϕ features, the passive is ungrammatical, as shown in (86) and (87):

(86) *Des chemises ont été fait(e)(s) faire — .²⁹
 of.the shirts have been made.F.PL do

(87) *La maison a été faite construire. (Cinque 2006c: 78 fn. 14)

Cinque suggests that the ungrammaticality of (87) 'remains to be understood'. The contrast between (85) and (86)/(87) suggests a link with Bouvier's (2000) analysis of the morphological defectiveness of causative *faire*.

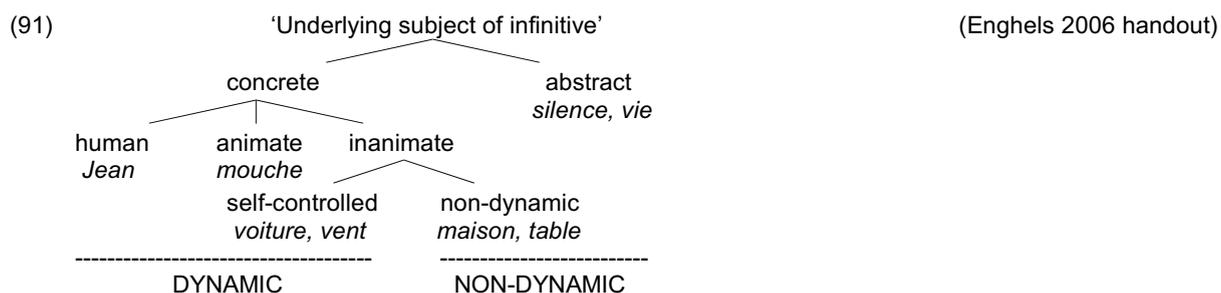
6.4. SEMANTIC DIFFERENCE BETWEEN F-VERBS AND L-VERBS

The distinction between F- and L- versions of the 'same' verb raises the issue of a possible semantic difference between the two. Cinque (2006b: sec. 6.4) addresses this issue with respect to Italian motion verbs and *sembrare* 'to seem' which he argues have F- and L- versions. He claims the two versions have subtly different meanings: Italian L-verbs of motion are interpreted literally as verbs of locomotion, while F-verbs of motion are not, as illustrated in (88):

(88) a. A: Come verrà **da te** a dipingere la porta? B: In bicicletta. (Cinque's 2006b: 36–37, ex. (90))
 b. A: Come **ti** verrà a dipingere la porta? B: *In bicicletta.
 A: How will he come to yours to paint the door? B: By bike.

Example (88a) contains L-*venire*, so the means of locomotion can be questioned, while (88b)

29. Cf. Italian, where causative passivisation is grammatical even with F/PL DP*s.



In the data in Enghels' sample, where the 'underlying subject of infinitive' is dynamic (n = 1439), an L-verb is used 75.7% of the time. In contrast, where it is non-dynamic (n = 418), an L-verb is used just 52.6% of the time.

Finally, the issue of the semantics of L-*faire* and F-*faire* is taken up by Baschung and Desmets (2000),³⁰ who point to a subtle difference surrounding whether or not the causer exercises direct causation over the causee. They suggest that L-*faire* is associated with 'strong control', that is, direct causation, only, while F-*faire* is compatible with 'loose control', too, that is, indirect causation. Thus, while F-*faire* is available however 'loose'/indirect the control/causation, L-*faire* is only available if direct causation is possible, as in (92a) (it is possible literally to force someone to *eat* spinach), but not in (92b) (it is not possible literally to force someone to *like* spinach):

- (92) a. Je l'/lui ai fait manger les épinards. b. Je *l'/lui ai fait aimer les épinards.
 I him/to.him have made eat the spinach I him/to.him have made eat the spinach
 'I made him eat some spinach.' 'I made him like spinach.'

7. SUMMARY AND CONCLUDING REMARKS

I started by observing that, unlike *à/de*-marked infinitives, which can be licensed by any lexical category, French bare infinitives are exclusively licensed by verbs, more particularly by members of a limited number of subcategories of verb. I went on to note that licensing V1–V2 is not the only property which distinguishes these subcategories of verb from regular verbs; they are all (or have all

30. Baschung and Desmets work in a different theoretical framework to the one assumed here, and use the terms control-*faire* and composition-*faire* for what I am calling L-*faire* and F-*faire*.

been) also associated with clitic climbing. Clitic climbing is traditionally attributed to the phenomenon of restructuring, whereby two predicates or two clauses are turned into one. Individual subcategories of V1–V2-licensing verbs also display other properties: modal verbs have unique infinitival-placement patterns, perception verbs and causative *laisser* license two V1–V2 structures which appear to be amenable to analysis in terms of the (non-)occurrence of restructuring; andative verbs can select the marked perfective auxiliary *être* and are truth-conditionally inseparable from V2. I suggested that a fruitful way of approaching the above empirical observations was to follow Cinque and to see V1–V2-licensing verbs as F-verbs rather than L-verbs, associated with inflectional features and therefore merged as inflectional F heads within an exploded IP. Furthermore, such an approach accounts for the fact that, when used in restructuring contexts, members of the subcategories of V1–V2-licensing verb are strictly ordered. Finally, I showed how the F-verb analysis accounted for interaction with passivisation, suggested that the peculiarities of causative *faire* are morphological in nature rather than syntactic, and reviewed some evidence that the syntactic F-verb/L-verb distinction also has a semantic dimension.

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