Clitic climbing in French causatives: a periphrasis account

Gabrielle Aguila-Multner and Berthold Crysmann

Laboratoire de linguistique formelle — CNRS & U Paris

HPSG 2020

Clitic climbing in French

- Clitic climbing refers to the realisation of pronominal arguments on a higher verb than the lexical verb/predicate they are an argument of
- In French these include:

(1) Auxiliary *avoir/être*

a. Le chat l’ a cassé.
the cat DO.SG have.PRS.3SG broken
‘The cat broke it.’

b. Le chat y est allé.
the cat LOC be.PRS.3SG gone
‘The cat went there.’

(2) Passives/predicatives

(3) Causatives

(4) Perception verbs

Clitic climbing in French

- Clitic climbing refers to the realisation of pronominal arguments on a higher verb than the lexical verb/predicate they are an argument of
- In French these include:

(1) Auxiliary *avoir/être*

(2) Passives/predicatives

a. Un chat leur sera donné.
a cat IO.PL be.FUT.3SG given
'A cat will be given to them.'

b. Le chat nous est supérieur.
the cat 1PL be.PRS.3SG superior
'The cat is superior to us.'

(3) Causatives

(4) Perception verbs

Clitic climbing in French

- Clitic climbing refers to the realisation of pronominal arguments on a higher verb than the lexical verb/predicate they are an argument of
- In French these include:

(1) Auxiliary *avoir/être*

(2) Passives/predicatives

(3) Causatives

a. Je le ferai manger au chat.
I DO.SG.M make.FUT.1SG eat to.the cat
'I will make the cat eat it.'

b. Je le laisserai manger au chat.
I DO.SG.M let.FUT.1SG eat to.the cat
'I will let the cat eat it.'

(4) Perception verbs

Clitic climbing in French

- Clitic climbing refers to the realisation of pronominal arguments on a higher verb than the lexical verb/predicate they are an argument of
- In French these include:

  (1) Auxiliary *avoir/être*

  (2) Passives/predicatives

  (3) Causatives

  (4) Perception verbs

  Je l’ ai vu casser par le chat.
  I DO.SG have.PRS.1SG seen break by the cat

  ‘I saw the cat break it.’

Clitic climbing in French

- Clitic climbing refers to the realisation of pronominal arguments on a higher verb than the lexical verb/predicate they are an argument of
- In French these include:

  (1) Auxiliary *avoir/être* ✓

  (2) Passives/predicatives ✓

  (3) **Causatives**

  (4) Perception verbs

- Classical HPSG analyses derive climbing via argument composition
- Aguila-Multner & Crysmann (2020) suggest that clitic climbing with auxiliaries and passives/predicatives should be analysed as a case of periphrastic morphology, instead of argument composition
- **Aim of this paper**: extend the morphological perspective to **causatives!**

French causative constructions

- 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

      (5) 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

      (6) 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)
- Semantic difference

French causative constructions

- 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

      (7) 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)

      (8) Je lui en ai fait manger
      I IO.3SG DO.INDEF have made eat
      ‘I have made him eat some.’

- Semantic difference

French causative constructions

- 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
  - **non-control** *faire*:
    - realisation of downstairs subject varies according to downstairs transitivity
    - clitic climbing (subject to further constraints)
- Semantic difference
  - **Control** *faire* implies direct control of embedded event by the causee

(9) # Faites-les aimer Proust !
make-DO.3PL love Proust
'Make them like Proust.'

(10) Faites-leur aimer Proust !
make-IO.3PL love Proust
'Make them like Proust.'

  - No direct causation implied by **non-control** *faire*

Standard HPSG analysis: argument composition

$$\left[\begin{array}{l} \textit{arg-comp-aux} \\ \\ \textsc{arg-st}\ \langle \boxed{1} \rangle \oplus \langle \mathrm{V} \left[\begin{array}{ll} \textsc{subj} & \langle \boxed{1} \rangle \\ \textsc{comps} & \boxed{2} \end{array}\right] \rangle \oplus \boxed{2} \end{array}\right]$$

- Argument composition makes downstairs arguments available for upstairs realisation
- Additional evidence in favour of argument composition (Miller, 1992):
  - permutation of downstairs subject with downstairs dependents

    (11) Pierre a fait échanger les jouets aux enfants contre des livres.
    Pierre has made exchange the toys to.the children against some books
    'Pierre made the children swap the toys for books.' (Miller, 1992, 238)

  - ban on downstairs negation

    (12) * Pierre fera ne pas rire Marie.
    Pierre will make NEG not laugh Mary
    (Miller, 1992, 240)

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

(13) 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 IO.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

(14) 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)

Downstairs constraints: Subject by-phrases (*de/par*)

- Choice of by-phrase depends on verb semantics:
  - *de* with stative verbs
  - *par* with dynamic verbs

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

b. Le poisson a été suivi de / *par des rôtis.
the fish has been followed of / by some roasts
'The fish has been followed by a roast.'

- Non-control *faire*: subject of downstairs infinitive can be realised by by-phrase (Koenig, 1998):
  - Choice of preposition depends on downstairs verb
  - Construction-specific option must be conditioned inside-out

(16) 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.'

Coordination

- VP complements of non-control *faire* can be coordinated

(17) Elle la leur a fait apprendre par cœur et réciter le
she DO.SG.F IO.PL have.3SG.PRS made learn by heart and recite the
lendemain.
next.day
'She made them learn it by heart and recite it the next day.'

- Conjuncts may differ with respect to their subjects' case marking:

(18) Elle a fait lire Sartre par les garçons et réciter Prévert
she have.3SG.PRS made read Sartre by the boys and recite Prévert
aux filles.
to.the girls
'She made the boys read Sartre and the girls recite Prévert.'

- VP analysis can capture coordination facts in terms constituent coordination
- Argument composition needs to rely on non-constituent coordination

Summary

- Main empirical findings
  - Marking of downstairs subject systematically decided by downstairs infinitive
    - Transitivity (NP for intransitives, NP[à] for transitives)
    - Dynamic/stative semantics (NP[par] vs. NP[de])
  - "Quirky case" assignment contingent on embedding under causative predicate (Koenig, 1998)
  - Trapping equally fixed downstairs
- Implications: independently required inside/out conditioning opens up a new perspective of the causative construction
  - Downstairs case/marking assignment
  - Inversion analysis of "quirky" lexical subjects
    - directly captures permutation with downstairs complements/adjuncts
  - Clitic climbing
    - periphrastic realisation akin to compound tenses (dependent on tense auxiliary)
    - trapping is standard direct realisation for infinitives

Causativisation

$$\begin{bmatrix} \textsc{head} & \begin{bmatrix} \textsc{vform} & \textit{nonfinite} \end{bmatrix} \\ \textsc{rev-sel} & \langle \begin{bmatrix} \textsc{lid} & \textit{faire-lid} \end{bmatrix} \rangle \\ \textsc{subj} & \langle \mathrm{NP}_i \begin{bmatrix} \textsc{marking} & \textit{bare} \vee \textit{à} \vee \textit{par} \vee \textit{de} \end{bmatrix} \rangle \\ \textsc{comps} & \boxed{1} \\ \textsc{dtr} & \begin{bmatrix} \textsc{rev-sel} & \langle\rangle \\ \textsc{subj} & \langle \mathrm{NP}_i \rangle \\ \textsc{comps} & \boxed{1} \end{bmatrix} \end{bmatrix}$$

Figure: Lexical rule for causativised verbs

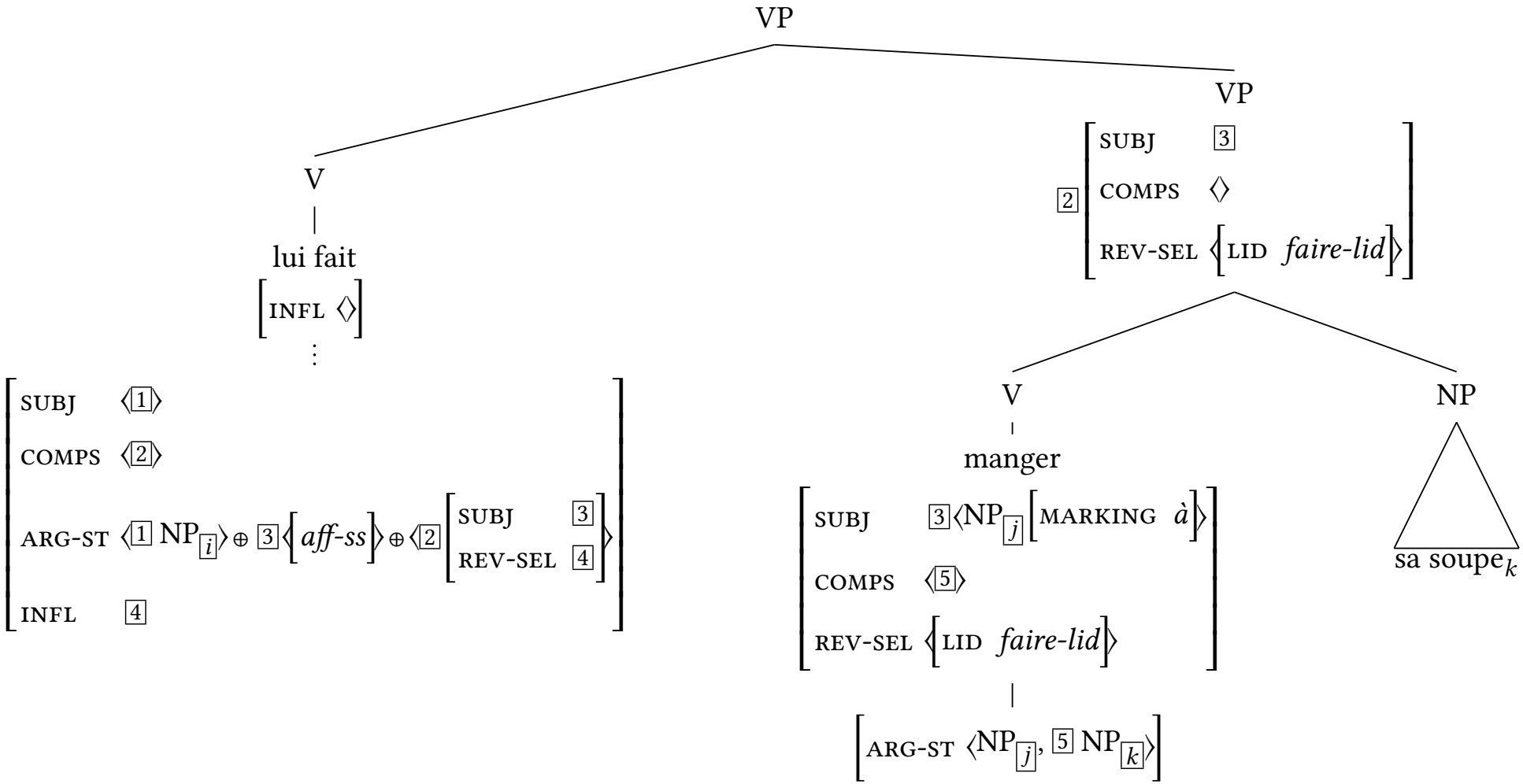
- Subtypes of the rule decide the marking of the quirky subject based on lexical properties (transitivity, dynamic/stative semantics)

Non-control *faire*

$$\left[\begin{array}{l} \textit{faire-non-control} \\ \textsc{cont} \quad \left[\begin{array}{ll} \textit{causing-rel} & \\ \textsc{causer} & \boxed{i} \\ \textsc{soa-arg} & \boxed{c} \end{array}\right] \\ \textsc{arg-st} \quad \langle \mathrm{NP}_{\boxed{i}} \rangle \oplus \boxed{s} \oplus \left\langle \left[\begin{array}{ll} \textsc{head} & \left[\textsc{vform} \;\; \textit{inf}\right] \\ \textsc{subj} & \boxed{s} \; \textit{list}\left(\left[\textit{aff-ss}\right]\right) \\ \textsc{comps} & \langle\,\rangle \\ \textsc{rev-sel} & \langle \boxed{c} \rangle \circ \boxed{a} \; \textit{list}\left(\left[\textit{praf}\right]\right) \\ \textsc{cont} & \boxed{c} \end{array}\right] \right\rangle \\ \textsc{infl} \quad \langle \boxed{c} \left[\textsc{lid} \;\; \textit{faire-lid}\right] \rangle \circ \boxed{a} \end{array}\right]$$

Figure: Non-control *faire*

Sample derivation: *lui fait manger sa soupe*

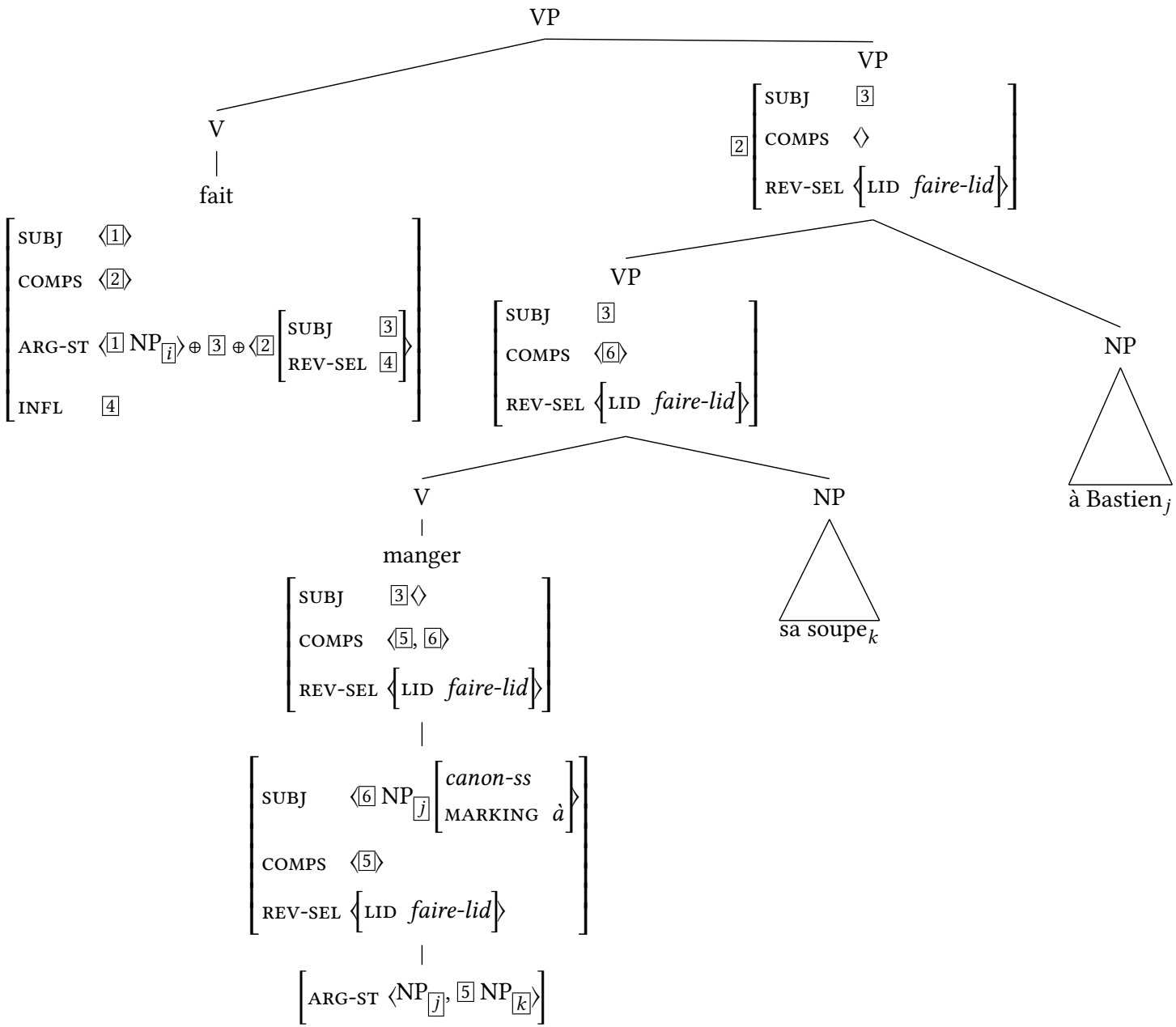


Subject inversion

$$\begin{bmatrix} \textsc{subj} & \langle\rangle \\ \textsc{comps} & \boxed{2} \oplus \langle \boxed{1} \rangle \\ \textsc{dtr} & \begin{bmatrix} \textsc{rev-sel} & \langle \begin{bmatrix} \textsc{lid} & \textit{faire-lid} \end{bmatrix} \rangle \\ \textsc{head.vform} & \textit{nonfinite} \\ \textsc{subj} & \langle \boxed{1} \ \mathrm{NP} \begin{bmatrix} \textit{canon-ss} \\ \textsc{marking} \quad \textit{bare} \vee \textit{à} \vee \textit{par} \vee \textit{de} \end{bmatrix} \rangle \\ \textsc{comps} & \boxed{2} \end{bmatrix} \end{bmatrix}$$

Figure: Lexical rule for subject inversion

Sample derivation: *fait manger sa soupe à Bastien*



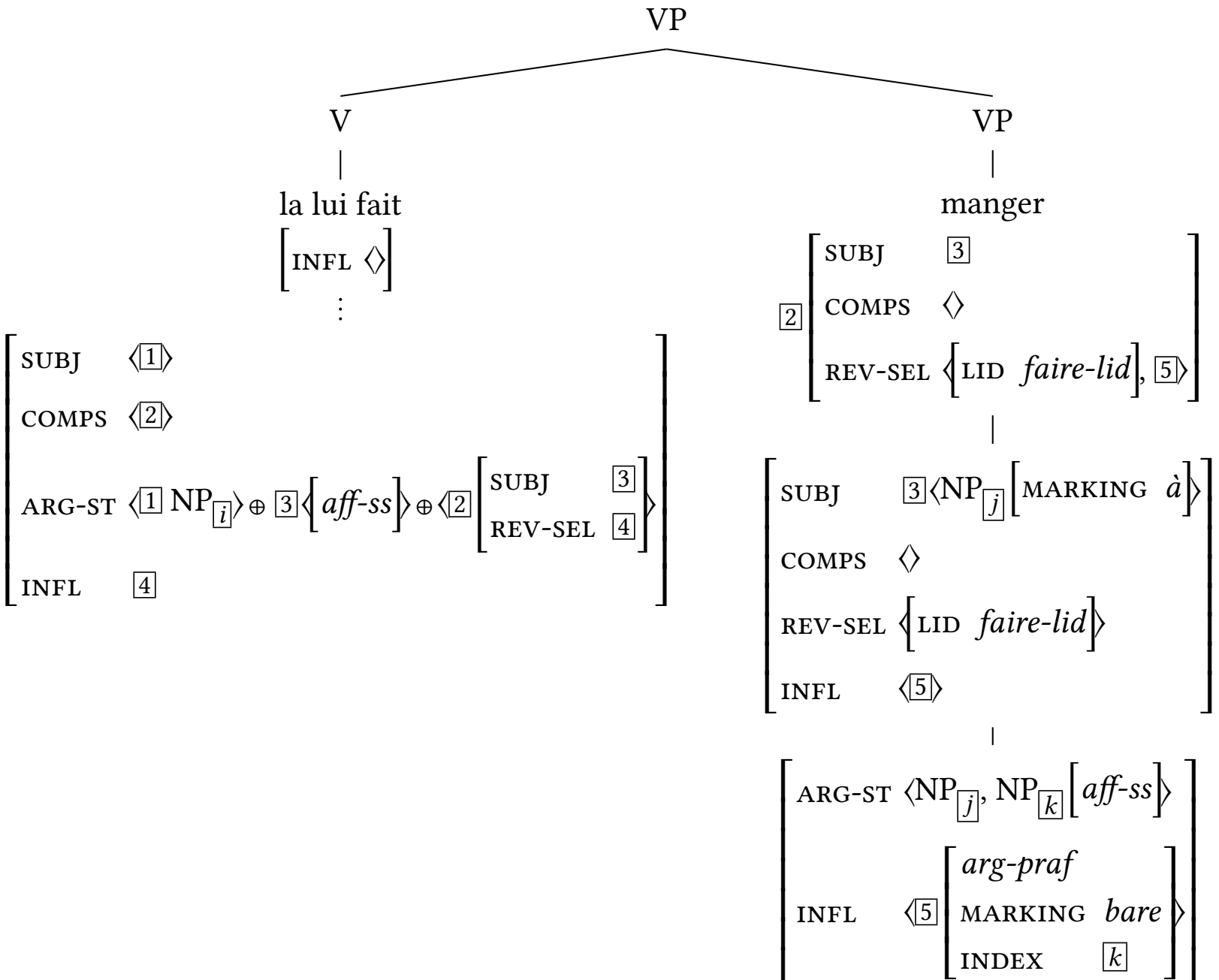
Delegation of pronominal affixes

$$\begin{bmatrix} \textsc{head.vform} & \mathit{inf} \\ \textsc{infl} & \langle\rangle \\ \textsc{rev-sel} & \boxed{r} \circ \boxed{c} \oplus \boxed{a} \\ \textsc{dtr} & \begin{bmatrix} \textsc{infl} & \boxed{a}\ \mathit{list}\left(\left[\mathit{arg\text{-}praf}\right]\right) \\ \textsc{rev-sel} & \boxed{r} \circ \boxed{c}\left\langle\left[\textsc{lid}\ \ \mathit{faire\text{-}lid}\right]\right\rangle \end{bmatrix} \end{bmatrix}$$

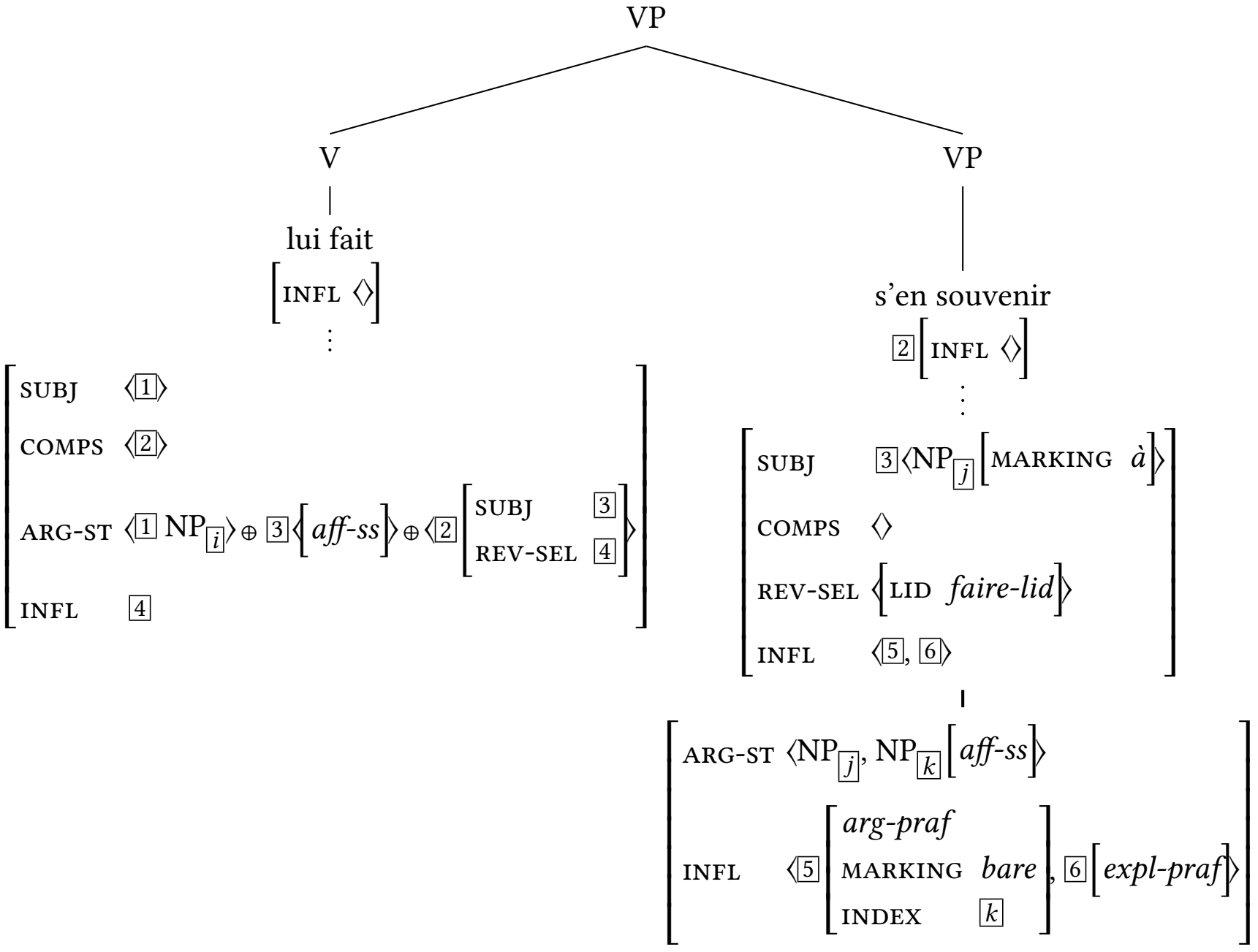
Figure: Lexical rule for periphrastic realisation of affixes

- Rule is modelled on the periphrastic rule for participles, but restricted to apply to argument clitics only (*arg-praf*)
- Rule contrasts with general synthetic (i.e. local) realisation of pronominal affixes, otherwise found with infinitives

Sample derivation: *la lui fait manger*



Sample derivation: *lui fait s'en souvenir*



Control *faire*

$$\left[\begin{array}{l} \textit{faire-object-control-verb} \\ \textsc{cont} \quad \left[\begin{array}{ll} \textit{causing-rel} & \\ \textsc{causer} & \boxed{i} \\ \textsc{causee} & \boxed{j} \\ \textsc{soa-arg} & \boxed{c} \end{array}\right] \\ \textsc{arg-st} \ \langle \mathrm{NP}_{\boxed{i}}, \mathrm{NP}_{\boxed{j}}\left[\textit{aff-ss}\right], \mathrm{VP} \left[\begin{array}{ll} \textsc{head} & \left[\textsc{vform} \ \textit{inf}\right] \\ \textsc{rev-sel} & \langle\rangle \\ \textsc{val} & \left[\begin{array}{ll} \textsc{subj} & \langle \mathrm{NP}_{\boxed{j}} \rangle \\ \textsc{comps} & \langle\rangle \end{array}\right] \\ \textsc{cont} & \boxed{c} \end{array}\right] \rangle \end{array}\right]$$

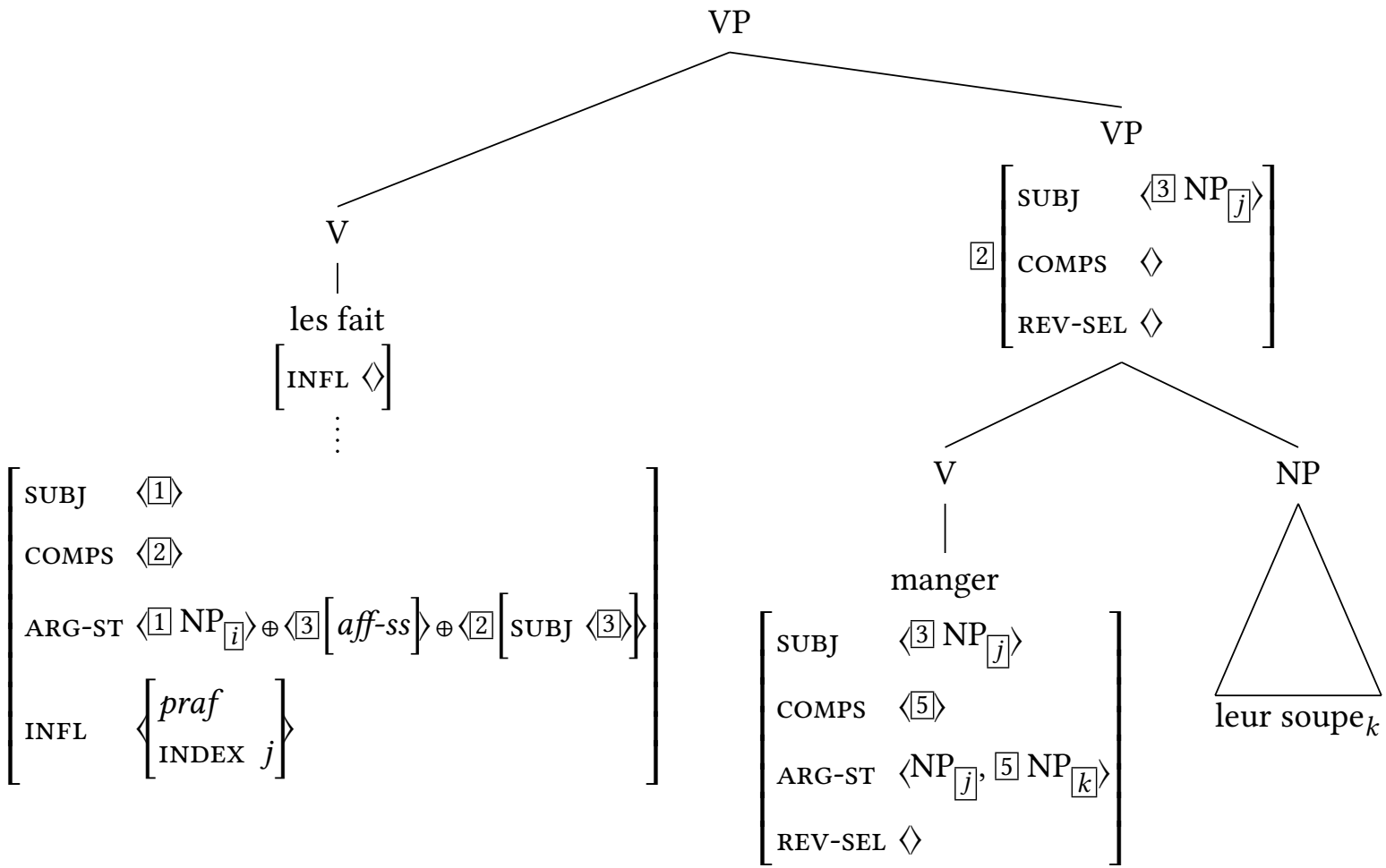
(a) Control

$$\left[\begin{array}{l} \textit{faire-non-control} \\ \textsc{cont} \quad \left[\begin{array}{ll} \textit{causing-rel} & \\ \textsc{causer} & \boxed{i} \\ \textsc{soa-arg} & \boxed{c} \end{array}\right] \\ \textsc{arg-st} \ \langle \mathrm{NP}_{\boxed{i}} \rangle \oplus \boxed{s} \oplus \langle \mathrm{VP} \left[\begin{array}{ll} \textsc{subj} & \boxed{s} \ \textit{list}\left(\left[\textit{aff-ss}\right]\right) \\ \textsc{rev-sel} & \langle \boxed{c} \rangle \circ \boxed{a} \\ \textsc{cont} & \boxed{c} \end{array}\right] \rangle \\ \textsc{infl} \quad \boxed{c}\left[\textsc{lid} \ \textit{faire-lid}\right] \circ \boxed{a} \ \textit{list}\left(\left[\textit{praf}\right]\right) \end{array}\right]$$

(b) Non-control

Figure: The two entries for *faire*

Sample derivation: *les fait manger leur soupe*



Negation

- Infinitival negation *ne pas* cannot premodify complement of non-control *faire*, but may do so with control *faire*

(19) Le stress le/*lui fait ne pas manger sa soupe.
the anxiety DO/IO makes NEG not eat his soup
'Anxiety makes him not eat his soup.'

- Constraint also holds for other periphrastic tenses, e.g. the *futur proche* ban on downstairs negation unrelated to argument composition

(20) * Je vais ne pas la manger.
I am going to NEG not 3SG.F eat
(intended) 'I am going to not eat it (the soup).'

(21) Je ne vais pas la manger.
I NEG am going to NOT 3SG.F eat
'I am not going to eat it (the soup).'

- Analysis: modifier *ne pas* cannot disrupt a periphrastic dependency, i.e. it selects for a [REV-SEL ⟨⟩] infinitive

Conclusion

- Current proposal extends the periphrasis-based approach to clitic climbing from analytic tenses to causative construction
- Approach
  - builds on inside-out constraints (Koenig, 1998) to derive:
    - downstairs control over marking of subject
    - downstairs control over inversion
    - downstairs control over trapping
    - clitic climbing
  - obviates the need for argument composition
  - provides a straightforward account of VP coordination
- Analysis can be generalised to *laisser* 'let' and perception verbs

Clitic climbing in French causatives: a periphrasis account

Gabrielle Aguila-Multner and Berthold Crysmann

Laboratoire de linguistique formelle — CNRS & U Paris

HPSG 2020

Laisser and the perception verbs

- Same double structure: one control entry, one non-control entry with climbing
- In the control structure, the controlled subject can be phrasal

(22) Elle a vu/laissé les enfants dormir.
she has seen/let the children sleep
'She saw/let the children sleep.'

$\Rightarrow$ No constraint on synsem type of controlled subject

Non-control *laisser*

$$\left[\begin{array}{ll} \textit{laisser-non-control} & \\ \textsc{cont} & \left[\begin{array}{ll} \textit{letting-rel} & \\ \textsc{permitter} & \boxed{i} \\ \textsc{soa-arg} & \boxed{c} \end{array}\right] \\ \textsc{arg-st} & \langle \mathrm{NP}_{\boxed{i}} \rangle \oplus \boxed{s} \oplus \langle \mathrm{VP} \left[\begin{array}{ll} \textsc{subj} & \boxed{s}\ \textit{list}\left(\left[\textit{aff-ss}\right]\right) \\ \textsc{rev-sel} & \langle \boxed{c} \rangle \circ \boxed{a}\ \textit{list}\left(\left[\textit{praf}\right]\right) \\ \textsc{cont} & \boxed{c} \end{array}\right] \rangle \\ \textsc{infl} & \boxed{c}\left[\textsc{lid}\ \ \textit{laisser-lid}\right] \circ \boxed{a} \end{array}\right]$$

Figure: Non-control *laisser*

Control *laisser*

$$\left[\begin{array}{l} \textit{laisser-object-control-verb} \\ \textsc{cont} \quad \left[\begin{array}{ll} \textit{letting-rel} & \\ \textsc{permitter} & \boxed{i} \\ \textsc{permittee} & \boxed{j} \\ \textsc{soa-arg} & \boxed{c} \end{array}\right] \\ \textsc{arg-st} \ \langle \text{NP}_{\boxed{i}}, \text{NP}_{\boxed{j}}, \text{VP} \left[\begin{array}{ll} \textsc{head} & \left[\textsc{vform} \ \textit{inf}\right] \\ \textsc{rev-sel} & \langle\rangle \\ \textsc{val} & \left[\begin{array}{ll} \textsc{subj} & \langle \text{NP}_{\boxed{j}} \rangle \\ \textsc{comps} & \langle\rangle \end{array}\right] \end{array}\right] \rangle \\ \textsc{cont} \quad \boxed{c} \end{array}\right]$$

Figure: Control *laisser*

References I

Abeillé, Anne, Danièle Godard & Ivan Sag. 1998. Two kinds of composition in French complex predicates. In Erhard Hinrichs, Andreas Kathol & Tsuneko Nakazawa (eds.), *Complex predicates in nonderivational syntax*, 1–41. New York: Academic Press.

Aguila-Multner, Gabrielle & Berthold Crysmann. 2020. French clitic climbing as periphrasis. *Lingvisticæ Investigationes* 43(1). 39 pages. In press.

Koenig, Jean-Pierre. 1998. Inside-out constraints and description languages for hpsg. In Gert Webelhuth, Jean-Pierre Koenig & Andreas Kathol (eds.), *Lexical and constructional aspects of linguistic explanation*, 265–279. Stanford, CA: CSLI Publications.

Miller, Philip H. 1992. *Clitics and constituents in phrase structure grammar*. Garland, New York.

Miller, Philip H. & Ivan A. Sag. 1997. French clitic movement without clitics or movement. *Natural Language & Linguistic Theory* 15(3). 573–639.