Clause union inside-out: reflexives and medio-passives in French causatives

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In this paper, we shall discuss the treatment of reflexive and middle se in the French causative construction. While we concur with previous research that reflexives and middles support a notion of clause union, we shall reexamine the locus at which complex predicate formation takes place. In particular, we shall expand on our recent proposals (Aguila-Multner & Crysmann, 2020, 2021), where we suggest that French clitic climbing should be considered an instance of inflectional periphrasis, and we shall argue in favour of an analysis that effects clause union by means of argument structure extension of the downstairs verb, instead of by argument composition on the upstairs verb. Thus, we shall essentially treat French causatives as the periphrastic counterpart of morphological causatives.

1 Clause union in French causatives

French causative constructions have been argued to involve clause union like other Romance complex predicates (Aissen & Perlmutter, 1976; Alsina, 1992; Abeillé et al., 1997). I.e. they are said to involve a single complex argument structure that contrasts with standard infinitival complementation.

There are properties of faire and related constructions, such as laisser and perception verbs, that support this perspective. First, pronominal arguments of the downstairs verb can undergo clitic climbing.

(1) La panthère la leur fait traverser.  
the panther it to.them makes cross

‘The panther makes them cross it.’

Second, the subject of the downstairs verb displays atypical ordering and case marking properties:

(2) La panthère fait traverser la route à ses petits.  
the panther makes cross the road to its little ones

‘The panther makes its little ones cross the road.’

Third, there are two valence-changing phenomena involving se that operate across the entire argument structure: these are reflexive se, as shown in (3) and medio-passive se, as illustrated in (4).

(3) Le voleur se ferait arrêter.  
the thief 3.REFL will.make arrest

‘The thief will get himself arrested.’

(4) Les voitures se font réparer pour pas cher.  
the cars 3.REFL make repair cheap de nos jours.  
these days

‘Cars get repaired cheaply these days.’

In (3), the causer binds the patient argument of the downstairs verb, a case we shall refer to as long reflexivisation. With medio-passives as in (4), the upstairs subject is the theme argument of the downstairs verb, and crucially does not receive an actor or undergoer role from the causative, which remains unexpressed: the logical object of the downstairs verb is promoted to subject of faire, while the logical subject of faire is put en chômage. Thus, with complex predicates, long middles behave exactly the way they do when applied to simple predicates:

(5) Les voitures se réparent facilement de nos jours.  
the cars 3.REFL repair easily these days

‘Cars are repaired easily these days.’

Both long reflexivisation and long medio-passives feature climbing of the reflexive affix se. Reflexives and middles targeting the downstairs subject, by contrast, fail to undergo climbing, cf. (13–14).

In HPSG, clause union is standardly implemented by means of argument composition (Abeillé et al., 1998; Abeillé & Godard, 2002; Miller & Sag, 1997). If the arguments of the downstairs verb are inherited by the causative, clitic climbing can be reduced to local affixal realisation of the inherited arguments. Similarly, reflexives and middles can be analysed on the basis of the composed argument structure.

Based on recent advances in the treatment of periphrastic inflection (Bonami, 2015), we have challenged the argument composition approach in recent work (Aguila-Multner & Crysmann, 2020, 2021). For the case of French causatives, we argued that controlling the construction solely from the upstairs causative makes it difficult to integrate constraints on realisation imposed by the downstairs verb. Instead, we proposed to account for the properties of the downstairs subject and for clitic climbing in terms of an extended notion of periphrasis, using inside–out constraints.

In the next section, we shall recapitulate, in Section 2.1, the arguments against an argument composition approach and for a more active role of the downstairs verb, as well as present, in Section 2.2, some new evidence that in points in the same direction. Subsequently, in sections 3 and 4, we shall extend our previous take on causatives (Aguila-Multner & Crysmann, 2021) in such a way as to effect clause union on the downstairs verb, picturing causative faire as the ancillary element in a periphrastic morphological causative.

2 Outside–in or inside–out?

In a recent paper (Aguila-Multner & Crysmann, 2021), we have argued that the downstairs verb in French causatives plays a more active role than what is suggested by argument composition.

Subject by-phrases (delpar) The first piece of evidence we presented in favour of an inside–out approach pertains to the choice of marking of the downstairs subject, a point originally made by Koenig (1998).

The subject of the downstairs verb in the causative construction can be realised by a by–phrase, akin to passives. In French passives, choice of preposition depends on the verb’s semantics: while de is used with stative verbs, we find par with dynamic verbs.

(6) Jean a été suivi *de / par Paul.  
Jean has been followed of / by Paul

‘Jean has been followed by Paul.’

(7) Le poisson a été suivi de *par des rôtis.  
the fish has been followed of / by some roasts
The same constraint seems to apply in the causative construction:

(8) a. Marc a fait suivre Jean *de / par Paul.
(Marc has made follow Jean of / by Paul)
‘Marc had follow Jean by Paul.’

b. Marc a fait suivre le poisson de / *par des rôtis.
(Marc has made follow the fish of / by some roasts)
‘Marc had the fish be followed by a roast.’

**Trapping** The second piece of evidence we discussed pertains to trapping, as found with inherent clitics and downstairs reflexives and middles (se).

Intrinsic clitics not only resist clitic climbing (9–10), but they also block climbing of argument clitics, such as the downstairs indirect object leur in (11):

(9) * Tout leur en fait vouloir à Paul.
(everything IO.PL EN make angry to Paul)
‘Everything makes them/Paul angry at Paul/Them.’

(10) Tout leur en fait vouloir à Paul.
(everything IO.PL make EN angry to Paul)
‘Everything makes them angry at Paul.’

(11) Tout leur vous en vouloir.
(everything IO.PL make 2.PL EN angry)
‘Everything makes them angry at you.’
(Miller & Sag, 1997, 609–610)

Clitic se also resists climbing and triggers trapping, when agreeing with the downstairs subject. This not only holds for intrinsic se (12), but also for true reflexives (13) or middles (14).

(12) Marie lui fait s’ en souvenir.
(Marie IO.3 SG makes 3.REFL of it remember)
‘Marie makes him remember it.’

(13) % Marie a fait se laver les enfants.
(Marie has made 3.REFL wash the children)
‘Marie has made the children wash themselves.’ (Abeillé et al., 1998, 24)

(14) Le snobisme fait se vendre bien les classiques.
(The snobism makes 3.REFL sell well the classics)
‘Snobism makes the classics sell well.’ (Abeillé et al., 1998, 24)

Furthermore, Aguila-Multner & Crysmann (2021) also takes issue with the way trapping is addressed by the Miller & Sag (1997) proposal, namely by means of a diacritic distinction on verbal head values into red-vb (=reduced valency verb) and bas-vb (=basic verb) and the stipulation that the type red-vb is a default for verbs with pronominal clitics that is overridden with the value bas-vb, the type normally associated with plain verbs, just in case an intrinsic or reflexive clitic is present.

**Downstairs subject** It is widely agreed that the realisation of the downstairs subject displays behaviour typical of objects: this does not only hold for the by-phrases discussed above, but is also corroborated by the marking of subjects of transitives (as indirect objects) and, more generally, by ordering. I.e. they appear post-verbally and can be permuted with other objects.

While argument composition derives these facts by raising to object, we suggested instead that these properties are readily accounted for by subject demotion on the downstairs verb.

### 2.1 Problems with argument composition

In Aguila-Multner & Crysmann (2021), we further highlighted two problems faced by an argument composition approach to the faire construction: (i) the failure to account for trapping of non-local en-cliticisation, and (ii) the necessity to analyse coordinations of downstairs VPs as non-constituent coordination.

**En-cliticisation** In contrast to argument clitics, en-cliticisation is non-local, akin to dont-relativisation (Sag & Godard, 1993), i.e. the NP[de] complement expressed by en can be arbitrarily deeply embedded within the complement of a verbal host. Miller & Sag (1997) capture this rather elegantly by a lexical rule that extends a verb’s argument structure with the specification for an affixal NP[de] that binds the slash value of the direct object argument. This use of en, however, is surprisingly trapped in the presence of intrinsic pronominals:

(15) J’ai fait s’ en rappeler la fin aux élèves.
(I have made REFL.3 EN remember the end to the pupils)
‘I made the students remember the end of it.’

(16) ?? J’en ai fait se rappeler la fin aux CM2.

Under an argument composition approach, these facts cannot be captured, for two reasons: first, presence of inherent clitics is only detectable on the downstairs verb, and second, canonical complements always undergo argument composition under this approach, so the conditions for the application of the en-cliticisation rule are met both downstairs and upstairs. As a result, argument composition derives both the acceptable (15) and the deviant (16).

**Coordination** Verbal complements of faire can be conjoined and the resulting syntactic surface does not differ from standard constituent coordination of two VPs.

(17) Elle l’a fait écrire aux enfants et signer par les parents.
(she DO.SG has made write to the children and sign by the parents)
‘She made the children write it and the parents sign it.’

However, with argument composition and the flat structure it implies, the relevant VP constituent simply does not exist, making it necessary to treat this kind of coordination as an instance of argument cluster coordination.

### 2.2 More problems

In addition to the issues we raised in Aguila-Multner & Crysmann (2021), there are two further problems associated with argument composition, one technical, the other empirical.

**Binding** At first sight, argument composition appears well-suited to capture reflexive binding by the causer in the faire construction, given that all arguments of the complex predicate are found on the ARG-ST list of the upstairs verb.

However, owing to the sharing of argument lists, we end up with the paradoxical situation that Binding Principle A will be
both fulfilled (on the upstairs ARG-ST) and violated (on the downstairs ARG-ST).

(18) Il s’est fait offrir des fleurs.
he 3.REFL is made offer INDEF.PL flowers
‘He got himself offered some flowers.’

Consider the example in (18): here, the recipient of *offrir* is realised as a reflexive clitic, bound by the subject of *faire*, i.e. the causer. On the downstairs argument structure, however, the causer argument is not present under an argument composition approach, such that the reflexive recipient ends up being locally α-commanded, e.g. by the downstairs agent, without being locally α-bound, incurring a Principle A violation (Pollard & Sag. 1994, 254).

**Modifier attachment** Modifiers in French VPs can be interspersed between the head verb and the complements. In the *faire*-construction, non-peripheral modifiers are interpreted as referring to the caused event, not to the causing event:

(19) Le pharaon a fait travailler des centaines d’ esclaves inlassablement à la construction de la pyramide.
‘The pharaoh made hundreds of slaves work tirelessly to build the pyramid.’

In a flat structure, adjuncts should be expected to modify only the head (*faire*). However, in order to derive the correct interpretation for (19), argument composition will necessitate semantic attachment to a syntactic co-dependent. While this already makes for an unorthodox syntax-semantics interface, it will probably be even harder to account for the degraded acceptability of (20), where the modifier targets *faire*, which is considered the syntactic head of the flat VP.

With a more traditional layered VP structure, by contrast, the modifier attachment facts are derived directly: a modifier will attach semantically to the event denoted by the verbal projection it adjoins to. In the case of interspersed modifiers as in (19), this can only be the downstairs VP, whereas with right-peripheral modifiers, it can be either event.

### Clause union inside–out

As we have seen in Section 1, French causatives involve not just clitic climbing, but also show some peculiar behaviour regarding valence-changing operations with *se*. We take this to be due to clause union in the sense of Aissen & Perlmutter (1976):

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1. A possible workaround for the first problem is to treat all adjuncts as complements (Bouma et al., 2001). However, in the flat structure resulting from argument composition, modifiers of the causing event are still expected to permute with arguments of the downstairs verb, contrary to fact, cf. (20).

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these cases of *se* can be explained if the valence operation targets a single, complex argument structure containing arguments of both *faire* and the verb that follows it. However, we have shown in Section 2 that the argument composition approach to clause union, and in particular the flat structure it entails, is unsatisfactory. What we propose instead is an approach that builds the complex predicate at the level of the lexical verb, by simply giving it an extra argument corresponding to the external subject (the causer). In other words, we build the complex argument structure not by raising all of the downstairs arguments to *faire*, but by anticipating *faire*’s argument on the infinitive.

This line of approach is made possible by the independently motivated inside–out selection relation that stands between the causativised infinitive and *faire*, which was argued for in Koenig (1998) for the marking of the subject and in Aguila-Multner & Crysmann (2021) for clitic climbing. Indeed, this selection lets us limit the distribution of causativised infinitives to the context of *faire*. Figure 1 schematically represents clitic climbing via inside–out selection (Aguila-Multner & Crysmann, 2020, 2021). Given both a causativised argument structure and an inside–out selection for *faire*, our causativised infinitives can effectively be considered to be the lexical element in a periphrastic causative, the ancillary element being *faire*.

[Figure 1: inside–out selection in causative constructions]

To sum up, our current proposal brings together the benefits of our earlier periphrasis approach, which maintains a hierarchical structure of the construction and allows for a better treatment of several argument realisation properties, with a true implementation of clause union that accounts for its peculiar interaction with valence-changing phenomena.

### 4 Analysis

#### 4.1 Downstairs clause union

We implement downstairs complex predicate formation as a lexical rule applying to non-finite verbs. This rule, given in Figure 2, prepends a new element to ARG-ST, corresponding to the expected causer argument. The original subject, being thus shifted to a complement position, is assigned a specific marking depending on properties of the verb. Additionally, the rule inserts an INFL(ectinal) requirement for causativity; however, contrarily to Aguila-Multner & Crysmann (2021), its content is not a simple (*EXEME*) but an Elementary Predication (EP) containing the index of the introduced argument as ARG1, for reasons which will be made clear once we address middle *se*. We assume a later morphological rule of causative periphrasis similar to the one in Aguila-Multner & Crysmann (2021) that defers the causativity element on INFL and any unrealised pronominal affixes to a REVERSE-SELECTION dependency.
We can now give faire an entry as in Figure 3. The expected causer argument is syntactically realised as a raised subject of faire. As a periphrastic ancillary verb, faire matches the contents of its VP complement’s REV-SEL. This includes a (possibly empty) set of pronominal affixes, which map onto faire’s INFL set, and the EP introduced by the causativisation rule, which is mapped onto its semantics (RELS). In this way faire always assigns its causer role to the argument introduced by the causativisation rule.

Figure 2: Lexical rule for causativised verbs

Figure 3: Lexical entry for causative faire

4.2 Long reflexivisation

This downstairs implementation of clause union readily allows us to deal with long reflexivisation (3). Indeed, the argument structure produced at the output of our causativisation rule contains the expected subject as a potential binder to license an anaphor among the verb’s complements (DO or IO). Any theory of binding should therefore be able to type the content of one of the complements as ana(phoric), which in French will yield a realisation as a reflexive affix (se etc.). Since this anaphor is licensed after the application of the causative rule, its only possible realisation will be periphrastic, similarly to the realisation of affixal downstairs subjects (Aguila-Multner & Crysmann, 2021, p. 18).

An illustration of the analysis of long reflexivisation is given in Figure 4. In sum, our argument extension approach allows binding to operate downstairs, while periphrastic clitic climbing correctly predicts the upstairs realisation of reflexive se.

If, by contrast, reflexivisation applies before the argument structure has been extended by the causative lexical rule, we obtain binding by the downstairs subject and concomitant trapping of reflexive se, as in (13).

4.3 Long medio-passive se

Following Grimshaw (1982); Wehrli (1986), we consider medio-passive se as a case of argument reduction. We consequently rely on a lexical rule affecting the argument structure of verbs, suppressing the subject and promoting a DO to take its place (Figure 5). To produce the correct exponent (a reflexive affix), an argument with ana content is introduced on ARG-ST.

Figure 4: Sample derivation: long reflexive

Figure 5: Lexical rule for medio-passives

Entirely parallel to long reflexives, our analysis of long medio-passives takes advantage of the downstairs availability of a uniform argument structure to apply the relevant rule on the infinitive instead of faire. Indeed, our derivation of sentences like (4) works by applying the medio-passive rule to the output of the causativisation rule. Such a derivation is given in Figure 6. The expected causer argument prepended by the causative rule is at once suppressed by the medio-passive rule, which promotes the verb’s DO to subject position instead. Since we think of faire as a subject-raising verb, the promoted DO is correctly raised to become the subject of faire. The anaphoric argument is translated to a reflexive affix, which as before has no other possible realisation than deferral to faire via REV-SEL. Similarly to reflexive se, downstairs medio-passive se, as in (14), is covered by applying the medio-passive rule before causativisation.

4.4 Semantic composition

We can now turn back to the motivation for reverse selection of an EP containing the index of the expected causer as ARG1. In
an approach that views the causative predicate as a periphrastic form, the question arises whether the causative meaning is introduced by faire or by the lexical verb. The modifier attachment properties (cf. Section 2.2) indicate that the downstairs verb should remain the semantic head of its projection: we can therefore rule out introducing the causation relation downstairs. On the other hand, since our approach locates the complex predicate’s argument structure downstairs, the linking of arguments should also take place downstairs. In other words, the introduced expected argument should be properly linked to its role. This is achieved by the reverse selection for an EP, effectively linking the argument to its role inside–out.

Taken together, these facts motivate a slight extension of our earlier conservative conception of purely morphological reverse selection to allow selection of semantic components as well. However, reverse selection does not only have a history as a feature for inflectional periphrasis (Bonami, 2015), but has been used for semantic purposes before that. See, e.g. Soehn & Sailer (2003)’s original synsem-valued proposal for reverse selection in idioms, as well as Koenig (1998)’s view of reverse selection as a general selection mechanism, able in particular to target the semantic content of a verb in the dative predication construction or a particular role in the body-part binding construction.

Figure 6: Sample derivation: long medio-passive

5 Conclusion

In this paper we discussed the proper locus of complex predicate formation in French causatives. While long reflexive and long medio-passive uses of se faire suggest a notion of clause union, we presented ample evidence against an argument composition approach to complex predicate formation. Instead we proposed an inside–out approach to clause union that extends our periphrasis approach to clitic climbing (Aguila-Multner & Crysmann, 2020, 2021). We suggested a lexical rule that extends the argument structure of the downstairs verb with the causer argument and condition this rule inside–out on the presence of a causative predicate, essentially treating the French causative as a periphrastic version of morphological causatives.

References


Sag, Ivan A. & Danièle Godard. 1993. Extraction of de-phrases from the French NP. In Proceedings of the north east linguistic society 24, Department of Linguistics, University of Massachusetts: GLSA.