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

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General properties

French causative constructions:

- involve *faire* “make”

  (1) Le chat le fait tomber.  
  ‘The cat makes it fall.’

- *laisser* “let” as well as perception verbs like *voir* “see”, *entendre* “hear” have similar properties

- A number of properties set them apart from standard infinitival complementation constructions, most evidently:
  - unusual placement and marking of the subject of the infinitive

    (2) La panthère fait traverser la route à ses petits.  
    ‘The leopard make the cubs cross the road.’

- “clitic climbing” is possible

    (3) La panthère la leur fait traverser.  
    ‘The leopard makes them cross it.’
Clause union

- French causative constructions have been argued to involve clause union like other Romance complex predicates (Aissen & Perlmutter, 1976; Alsina, 1992; Abeillé et al., 1997): they involve a single complex argument structure

→ Clitic climbing is one piece of evidence: faire hosts non-local pronominal arguments

(4) La panthère la leur fait traverser.
   ‘The leopard makes them cross it.’

→ Two valence-affecting phenomena involving se operate across the entire argument structure

(5) Le maire_i se_i fera élire frauduleusement.
   ‘The mayor will get (himself) fraudulently elected.’ (reflexivisation)

(6) Les voitures_se font réparer pour pas cher de nos jours.
   ‘Cars get repaired for very little these days.’ (medio-passive se)
In surface-oriented frameworks like HPSG or LFG, clause union was implemented using argument composition (Abeillé et al., 1998; Abeillé & Godard, 2002; Miller & Sag, 1997; Alsina, 1992).

Argument composition unifies the argument structure of the complex predicate at the level of *faire*

$$\begin{align*}
\text{faire-arg-comp-aux} \\
\text{ARG-ST} \langle \text{NP, V[ARG-ST 1]} \rangle \oplus 1
\end{align*}$$

Is this the right locus for clause union?

We consider and argue for the alternative: clause union at the level of the infinitive.
Double structure (Abeillé et al., 1997)

- Two types of causatives: control faire vs. non-control faire
- Syntactic differences
  - control faire:
    - Controller of downstairs subject invariably realised as a direct object pronominal affix
      
      (7) Je l’ ai fait manger des épinards.
      I DO.3SG have made eat INDEF.PL spinach
      ‘I made him eat spinach.’

    - no clitic climbing
  - non-control faire:
    - realisation of downstairs subject varies according to downstairs transitivity
      
      (8) Je lui ai fait manger des épinards.
      I IO.3SG have made eat INDEF.PL spinach
      ‘I made him eat spinach.’

    - clitic climbing (subject to further constraints)
Double structure (Abeillé et al., 1997)

- Two types of causatives: **control faire** vs. **non-control faire**

- Syntactic differences
  - **control faire**:
    - Controller of downstairs subject invariably realised as a direct object pronominal affix
    - no clitic climbing

  
  (9)  
  
  Je l’ai fait en manger.  
  I do.3sg have made do.indef eat  
  ‘I have made him eat some.’

  - **non-control faire**:
    - realisation of downstairs subject varies according to downstairs transitivity
    - clitic climbing (subject to further constraints)

  
  (10)  
  
  Je lui en ai fait manger  
  I io.3sg do.indef have made eat  
  ‘I have made him eat some.’
Downstairs subject status

- The subject of the infinitive is postverbal
  
  (11) Le chat fait tomber le vase.

- Its marking depends on a property of the infinitive (its transitivity)
  
  (12) La panthère fait traverser la route à ses petits.

- Permutation with other dependents of the infinitive is licit
  
  (13) La panthère fait traverser à ses petits la route qui les séparait du point d’eau.
  ‘The leopard make the cubs cross the road that separates them from the watering place.’

- It can be subject to quantitative *en*-pronominalisation (normally reserved to DOs)
  
  (14) La panthère *en* fait traverser un (mais l’autre ne veut pas).
  ‘The leopard makes one of them cross (but the other one doesn’t want to).’

→ Local object status
Downstairs constraints: Subject by-phrases (de/par)

- The subject of the downstairs infinitive can alternatively be realised by a by-phrase (Koenig, 1998):
  - Choice of preposition depends on downstairs verb semantics
    - **de** with stative verbs
    - **par** with dynamic verbs
  - Construction-specific option must be conditioned inside-out

(15) a. Marc a fait suivre Jean *de / par Paul.
    Marc has made follow Jean of / by Paul
    ‘Marc had Jean followed 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.’
**Downstairs constraints: Trapping**

- Intrinsic clitics resist climbing in the *faire* construction
- Intrinsic clitics comprise
  - inherent and medio-passive *se*
  - reflexive *se* (some speakers)
  - other lexical clitics

(16)  

a. Le snobisme fait *se* vendre bien les classiques.  
   the snobism makes *self* sell well the classics  
   ‘Snobism makes the classics sell well.’ (Abeillé et al., 1998, 24)

b. Marie lui fait s’*en* souvenir.  
   Marie 10.3sg makes *self* of.it remember  
   ‘Marie makes him remember it.’

c. (*) Marie a fait *se* laver les enfants.  
   Marie has made *self* wash the children  
   ‘Marie has made the children wash themselves.’ (Abeillé et al., 1998, 24)

- Intrinsic clitics “trap” non-intrinsic clitics
Downstairs constraints: Trapping

- Intrinsic clitics resist climbing in the *faire* construction

- Intrinsic clitics comprise
  - inherent and medio-passive *se*
  - reflexive *se* (some speakers)
  - other lexical clitics

- Intrinsic clitics “trap” non-intrinsic clitics

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

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

   c. Tout leur fait vous en vouloir.
   everything IO.PL make 2.PL EN angry
   ‘Everything makes them angry at you.’

(Miller & Sag, 1997, 609–610)
Interim summary

- The downstairs subject behaves like a local complement
- Its marking is systematically decided by the downstairs infinitive
  - Transitivity (NP for intransitives, NP[à] for transitives)
  - Dynamic/stative semantics (NP[par] vs. NP[de])
- These properties are contingent on embedding under causative predicate (Koenig, 1998; Aguila-Multner & Crysmann, 2021)
- Trapping equally fixed downstairs
- Clause union at the level of faire does not adequately capture these properties
Problems with the argument composition approach I

- Problem 1: Binding Principle A
  "A locally o-commanded anaphor must be locally o-bound"

(18) \(\text{Il}_i \text{ va se}_i \text{ faire offrir des fleurs.}
\) ‘He’ll get himself offered some flowers.’

- With argument composition, the downstairs arguments are structure-shared and appear twice

![Argument Composition Diagram]

- Different binding-theoretical results on the two verbs
  - On *faire*, the anaphor is bound by the subject
  - On *offrir*, it is unbound, contrary to Principle A
Problems with the argument composition approach II

- Problem 2: Non-local en-pronominalisation
  - NP[de] complements of DOs can be pronominalised as en
    
    ‘I read the end of the book. I read the end of it.’

  - NP[de] complement can be deeply embedded in a complement
    - Locality parallel to dont relativisation
    - Miller & Sag (1997) capture the parallelism by having a lexical rule on verbs intercept the slash dependency

  - This use of en is (un)surprisingly trapped in the presence of intrinsic pronominals:
    
    (20) J’ai fait s’en rappeler la fin aux élèves.
    ‘I made the students remember the end of it.’

    (21) ?? J’en ai fait se rappeler la fin aux élèves.

  - Application of en-cliticisation rule cannot be blocked on faire
    - presence of inherent clitics not detectable upstairs
Problems with the argument composition approach III

- Problem 3: Modifier attachment
  - Downstairs modifiers are interpreted as referring to the caused event

  \[(22)\] Le pharaon a fait construire la pyramide péniblement aux esclaves. ‘The pharaoh made the slaves build tirelessly the pyramid.’

  \[(23)\] Le pharaon a fait construire la pyramide impitoyablement aux esclaves. ‘The pharaoh made the slaves build mercilessly the pyramid.’

- In a flat structure, adjuncts should be expected to modify only the head (faire), not a co-dependent, failing to account for (22)
- Alternatively, if modifiers are treated as complements (Bouma et al., 2001), a complement modifier of faire should be expected to permute with the downstairs dependents, incorrectly predicting (23)
The alternative

To give the downstairs verb full control over the various realisation properties of its arguments, let’s take clause union one storey down.

Argument composition raises an entire argument structure - our approach only needs to augment the downstairs verb’s by 1.
Causativisation inside-out

- We rely on previous approaches to inflectional periphrasis (Vincent & Börjars, 1996; Ackerman & Webelhuth, 1998; Bonami & Webelhuth, 2013; Bonami, 2015)
- We can think of clitic climbing as part of inflectional periphrasis (Aguila-Multner & Crysmann, 2020), including with causatives (Aguila-Multner & Crysmann, 2021)
- We now picture clause union in causatives as a similar case of periphrasis, with argument extension of the downstairs verb, akin to a lexical causative
- This is implemented as a lexical rule that anticipates a causer argument
- Reverse selection lets us condition causativised infinitives to only be licit when there is a suitable ancillary element (faire)

\[
\begin{align*}
\text{ARG-ST} & \quad \square \quad \Rightarrow \quad \text{ARG-ST} \quad \langle \text{NP} \rangle \oplus \quad \square
\end{align*}
\]
Benefits

- Local complement status of downstairs subject

\[
\begin{align*}
\text{ARG-ST } & \text{[a}\langle \text{NP}_j, \text{NP}_k \rangle ] \Rightarrow \text{ARG-ST } \langle \text{NP}_i \rangle \oplus \text{[a}\langle \text{NP}_j \text{[MARK \ à], NP}_k \rangle ]
\end{align*}
\]

- The local complement status derives naturally from its demotion after the addition of the external subject (causer) to ARG-ST
- Permutation with other dependents possible
- Marking (bare/à/par/de) decided locally
- No need for *faire* to look into its complement’s lexical semantics to choose between *par* and *de*
Benefits

- Local complement status of downstairs subject
- Downstairs verb has full control over upstairs vs. downstairs realisation of clitic clusters (trapping)
  - No need for *faire* to look into its complement’s morphology to check the presence or absence of intrinsic arguments
- The downstairs verb complies with Principle A
- The hierarchical structure correctly predicts the semantics of modifier attachment
- Also gives a straightforward account of VP coordination

(24) Elle leur fait [traverser la route] et [boire l’eau du lac].
Benefits

- Local complement status of downstairs subject
- Downstairs verb has full control over upstairs vs. downstairs realisation of clitic clusters (trapping)
- The downstairs verb complies with Principle A

(24) Il s’est fait offrir des fleurs.

\[
\begin{align*}
\text{offrir} \\
\text{ARG-ST} \langle \text{NP}_i, \text{NP}_k, \text{NP}_i:ana, (\text{PP}_j) \rangle \\
\end{align*}
\]

- *faire* trivially complies as well, having no anaphor on its argument list
Benefits

- Local complement status of downstairs subject
- Downstairs verb has full control over upstairs vs. downstairs realisation of clitic clusters (trapping)
- The downstairs verb complies with Principle A
- The hierarchical structure correctly predicts the semantics of modifier attachment
  - Modifiers inside the internal VP attach to the caused event
  - Modifiers external to it attach to the causing event
Benefits

- Local complement status of downstairs subject
- Downstairs verb has full control over upstairs vs. downstairs realisation of clitic clusters (trapping)
- The downstairs verb complies with Principle A
- The hierarchical structure correctly predicts the semantics of modifier attachment
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(24) Elle leur fait [ traverser la route ] et [ boire l’eau du lac ].
Analysis I

- Causativised verbs generated with an argument extension lexical rule
  - Prepends an argument corresponding to the external subject/causer
  - Adds a requirement for a verb of causing
  - Requirement is now an Elementary Predication containing the external argument’s index

Figure: Lexical rule for causativised verbs
Analysis II

- No synthetic exponent of causative property in French: the property is deferred to an ancillary element by a periphrasis rule (Aguila-Multner & Crysmann, 2020, 2021)
- This rule also defers expression of any pronominal affixes found on the INFL(ection) set, covering clitic climbing
- Interaction with trapping unchanged from previous analysis

```
[ HEAD.VFORM  nonfinite ]
[ REV-SEL  \{1 \cup 2\} \cup 3 ]
[ INFL  \{\} ]
[ DTR  \{\begin{array}{c}
\text{REV-SEL} 3 \\
\text{INFL} 1 \left\{\begin{array}{c}
\text{caus-rel} \\
\text{ARG1} i \\
\end{array}\right\} \cup 2 \text{praf-set}
\end{array}\} ]
```

Figure: Morphological rule for causative periphrasis
Analysis III

- *Faire* satisfies morphological requirements of its complement
- Semantic constraint also matched

![Diagram](image)

**Figure:** Lexical entry for causative *faire*
Sample derivation

\[
\begin{array}{c}
\text{V} \\
\text{la leur fait} \\
\text{SUBJ} \langle 1 \rangle \\
\text{COMPS} \langle 2 \rangle \\
\text{CONT.RELS} \{ c \}
\end{array}
\]

\[
\begin{array}{c}
\text{V} \\
\text{traverser} \\
\text{SUBJ} \langle 1 \rangle \\
\text{COMPS} \langle 2 \rangle \\
\text{REV-SEL} \{ r \}
\end{array}
\]

\[
\begin{array}{c}
\text{Adv} \\
\text{rapidement}
\end{array}
\]
Sample derivation - Reflexive

- Argument extension makes the binder available downstairs
- Reflexive use covered by binding theory
Medio-passive *se*

- Usually treated as argument reduction (Grimshaw, 1982; Wehrli, 1986)

(25) **Les voitures** se réparent rapidement de nos jours.
    ‘**Cars** are repaired quickly these days.’

(26) **Les voitures** se font réparer pour pas cher de nos jours.
    ‘**Cars** get repaired for very little these days.’

Figure: Lexical rule for medio-passives

- Promotion of a (usually inanimate) **DO**
- Suppression of the **subject**
- Exponent: reflexive *se*
Sample derivation - Medio-passive

- Medio-passive rule applies to causativised infinitive
- Mismatch between raised subject and ARG1
- We need to reverse-select for Elementary Predications
Conclusion

▶ Clause union in French causatives effected on downstairs verb
▶ Argument structure extension, similar to a lexical causative
  ▶ Augmentation of ARG-ST with causer argument
  ▶ Inside-out selection for a causer role
▶ *Faire* as an ancillary element in a periphrastic causative
▶ Periphrastic approach now covers the full range of clause union phenomena
  ▶ Clitic climbing/trapping still covered
  ▶ Long reflexives, compatible with binding theory
  ▶ Long medio-passives
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References I


