

OBJECT TO SUBJECT RAISING, REFLEXIVE PASSIVE AND 3 TO 2 ADVANCEMENT IN FRENCH

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0. Introduction

This paper focuses on two well-known phenomena, Object to Subject Raising (henceforth OSR) and Reflexive Passive in French: OSR is informally a process which turns a Non-subject into a Subject. In French, OSR constructions seem to obey various constraints, depending on the type of ascende and lower predicate involved: some superficial direct objects can raise in the OSR construction, some can't; some intransitive predicates in causative constructions allow OSR, some don't; inherent reflexives don't either. One goal of this paper is to formulate a single condition which accounts for all these facts by appealing to Relational Grammar (RG) notions such as Grammatical Relations (GRs), the Unaccusative Hypothesis, Multiattachment and Clause Union.

A second goal of this paper is to examine the French Reflexive Passive construction, whereby certain passive clauses have a reflexive form, and formulate a condition for nominals to undergo this process, in similar RG terms.

A third goal is to argue, on the basis of these conditions, that the grammar of French includes a productive type of revaluation, i.e. 3 to 2 Advancement, and propose a multistratal analysis of a class of French predicates, the *avertir* class.

1. The Facts of French

1.1. OSR in French

In French, OSR is triggered by predicates like *facile* 'easy', *difficile* 'difficult', *impossible* 'impossible'. The effect of this construction is to promote the direct object of the immediately embedded clause to subject of the higher clause. Consider (1b):

- (1) a. Il est toujours difficile de dire la vérité.
It is always difficult to tell the truth.
- b. La vérité est toujours difficile à dire.
Truth is always difficult to tell.

In (1b) OSR optionally promotes the 2 of the embedded clause, *la vérité*, to 1 of the matrix clause. Yet, certain 2s cannot raise in this construction:

- (2) a. Il est impossible d'avertir les passagers d'un danger imminent.
It is impossible to warn the passengers about an imminent danger.

- b. *Les passagers sont impossibles à avertir d'un danger imminent.
The passengers are impossible to warn about an imminent danger.

The grammar of French has to explain why the direct objects of different transitive clauses behave differently with respect to OSR. Moreover it has to account for other 'mysterious' facts of French as shown in sentences (3) and (4):

- (3) a. Il est facile de faire jouer les enfants dans la cour.
It is easy to make the children play in the yard.
b. *Les enfants sont faciles à faire jouer dans la cour.
(The) children are easy to make play in the yard.
- (4) a. Il est facile de faire fondre la glace au soleil.
It is easy to have the ice melt in the sun.
b. La glace est facile à faire fondre au soleil.
The ice is easy to have melt in the sun.

In (3a) and (4a) the embedded clause under *facile* is an example of the causative Clause Union construction triggered by *faire* (Perlmutter and Postal (1974), Gibson and Raposo (to appear)). Sentence (4b) shows that the argument of the intransitive clause embedded under *faire*, *la glace*, is raised to subject of the matrix clause with *facile*. Sentence (3b) shows that certain subjects of intransitive clauses cannot appear in OSR constructions embedded under causative Clause Union.

1.2. Reflexive Passive in French

French has pairs of related sentences such as (5a) and (5b):

- (5) a. On lit ce livre facilement.
Unspecified reads this book easily.
b. Ce livre se lit facilement.
This book reads itself (= is read) easily.

Sentence (5b) is an example of the Reflexive Passive construction in French. The nominal *ce livre* which heads an initial 2-arc in (5a) heads a final 1-arc in (5b) and appears with reflexive morphology, i.e. *se*. Sentence (6) shows that Reflexivization is obligatory in this process:

- (6) *Ce livre lit facilement.
This book reads (=is read) easily.

The contrasts in grammaticality observed in the OSR construction (see (1) and (2), (3) and (4)) extend to the Reflexive Passive construction. Consider the following sentences:

- (7) *Les passagers s'avertissent facilement d'un danger imminent.
Passengers are easily warned about an imminent danger.
- (8) *Les enfants se font jouer facilement dans la cour.
Children are easily made to play in the yard.
- (9) La glace se fait fondre facilement au soleil.
Ice is easily made to melt in the sun.

The contrast between (5b) and (7) shows that some 2s can undergo Reflexive Passive while others cannot.

In this paper I shall argue that the difference between (1) and (2), (5b) and (7) can be accounted for if the nominal *les passagers* in (2) and (7) is an initial 3 that advances to 2. The contrast between (8) and (9) shows that some subjects of intransitive clauses embedded under *faire* can undergo Reflexive Passive while others cannot. I shall argue that the Unaccusative Hypothesis proposed by Perlmutter (1978) accounts for the grammaticality of (4b) and (9) and the ungrammaticality of (3b) and (8).

2. The OSR construction and the Unaccusative Hypothesis

2.1. The OSR construction

In French the OSR construction is governed by predicates such as *facile* 'easy', *difficile* 'difficult' and *impossible* 'impossible'. OSR optionally promotes the 2 of the immediately embedded clause to 1 of the matrix clause:

- (10) a. Il est facile de lire ces livres.
It is easy to read these books.
b. Ces livres sont faciles à lire.
These books are easy to read.

In (10a) the nominal *ces livres* is the 2 of the embedded clause. In (10b) *ces livres* is the final 1 of the matrix clause. It determines plural agreement with the matrix predicate, *sont*. Sentences (11a,b,c) show that a 3 cannot raise in the OSR construction but the 2 of a clause can:

- (11) a. Il est facile de lire ce livre aux enfants.
It is easy to read this book to the children.
b. *Les enfants sont faciles à lire ce livre (à):
(The) children are easy to read this book to.
c. Ce livre est facile à lire aux enfants.
This book is easy to read to the children.

In French a 1 cannot raise to be the subject of an OSR predicate:

- (12) a. Les étudiants travaillent tous les jours.
Students work everyday.
b. *Les étudiants sont impossibles à travailler tous les jours.
Students are impossible to work everyday.

In French an Oblique from the embedded clause cannot raise in the OSR construction. Consider (13a) where *Paris* heads a Locative-arc and *le train* an Instrumental-arc in the embedded clause. Both fail to raise in (13b) and (13c):

- (13) a. Il est facile d'aller à Paris par le train.
It is easy to go to Paris by train.
b. *Paris est facile à aller par le train (à).
Paris is easy to go by train to.
c. *Le train est facile à aller à Paris (par).
The train is easy to go to Paris by.

At this point I shall propose a tentative statement of the condition on OSR in French:

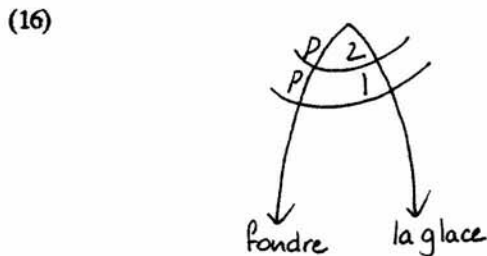
- (14) *Condition on OSR* (first version):
Only a nominal heading a 2-arc can raise in the OSR construction.

2.2. The Unaccusative Hypothesis

Perlmutter (1978) and Perlmutter and Postal (1984a) have argued that two types of intransitive clauses can be distinguished, according to the form of the initial stratum. According to the Unaccusative Hypothesis, sentence (15):

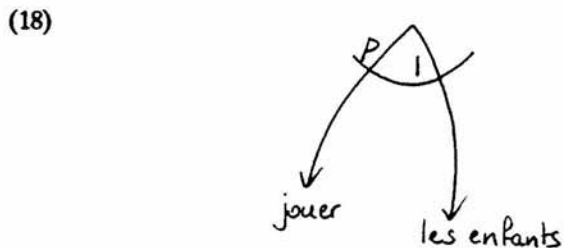
- (15) La glace fond.
The ice is melting.

is associated with the following Relational Network (RN):



The initial stratum is Unaccusative, i.e. it has a 2 but no 1. The initial 2 advances to 1 in the next stratum by what is called Unaccusative Advancement. Under the Unaccusative Hypothesis it is claimed that sentences like (15) contrast with so-called Unergative clauses, i.e. clauses which have an initial 1 but no initial 2. Sentence (17) is initially unergative as shown in its RN:

- (17) Les enfants jouent.
The children are playing.



Sentence (17) is a monostratal intransitive clause. Its initial and final stratum has a 1 but no 2.

Besides independent motivation by Raposo (1979) and Olić (1982), I claim here that evidence for the Unaccusative Hypothesis in French comes from the contrast between sentences like (3) and (4); other relevant examples include:

- (19) a. Il est facile de faire téléphoner Pierre à Marie.
It is easy to make Peter call Mary.
b. *Pierre est facile à faire téléphoner à Marie.
Peter is easy to make call Mary.
- (20) a. Il est facile de faire rouspéter les enfants.
It is easy to make the children grumble.
b. *Les enfants sont faciles à faire rouspéter.
The children are easy to make grumble.
- (21) a. Il n'est pas facile de faire tomber Pierre.
It is not easy to make Peter fall down.
b. Pierre n'est pas facile à faire tomber.
Peter is not easy to make fall down.
- (22) a. Il n'est pas facile de faire sécher ce pull en laine.
It is not easy to make this wool sweater dry out.
b. Ce pull en laine n'est pas facile à faire sécher.
This wool sweater is not easy to make dry out.

OSR is a phenomenon which splits the intransitive clauses (embedded under causative *faire*) into two groups. If *jouer*, *téléphoner*, *rouspéter* on the one hand and *fondre*, *tomber*, *sécher* on the other were all intransitive verbs of the same kind, one would see no reason why they should differ here. Furthermore, the membership of the two groups bears some resemblance, from the viewpoint of meaning, to the corresponding groups in other languages that do present evidence for unaccusativity.¹

Taking *jouer* vs. *fondre* to represent both classes of verbs, consider the following sentences: (23) involves an unergative predicate, (24) an unaccusative predicate:

- (23) a. Les enfants jouent dans la cour.
The children are playing in the yard.
b. *Les enfants sont faciles à jouer dans la cour.
The children are easy to play in the yard.
- (24) a. La glace fond au soleil.
The ice is melting in the sun.
b. *La glace est facile à fondre au soleil.
The ice is easy to melt in the sun.

With sentence (12b) we saw that a 1 cannot raise in the OSR construction. The fact that both (23b) and (24b) are ungrammatical shows that finals 1s (whether they are initial 1s or advancees to 1 by Unaccusative Advancement) cannot undergo OSR. The ungrammatical (24b) is evidence that an initial 2 that is not also a final 2 cannot appear in the OSR construction.

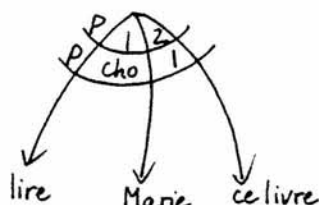
Consequently, other kinds of Advancement from 2 to 1, such as Personal Passive, are predicted incompatible with OSR. Consider sentence (25b) which involves Personal Passive:

- (25) a. Marie a lu ce livre.
Mary read that book.

- b. Ce livre a été lu par Marie.
This book was read by Mary.

As shown in the stratal diagram, (25b) involves an initial stratum containing a 1- and a 2-arc. In the next stratum the initial 2 advances to 1, thereby putting the initial 1 en chômage:

(26)



Sentence (27) shows that the advancee to 1 cannot appear in the OSR construction:

- (27) *Ce livre est facile à être lu par Marie/les enfants.
That book is easy to be read by Mary/the children.

The ungrammaticality of (27) parallels that of (23b) and (24b), suggesting that the condition on OSR in French requires the ascende to be a final 2 in the complement:

- (28) *Condition on OSR* (second version):
Only a nominal heading a final 2-arc can raise in the OSR construction.

3. OSR and Locative to 2 Advancement

Locative to 2 Advancement exists in French but it is extremely restricted since only one predicate, *habiter* 'live', seems to allow it:

- (29) a. Les Dupont habitent dans une grande villa.
The Duponts live in a large villa.
b. Les Dupont habitent une grande villa.
The Duponts occupy a large villa.

That the nominal *une grande villa* in (29a) heads a Locative-arc is shown by cliticization: *y* 'there' is a Locative clitic in French:

- (30) Les Dupont y habitent pendant les vacances.
The Duponts live there during the holidays.

Evidence for 2-hood of the advancee in (29b) comes from the fact that it can cliticize as the accusative clitic and can undergo Personal Passive as in:

- (31) a. Les Dupont l'habitent pendant les vacances.
The Duponts occupy it during the holidays.
b. Cette grande villa est habitée par les Dupont pendant les vacances.
This large villa is occupied by the Duponts during the holidays.

Sentences (31a,b) corroborate the claim that *une grande villa* in (29b) is a final 2. But advancees to 2 cannot undergo OSR:

- (32) a. Il sera impossible d'habiter cette grande villa pendant les vacances.
It will be impossible to occupy this large villa during the holidays.
b. *Cette grande villa sera impossible à habiter pendant les vacances.
This large villa will be impossible to occupy during the holidays.

The ungrammaticality of (32b) shows that OSR cannot be stated in terms of final 2-hood alone. Furthermore, the ungrammaticality of the unaccusative sentence (24b) and (27) shows that OSR cannot be stated in terms of initial 2-hood alone either. This observation leads to the following reformulation of the condition on OSR:

- (33) *Condition on OSR* (third version):
Only a nominal heading both an initial and final 2-arc can raise in the OSR construction.

4. OSR and the causative Clause Union construction

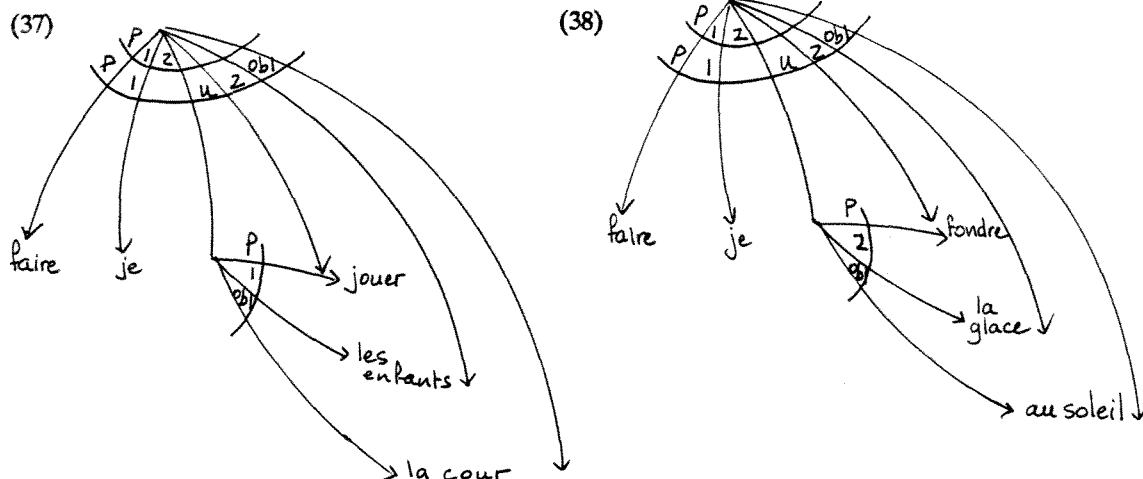
4.1. Causative Clause Union

In Clause Union (CU) constructions two clauses (matrix and complement) show up superficially as a simplex clause. In French, *faire* triggers causative CU, as studied by Gibson and Raposo (to appear). Gibson and Raposo propose both a universal rule schema called the Inheritance Principle, whereby downstairs non-1s either retain their last downstairs relation or go into chômage, and language particular revaluation rules based on their main claim that variation in CU across languages is limited to a single parameter, i.e. the fate of the downstairs 1 upstairs. They claim that there are no other language-particular rules than the 2 or 3 upstairs revaluation of the downstairs 1; in particular a direct chômage of the downstairs 1 is excluded.² Fauconnier (1983) challenges this last point with evidence from French: his proposal does not involve any language-particular revaluation strategy; he allows for a weakening of the Final 1-Law³ and proposes a downstairs freeze which prevents Advancement from 2 to 1 in the complement clause.⁴ Another view of the downstairs freeze⁵ is adopted by Rosen (1984a) who argues that Personal Passive does not occur internally to the union complement in Italian.

I will show how the OSR facts provide an additional argument for the downstairs freeze hypothesis. Consider first simple causative CU sentences in French:

- (34) J'ai fait jouer les enfants dans la cour.
I made the children play in the yard.
(35) J'ai fait fondre la glace au soleil.
I made the ice melt in the sun.
(36) J'ai fait lire le livre aux enfants.
I made the children read the book.

Sentence (34) involves an unergative predicate downstairs and (35) an unaccusative predicate. Following the Unaccusative Hypothesis and the characterization of Clause Union in French, the RNs of (34) and (35) are (37) and (38), respectively:



In (37) the nominal *les enfants* heads an initial 1-arc downstairs and a 2-arc upstairs; the nominal *la glace* in (38) heads an initial 2-arc downstairs and a 2-arc upstairs (the question whether there is Advancement from 2 to 1 downstairs in (38) will be addressed shortly). That both nominals bear the 2-relation upstairs can be verified by cliticization:

- (39) a. Je les ai fait jouer dans la cour.
I made them play in the yard.
b. Je l'ai fait fondre au soleil.
I made it melt in the sun.

where *les* and *l'* are occurrences of the accusative clitic. In (36) the nominal *les enfants* heads an initial 1-arc downstairs and a 3-arc upstairs: it is preceded by the preposition *à* in the contracted form *aux*, which marks final 3s in French, and it cliticizes with the dative clitic *leur* as in:

- (39) c. Je leur ai fait lire le livre.
I made them read the book.

4.2. Evidence against Advancement in the complement clause

In French, there is a class of unaccusative predicates which appear with the reflexive pronoun *se*; they include *s'évanouir* 'faint', *se taire* 'keep quiet', *se soûler* 'get drunk', etc.. Fauconnier (1983) notes that in simplex sentences 2 to 1 Advancement is obligatorily reflexive for these verbs:

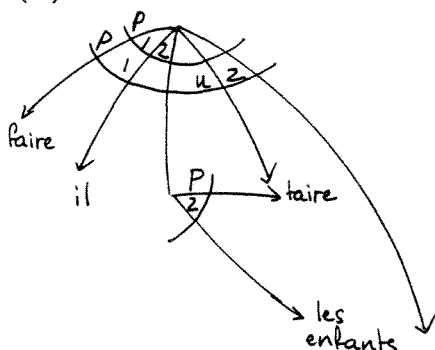
- (40) a. Les enfants se taisent.
The children keep quiet.
b. *Les enfants taisent.
The children keep quiet.

The presence of reflexive *se* can be interpreted as a signal that 2 to 1 Advancement has occurred. When sentence (40a) is embedded under a causative predicate, we get two grammatical sentences, although (41a) is, I think, preferable to (41b):

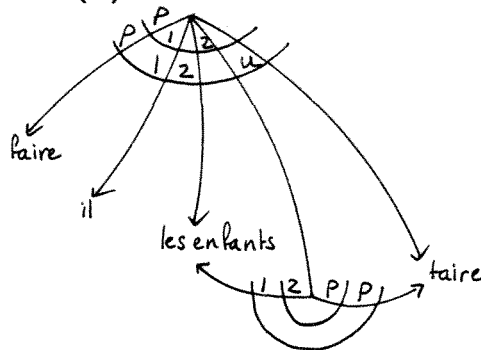
- (41) a. Il fait taire les enfants.
He makes the children keep quiet.
b. Il fait se taire les enfants.
He makes the children keep quiet.

Following the above remark on the presence of *se* I claim that Unaccusative Advancement does not occur in the downstairs clause of (41a) whereas it does in the downstairs clause of (41b); consider the corresponding RNs:⁶

(42) realized with *taire*



(42) realized with *se taire*



Now, if we embed sentences (41a,b) under an OSR predicate, only sentence (43a), where the reflexive *se* does not appear, is grammatical; its presence in (43b) leads to ungrammaticality:

- (43) a. Les enfants sont impossibles à faire taire.
The children are impossible to make keep quiet.
b. *Les enfants sont impossibles à faire se taire.
The children are impossible to make keep quiet.

Consider similar contrasts with other reflexive unaccusatives:

- (44) a. Le clairon a fait envoler/s'envoler les oiseaux.⁷
The trumpet made the birds fly away.
b. Les oiseaux seront faciles à faire envoler/*s'envoler si tu ouvres la cage.
The birds will be easy to make fly away if you open the cage.
- (45) a. La peur a fait noyer/se noyer le petit chat.
Fear made the kitten drown.
b. Le petit chat sera dur à faire noyer/*se noyer.
The kitten will be hard to make drown.
- (46) a. Il a fait soûler/se soûler ton ami.
He made your friend get drunk.

- b. Pierre n'est pas facile à faire tomber.
Peter is not easy to make fall.
 - c. Ce pull en laine n'est pas facile à faire sécher.
This wool sweater is not easy to make dry out.
- (51) a. La vérité n'est pas toujours facile à faire dire.
Truth is not always easy to make unspecified tell.
- b. Ce livre est facile à faire lire aux enfants.
This book is easy to have children read.
 - c. Ce paquet n'est pas facile à faire envoyer à l'étranger.
This parcel is not easy to have sent abroad.

In (49a,b,c) the ascende is an initial 1 in the most deeply embedded clause and a 2 in the middle clause, following Gibson and Raposo's revaluation procedure of the downstairs 1; it fails to raise to become the subject of an OSR predicate because it violates condition (48): it heads an arc other than a 2-arc, i.e. an initial 1-arc. In (50a,b,c) the ascende is an initial 2 in the initially unaccusative stratum of the lowest clause; it does not advance to 1 downstairs; it is a 2 in the middle clause by virtue of the universal Inheritance Principle, and thus can raise to be the 1 in the matrix clause. Finally, in (51a,b,c) the ascende is a 2 in the transitive complement clause and a 2 upstairs by virtue of the Inheritance Principle. That upstairs 2 can then raise to be the 1 of the matrix clause containing the OSR predicate.

Let's again contrast the causative sentences (50a,b,c) with their non-causative counterparts, illustrated under (52), respectively:

- (52) a. *La glace est facile à fondre au soleil.
The ice is easy to melt in the sun.
- b. *Pierre n'est pas facile à tomber.
Peter is not easy to fall.
 - c. *Ce pull en laine n'est pas facile à sécher.
This wool sweater is not easy to dry.

Again, sentences (52a,b,c) are ungrammatical because the ascende heads an arc other than a 2-arc (Unaccusative Advancement occurs in the lowest clause) while (50a,b,c) are grammatical because the ascende heads only 2-arcs (Unaccusative Advancement does not occur in the union complement). Crucially, the discussion of causative structures corroborates that of simplex sentences: the facts fall out if one adopts a theory of Clause Union that incorporates the independently motivated notion of downstairs freeze and the above formulation of the condition on OSR (48).

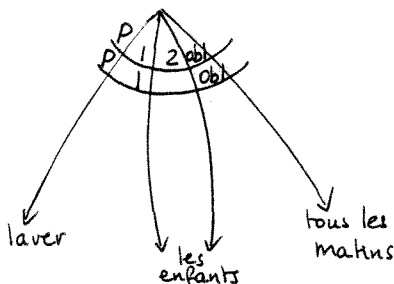
5. OSR and the Multiattachment Hypothesis

The idea of Multiattachment developed in RG by Perlmutter (to appear) is that there exist structures where one nominal bears two or more GRs in the same stratum. The notion of multiattachment was first used to handle clause internal coreference facts and was subsequently extended to cover cases where a nominal bears GRs in two or more clauses as in Raising. In French, clause-internal multiattachment handles various instances of reflexive morphology which occurs in a wide range of structures, including simple Reflexive as in (53), Reciprocal as in (54), Reflexive Passive as in (55), and Reflexive Unaccusative as in (56):

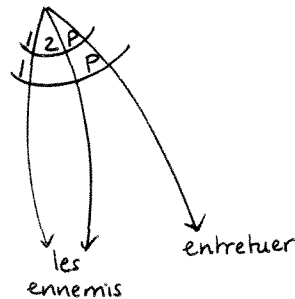
- (53) Ces enfants se lavent tous les matins.
These kids wash themselves every morning.
- (54) Les ennemis se sont entretués.
The enemies killed each other.
- (55) Le champagne français se vend bien à l'étranger.
French champagne sells well abroad.
- (56) Il s'est soûlé hier soir.
He got drunk last night.

In the final stratum of a clause a nominal cannot bear more than one GR, multiattachment must therefore be resolved. Assuming here the mechanism of cancellation of the lower relation, following Rosen (1981), the RNs corresponding to sentences (53) and (54) contain a multiattachment in the initial stratum with subsequent cancellation in the second:

(57)

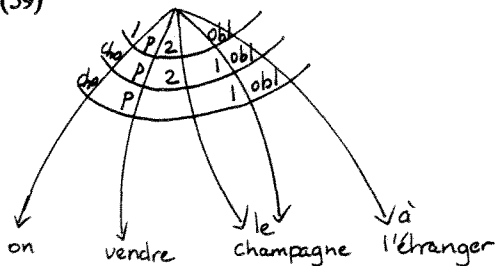


(58)

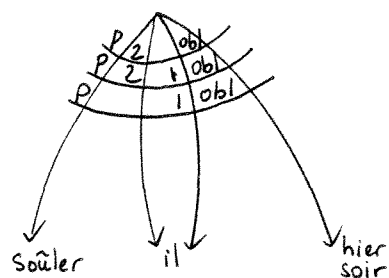


The reflexive clitic *se* is interpreted as a verb affix marking cancellation. The RNs corresponding to sentences (55) and (56) contain a nominal which is multiattached only in the second stratum; this is called retroherent advancement (see Rosen, 1981 for a clear exposition of the idea):

(59)



(60)



Note that in each of these RNs a nominal heads both a 1-arc and a 2-arc in the same stratum. Our condition on OSR (48) predicts that that nominal could never raise to be the subject of an OSR predicate. This prediction is borne out, as illustrated under (61):

- (61) a. *Ces enfants seront difficiles à se laver les mains.
These kids will be difficult to wash their hands.
b. *Les ennemis seront faciles à s'entretuer.
The enemies will be easy to kill each other.
c. *Le champagne français est facile à se vendre à l'étranger.
French champagne is easy to sell abroad.
d. *Ton ami sera facile à se sôuler.
Your friend will be easy to get drunk.

Recall the ungrammatical sentence with *se taire*:

- (61) e. *Les enfants sont impossibles à faire se taire.
The children are impossible to make keep quiet.

Sentence (61e) was claimed to be ungrammatical because Unaccusative Advancement occurs downstairs. Given the more precise account of multiattachment exposed above, it is ungrammatical because Retroherent Unaccusative Advancement occurs downstairs. In the second stratum of the lowest clause the nominal *les enfants* heads a 1-arc and a 2-arc, followed by cancellation of the 2-arc.⁸ The generalization about the ungrammatical sentences under (61) is that the ascendeé heads another arc, namely a 1-arc, besides a 2-arc, thus violating condition (48). Consider now their grammatical counterparts:

- (62) a. Le champagne français est facile à faire vendre à l'étranger.
French champagne is easy to have sold abroad.
b. Ton ami ne sera pas difficile à faire sôuler.
Your friend will not be hard to get drunk.
c. Les enfants sont impossibles à faire taire.
The children are impossible to make keep quiet.

It becomes clear why sentences (62a,b,c) are grammatical: in these contexts, 2 to 1 advancement would be retroherent and consequently signalled by *se*. The absence of *se* is a sign that 2 to 1 advancement does not occur. Thus, the raisee is not a 1 at any level. It heads 2-arcs and only 2-arcs both in the lowest clause and in the union clause. Therefore it meets our condition on OSR (48).

6. Condition on OSR

I shall now sum up the whole range of cases examined, starting with grammatical sentences and pointing out the GRs borne by the OSR ascendeé (Asc) in the clauses below the OSR predicate:

- (63) a. Ce livre est facile à lire.
b. Ce livre est facile à faire lire aux enfants.
(Asc heads initial and final 2-arc downstairs and 2-arc in the middle clause)
c. La glace est facile à faire fondre au soleil.
(Asc heads initial and final 2-arc downstairs: no advancement; it heads 2-arc in the middle clause)
d. Les enfants sont impossibles à faire taire.
(Asc heads initial 2-arc downstairs; no advancement downstairs hence no multiattachment, hence no *se*; it heads 2-arc in middle clause)

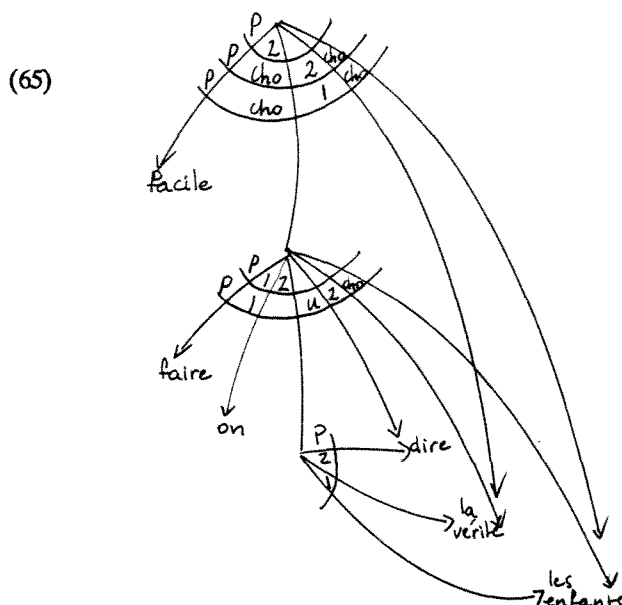
- e. *La glace est facile à fondre au soleil.
(Asc heads initial 2-arc downstairs but advances to 1)
- f. *Ce livre est facile à (faire) être lu par Marie.
(Asc heads initial 2-arc downstairs but advances to 1)
- g. *Ces enfants seront difficiles à (faire) se laver les mains.
(Asc heads 2-arc and 1-arc (multiattached) in the first stratum downstairs; cancellation downstairs; it heads 2-arc in the middle clause with *faire*)
- h. *Les ennemis seront faciles à (faire) s'entretuer.
(Asc heads 2-arc and 1-arc in the first stratum downstairs; cancellation downstairs; it heads 2-arc in the middle clause with *faire*)
- i. *Les enfants sont impossibles à faire se taire.
(Asc heads initial 2-arc and is multiattached in the second stratum downstairs; cancellation downstairs; it heads 2-arc in the middle clause)
- j. *Cette grande villa sera impossible à (faire) habiter pendant les vacances.
(Asc heads initial Oblique-arc and final 2-arc downstairs and in the middle clause with *faire*)

What do the grammatical sentences have in common that distinguishes them from the ungrammatical ones ? The answer is strikingly simple: in any clause below the OSR predicate the ascendee heads 2-arcs and 2-arcs only. Sentences (63e-j) are unacceptable because they involve either advancement or multiattachment, with the result that the ascendee bears a relation other than 2 at some level beneath the OSR predicate, thus violating the condition stated under (48).

Independent evidence (Fauconnier, 1983; Rosen, 1984_a) suggests that sentences like (64a) have a monostratal complement, i.e. Passive does not apply downstairs:

- (64) a. Il fera dire la vérité par les enfants.
He will have the truth told by the children.
- b. La vérité est facile à faire dire par les enfants.
Truth is easy to have it told by children.

We therefore predict that (64b) should be grammatical. And it is: the RN representation of (64b) is the following:



In (65) the initial 1 downstairs, *les enfants*, is not revalued and is a *chômeur* upstairs directly, thus avoiding a Stratal Uniqueness violation. Note that this no-revaluation strategy is only one option for French, since the semantically equivalent (66) is generally preferred to (64b):

- (66) La vérité est facile à faire dire aux enfants.
Truth is easy to have the children tell.

In French, OSR is 'bounded', i.e. no more than one clause can separate the OSR predicate from the clause out of which the nominal raises. Consider:

- (67) *Ces livres seront difficiles à dire que les enfants ont lus.
These books will be difficult to say that the kids have read.

In (67) the nominal *ces livres* heads an initial 2-arc in the lowest clause but does not head a final 2-arc in the clause immediately below the OSR predicate. This consideration leads us to a reformulation of the condition on OSR as follows:

- (68) *Condition on OSR (final):*
An OSR RN is well-formed only if
i) the ascendee heads an arc in the clause immediately beneath the OSR predicate
and
ii) every arc it heads below the OSR predicate is a 2-arc

Besides accounting for all grammatical and ungrammatical sentences in a very simple and general fashion, our condition on OSR unites a wide range of structures which a priori have nothing in common. But under the Multiattachment and the Unaccusative Hypotheses, they do have something in common, which allows this generalization to be stated.

7. The Reflexive Passive construction and causative CU

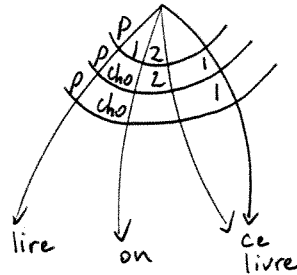
7.1. The Reflexive Passive construction

As mentioned in the introductory section, French has a construction like (69):

- (69) Ce livre se lit facilement.
This book is easily (= reads itself) read.

where the initial 1 is always understood as *ON*, i.e. unspecified. Assuming the multiattachment hypothesis discussed earlier, sentence (69) can be represented as follows:

(70)

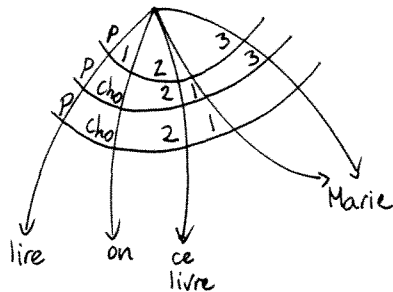


In French, sentences like (71b) and (72b) are ungrammatical.⁹

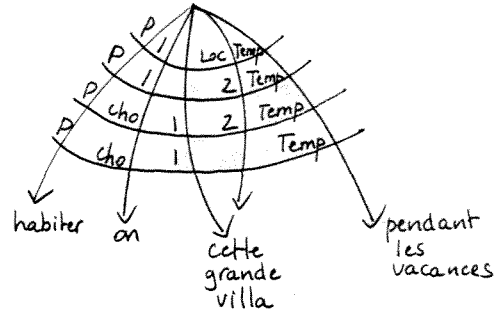
- (71) a. On a lu ce livre à Marie.
Unspecified read this book to Mary.
b. *Marie s'est lu ce livre.
Mary was read this book.
- (72) a. On habite cette grande villa pendant les vacances.
Unspecified occupies this large villa during holidays.
b. *Cette grande villa s'habite pendant les vacances.
This large villa is occupied during holidays.

Consider the RNs of (71b) and (72b), respectively (73) and (74):

(73)



(74)

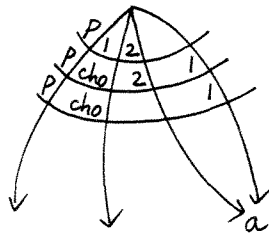


In (73) the nominal *Marie* heads a 1-arc and a 3-arc in the stratum with multiattachment, followed by cancellation of the 3-arc; in (74) the nominal *cette grande villa* heads an Oblique-arc, i.e. Locative and advances to 2 by Locative to 2 Advancement (see section 3); it is co-attached to a 1-arc in the next stratum, followed by cancellation of the 2-arc. The fact that the corresponding sentences are ungrammatical shows that only initial 2s are relevant for the characterization of Reflexive Passive constructions. I propose the following preliminary condition on Reflexive Passive in French:

(75) *Condition on Reflexive Passive (Preliminary):*

A Reflexive Passive RN like (76) is well-formed if a target nominal *a* heads an initial 2-arc:

(76)



7.2. Reflexive Passive and Causative CU

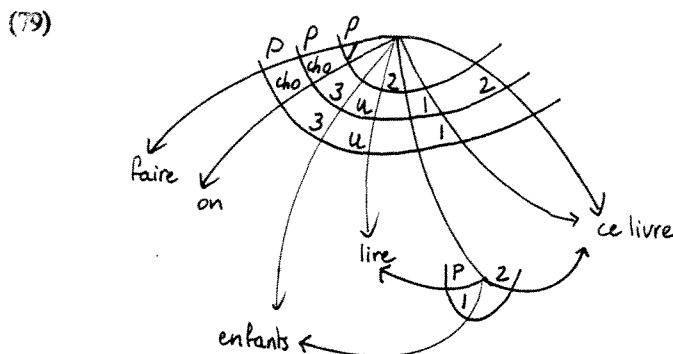
Consider sentence (77):

(77) Ce livre se fait facilement lire aux enfants
This book is easily made to be read by children.

Sentence (77) is semantically equivalent to (78):

- (78) On fait facilement lire ce livre aux enfants.
Unspecified makes children read this book easily.

To sentence (77) corresponds the following RN:



In (79) the nominal *ce livre* heads an initial 2-arc in the downstairs clause where *enfants* heads an initial 1-arc. In the union clause *enfants* heads a 3-arc; the initial 1-arc is unspecified; *ce livre* is multiattached in the second stratum upstairs, followed by retroherent advancement with concomitant appearance of the reflexive clitic. Consider now sentences (80) and (81):

- (80) La glace se fait fondre facilement au soleil.
The ice is made to melt easily in the sun.
- (81) *Les enfants se font jouer dans la cour.
The children are made to play in the yard.

Reflexive Passive sentences (80) and (81) are parallel to OSR sentences (50a) and (49c) and follow the same grammaticality pattern. In (80) the nominal *la glace* heads an initial 2-arc in the downstairs clause and the nominal *les enfants* in (81) heads an initial 1-arc. The contrast between (80) and (81) confirms that initial 2-hood is relevant to a characterization of Reflexive Passive in French.

7.3. Reflexive Passive and Multiattachment downstairs

As mentioned in the previous section, Reflexive Passive in causative union clauses involves multiattachment and retroherent advancement upstairs. Consider the following sentence (82) where the downstairs clause involves a simple Reflexive, i.e. multiattachment in the initial stratum with immediate cancellation of the 2-arc:

- (82) *Ces enfants se font se laver tous les jours.
These children are made to wash themselves everyday.

Sentence (82) is ungrammatical for the same reason the OSR sentences were ungrammatical when multiattachment occurred downstairs (see (61a-d)). It is not sufficient for the target nominal to head an initial 2-arc downstairs; it must head a single arc and that arc must be a 2-arc at all levels. In view of the multiple parallels between the condition on OSR and the condition on Reflexive Passive in French, the latter can be reformulated as follows:

- (83) *Condition on Reflexive Passive (final version):*
 A Reflexive Passive RN of a clause *a* is well-formed only if
 i) the nominal heading the initial 1-arc in *a* is unspecified
 and
 ii) every arc the target nominal heads before multiattachment is a 2-arc

Our condition accounts for all grammatical and ungrammatical sentences mentioned in section 7 and in the introductory section. Moreover it accounts for why initially unaccusatives don't form Reflexive Passives in French:¹⁰ consider the ungrammaticality of (84) as opposed to its grammatical causative counterpart (80):

- (84) **La glace se fond au soleil.*
 The ice is melted in the sun.

Sentence (84) violates clause i) of condition (83): because *fondre* is initially unaccusative, there is no initial 1-arc to be headed by an unspecified nominal.

We have so far arrived at a characterization of two constructions of French in terms of the same notion, that of 2-hood. Because 2-hood must be met at all levels, these two constructions constitute two tests for initial 2-hood. We can use them to account for some repeated here for convenience:

- (85) **Les passagers sont impossibles à avertir d'un danger imminent.*
 Passengers are impossible to warn about an imminent danger.
 (86) **Les passagers s'avertissent facilement d'un danger imminent.*
 Passengers are easily warned about an imminent danger.

8. 3 to 2 Advancement in French: an analysis of the *avertir* class

8.1. Two hypotheses

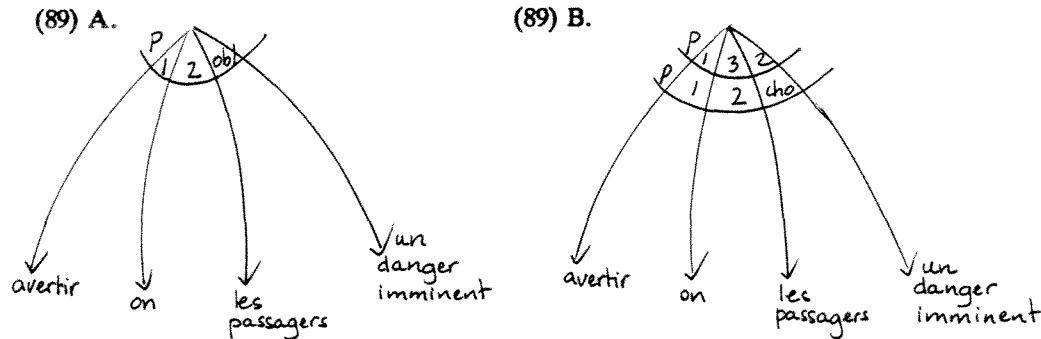
Consider again the parallel between sentences (87a) and (87b):

- (87) a. *On a lu ces livres aux enfants*
 Unspecified read these books to the children.
 b. *On a averti les passagers d'un danger imminent.*
 Unspecified warned the passengers about an imminent danger.

and the contrast between their OSR counterparts:

- (88) a. *Ces livres sont faciles à lire aux enfants.*
 These books are easy to read to the children.
 b. **Les passagers seront difficiles à avertir d'un danger imminent.*
 The passengers will be difficult to warn about an imminent danger.

Now, two hypotheses about the structure of (87b) can be proposed:



According to hypothesis A, (89) is monostratal: the nominal *les passagers* is an initial and a final 2 and *un danger imminent* is an Oblique. According to hypothesis B, (89) is bistratal: the nominal *les passagers* is an initial 3 that advances to 2¹¹, thus putting en chmage the initial 2, *un danger imminent*. Assuming our conditions on OSR (68) and on Reflexive Passive (83), hypotheses A and B make different predictions: hypothesis A predicts that the target nominal will undergo these processes whereas hypothesis B predicts that it won't.

8.2. Arguments for hypothesis B

8.2.1. Arguments for non-initial 2-hood

The conditions on OSR and Reflexive Passive we propose in this paper refer to 2-hood across syntactic levels. They predict that non-initial 2s that advance to 2 will not undergo these processes; and indeed (88b) and (90a-c) are ungrammatical:

- (90) a. *Les passagers sont difficiles  faire avertir d'un danger imminent.
Passengers are difficult to have warned about an imminent danger.
b. *Les passagers s'avertissent d'un danger imminent quand c'est absolument ncessaire.
Passengers are warned about an imminent danger whenever it is absolutely necessary.
c. *Les passagers se font avertir d'un danger imminent quand c'est absolument ncessaire.
Passengers are made to be warned about an imminent danger whenever it is absolutely necessary.

This is evidence that *les passagers* does not head an initial 2-arc. Without further counterevidence I assume that it heads an initial 3-arc.¹²

8.2.2. Arguments for final 2-hood

Two arguments can be given to show that the nominal *les passagers* heads a final 2-arc in (91a): first, it can cliticize with the accusative clitic as in (91b):

- (91) a. L'htesse a averti les passagers d'un danger imminent.
The stewardess warned the passengers about an imminent danger.
b. L'htesse les a avertis d'un danger imminent.
The stewardess warned them about an imminent danger.

Second, *les passagers* can undergo Personal Passive:

- (91) c. Les passagers ont été avertis d'un danger imminent (par l'hôtesse).
The passengers were warned about an imminent danger (by the stewardess).

Furthermore the ungrammaticality of sentence (92) shows that 3 to 2 Advancement is obligatory with *avertir*:

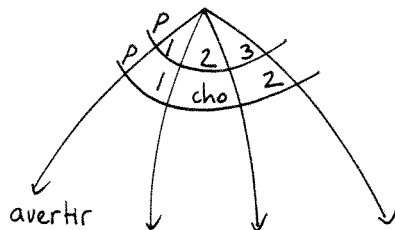
- (92) *L'hôtesse a averti un danger imminent aux passagers.
The stewardess warned an imminent danger to the passengers.

Under the 3 to 2 Advancement analysis the nominal *un danger imminent* is an initial 2 which demotes to chômeur as a result of 3 to 2 Advancement. Its status of final chômeur predicts that it cannot undergo OSR in simple and causative CU constructions; again hypothesis B makes the right prediction:

- (93) *Un danger imminent est difficile à (faire) avertir aux passagers.
An imminent danger is difficult to warn the passengers about (to have the passengers warned about).

8.2.3. Condition on the 'avertir' class

- (94) *Avertir*, etc. can occur only in structures of the form:



Among other things, condition (94) predicts that the nominal heading an initial 2-arc and a final chômeur will not undergo Personal Passive. And indeed, sentences (95a-b) are ungrammatical:

- (95) a. *Un danger imminent a été averti aux passagers.
An imminent danger was warned to the passengers.
b. *Un danger imminent a été averti les passagers.
An imminent danger was warned (to) the passengers.

Advancement from 3 to 2, widely attested in other languages,¹³ has been considered "mysteriously limited" in French (Postal, 1982). Yet, it appears that other verbs beside *avertir* exhibit the same behavior with respect to OSR and Reflexive Passive. They include *charger* 'put s.o. in charge of', *pourvoir*, *munir*, *nanir* 'provide', *aviser* 'announce', *renseigner* 'provide information', and this list may not be exhaustive. All these predicates are three-place predicates which never occur with superficial 3s. The following sample data shows that the OSR ascendeé does not head both an initial 2- and a final 2-arc in the following c-sentences, if it did we would expect them to be grammatical; the same can be

said about the target nominal in the Reflexive Passive d-sentences:

- (96) a. Il a chargé sa secrétaire d'une course urgente.
He put his secretary in charge of an urgent errand.
b. *Il a chargé une course urgente à sa secrétaire.
He gave an urgent errand to run to his secretary.
c. *Sa secrétaire était impossible à charger d'une course urgente.
His secretary was impossible to put in charge of an urgent errand.
d. *Toute secrétaire se charge de courses urgentes.
Any secretary is put in charge of urgent errands.
- (97) a. Napoléon a pourvu tous ses généraux d'un titre aristocratique.
Napoleon provided all his generals with aristocratic titles.
b. *Napoléon a pourvu des titres aristocratiques à tous ses généraux.
Napoleon provided aristocratic titles to all his generals.
c. *Tous les généraux de Napoléon ont été faciles à pourvoir de titres aristocratiques.
All Napoleon's generals were easy to provide with aristocratic titles.
d. *Tout général se pourvoit d'un titre aristocratique.
All generals are provided with aristocratic titles.
- (98) a. Il nantira ses filles d'une dot généreuse.
He will provide his daughters with a generous dowry.
b. *Il nantira une dot généreuse à ses filles.
He will provide a generous dowry to his daughters.
c. *Ses filles seront faciles à nantir d'une dot généreuse.
His daughters will be easy to provide with a generous dowry.
d. *Les filles se nantissent encore d'une dot généreuse.
Daughters are still provided with generous dowries.
- (99) a. On avisera les parents de leur arrivée.
We will notify the parents of their arrival.
b. *On avisera leur arrivée aux parents.
We will announce their arrival to the parents.
c. *Les parents seront faciles à aviser de leur arrivée.
The parents will be easy to announce their arrival to.
d. *Les parents s'aviseront à temps de leur arrivée.
The parents will be notified in time of their arrival.

9. Conclusion

This paper has provided a unified account of a wide range of constructions in terms of two independent simple very general constraints on OSR and on Reflexive Passive. A formulation of those constraints has been proposed in terms of metaclausal rules, the basic condition of which — heading only 2-arcs, regardless of clause — is, to my knowledge, unique in the literature.

This analysis provides further empirical evidence for the independently motivated Unaccusative and Multiattachment hypotheses. It has been shown that, on the one hand, unergative clauses group together with unaccusative clauses that do have the advancement, and on the other, that unaccusative clauses group together with constructions which involve multiattachment. Their common feature is

that a nominal can bear more than 1 relation; if those relations are different, the conditions on OSR and Reflexive Passive are violated.

Our analysis also touches on one important issue in RG, namely the characterization of Clause Union: specifically, it argues in favor of a downstairs freeze for French, and against Gibson's and Raposo's advancement analysis in causative union complements involving passive and unaccusatives.

Finally, our analysis provides evidence for multiple levels of syntactic structure. In the GB framework, Locative to 2 Advancement and 3 to 2 Advancement necessarily have to be lexical; yet Passive is syntactic: consequently sentences (27), (32b) and (88b) couldn't be ruled out by means of one unitary condition. Our OSR condition achieves this, and thereby provides evidence for an initial syntactic level at which nominals like *les passagers* in (2a) and *cette grande villa* in (29b), are not 2s. This analysis supports a syntactic framework which recognizes GRs at more than one level of syntactic representation.

Appendix

This analysis raises an issue, namely the possibility of formulating a similar condition in terms of thematic roles, in terms of the notion Patient with which direct objects are traditionally associated. An alternative formulation in terms of thematic roles would informally be of the following kind:

- (100) *Condition on OSR:*
 Only a Patient can raise in an OSR construction.
- (101) *Condition on Reflexive Passive:*
 Reflexive Passive applies only to Patients, provided the Agent is unspecified.

As claimed by Perlmutter (1978) a major subclass of the unaccusative class includes predicates whose initial nuclear term is semantically a Patient (see examples with *tomber*, *fondre*, *sécher* in the paper). Predicates that describe willed or volitional acts - therefore considered initially unergative - can appear in OSR constructions when it is clear from the context that the act is non-volitional but rather the result of an outside stimulus or even force:

- (102) *Cette fille n'est pas facile à faire rire.*
 This girl is not easy to make laugh.

is quite acceptable in a context where someone is trying hard to make the girl laugh, by telling jokes, making faces, etc. The following:

- (103) *Ce prisonnier ne sera pas difficile à faire parler.*
 This prisoner won't be hard to make talk.

can also be uttered when one thinks about some forceful methods which can be used to make someone talk. In these two cases the raisee does correspond to my intuitive notion of Patient but in other cases it is not clear to me whether we are dealing with a Patient or some other semantic notion, in particular when the nominal in question refers to something over which one can never have total control, as in:

- (104) Cette année, leurs profits seront difficiles à accroître.
This year, their profits will be difficult to increase.
- (105) Sans la crise, les taux d'intérêt seraient faciles à diminuer.
Without the crisis, interest rates would be easy to lower.

Another sub-class of unaccusative predicates includes those whose initial nuclear term is semantically an Experiencer (involuntary action):

- (106) Un enfant est facile à décourager.
A child is easy to discourage.

Finally, predicates of existing, happening, duratives can appear in OSR constructions; consider the following sentences where the raisee does not correspond either to my intuitive notion of Patient:

- (107) La chance n'est pas facile à faire tourner.
Chance isn't easy to make turn up.
- (108) Le bonheur n'est pas facile à faire durer.
Happiness isn't easy to make last.

What all these examples show is that there is not a one to one mapping between one semantic role and the OSR construction. The same can be said for Reflexive Passive. If OSR and Reflexive Passive were to be stated in terms of semantic roles, the conditions would have to include a whole list of them. Crucially however, such semantic condition would completely fail to explain the contrasts between (109) and (110), and other similarly reflexive unaccusative predicates:

- (109) Les enfants sont impossibles à faire taire.
- (110) *Les enfants sont impossibles à faire se taire.
Children are impossible to make keep quiet.

where the semantic role remains constant.

Footnotes

I am grateful to Sandra Chung, Gilles Fauconnier, Nora Gonzalez, Béatrice Lamiroy, David Perlmutter, Paul Postal, and Carol Rosen for valuable comments and suggestions on earlier versions of this paper. For comparing and sharing their native intuitions, I thank Gilles Fauconnier, Annie Olić and my colleagues from the UCSD Language Program. For help with the computer I thank Karen Andrews and Paul Smolensky. Any remaining errors are mine alone.

1. See Rosen (1984b), for a survey of this issue.

2. Gibson and Raposo assume that *les enfants* and *le secrétaire général* bearing an initial 2-relation in the following union structures: *j'ai fait tomber le garçon* 'I made the boy fall' (where the initial stratum downstairs is unaccusative), and *le comité central fera critiquer le secrétaire général par le bureau politique* 'the central committee will have the secretary general criticized by the political bureau' (where the initial stratum downstairs is transitive) are advancees and final 1s; therefore a Union Revaluation Rule is responsible for prescribing their upstairs 2-hood. I will argue against such a union

analysis for French in this paper.

3. The original Final 1 Law states that basic clause final strata must contain 1-arcs. Fauconnier's version states that every *final* clause must have a final 1.

4. In Fauconnier's analysis, if there is an initial 1 or advancement from Agent to 1 downstairs, it must undergo Equi.

5. Rosen's view of the downstairs freeze is different from Fauconnier's in that the downstairs 1 can only be an initial 1.

6. In the present formulation, RN (42) with *taire* does violate the original Final 1 Law.

7. Sentence (44a) is from Fauconnier (1983).

8. G. Fauconnier points out a difference in degree of ungrammaticality between instances of Advancement to 2, where the initial relation borne by the ascende is some other relation but a 2 and instances where an ascende heads an initial 2, some other relation on the same or a subsequent stratum and a final 2 relation (see multiattached structures): the latter sound much worse to a native ear; in other frameworks these cases would not even be relevant. RG and the concept of multiattachment provide us with an explanation as to why sentences under (61) are absolutely ungrammatical.

9. Some speakers find (71b) and (84) acceptable, with respectively the following readings: *Mary read that book to herself* and *The ice melts in the sun*. I personally find them totally unacceptable. At any rate, they don't constitute counterexamples since with those meanings, they are not Reflexive Passive sentences: in (71b) the reflexive clitic represents an initial 3 multiattached with the initial 1, *Marie*; in (84) *se fondre* would be an unaccusative predicate just like *s'évanouir*. Recall that the initial 1 of a Reflexive Passive must be unspecified.

10. A similar point is made for German Reflexive Impersonal Passives by Perlmutter and Postal (1984b) in the Appendix to *IPSL*.

11. The OSR argument in support of 3 to 2 Advancement for a class of French verbs was inspired by a similar argument in Spanish (Gonzalez, this volume).

12. The question of whether the initial 3 of the *avertir* class has something in common semantically with the object of predicates taking initial 3s, which distinguishes it from initial 2s, is an important question that deserves consideration but lies beyond the scope of this paper.

13. 3 to 2 Advancement has been attested in Tzotzil (Aissen, 1983), Indonesian (Chung, 1983), Southern Tiwa (Allen and Frantz, 1983), Spanish (Gonzalez, this volume), etc.

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