# **Subject Inversion in French. The Limits** of Information Structure

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#### Abstract

My objective here is to assess the relevance of information structural notions for analyzing subject inversion in French. Subject inversion is not a unified phenomenon. In fact, there are three distinct constructions featuring an inverted subject. I show that the sentences do not have the same informational potential (the type of focus-ground articulation they are compatible with) depending on the construction they abide by. I propose a contextual factor – the informational solidarity between the verb and its first argument – to account for those differences. Then, I show that the three constructions share a common feature that pertains to a completely different dimension: the perspective chosen to describe the situation. I adopt Langacker's notion of absolute construal to characterize it. Finally, I present another common feature: the blocking of the referential anchoring of the referent of indefinite and partitive NPs.

## 1 Introduction

Information structure is often invoked to analyze word order variations, in particular subject inversion in French. My point here is not to dismiss the relevance of information structure, but to put it in its right place. The various proposals linking subject inversion and information structure – the focus-ground and/or the topic-comment articulations of sentences – can be summarized in three proposals (1).

- (1) a. Inverted subjects are narrow foci;
  - b. Inverted subjects occur in broad or all focus sentences;
  - c. Inverted subject are detopicalized.

Until recently, the syntactic/constructional diversity of subject inversion has not been recognized. In fact, there are three different constructions featuring subject inversion, i. e. occurrence of subject NPs to the right of verbs.

- (2) a. Inversion in extraction-context [EXTR-INV]: le livre qu'a écrit Marie Lit. the book that has written Marie
  - b. Presentative inversion [pres-inv]: Alors entra un soldat.
  - Lit. Then entered a soldier.

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c. Inversion via permutation [PERM-INV] : Sont reçus Pierre et Marie. Lit. passed Pierre and Marie

A close scrutiny shows that these constructions do not behave informationally in the same way, which calls into question the relevance of the claims in (1). Hence, the link between subject inversion and information structure must be investigated afresh. My objective is twofold. First, I characterize the difference between the three constructions as regard information structure. I propose that the informational solidarity between the verb and its first argument affords – "contribute to the possibility of" – the use of EXTR-INV and PRES-INV. Then, I bring to light what the three constructions have in common. It does not pertain to the packaging of content, but to the content itself: the perspective chosen to describe the situation. I propose the notion of absolute construal (Langacker 2000) to characterize it. Finally, I relate the blocking of the referential anchoring of specific indefinites and partitive NPs to the demotion of postverbal subjects from their primary status in the description. Before proceeding further, I sketch some backstage assumptions about subject inversion in French.

## 2 Background

#### 2.1 Three constructions

There are three constructions featuring an inverted subject in French. The first one – *inversion in extraction context* (henceforth EXTR-INV) – is licensed by extraction. Its main criterial property is that it allows scrambling among the dependents of the verb (3) – a rather rare phenomenon in French – (Bonami & Godard 2000).

- (3) a. Je ne retrouve pas le livre que pensait [recommander [le professeur de philosophie]<sub>Subject</sub> à ses élèves pour l'examen]<sub>VP</sub>
  - Lit. I do not find the book that intended [to recommend [the philosophy professor] $_{Subject}$  to his students for the exam] $_{VP}$
  - b. Je ne retrouve pas le livre que pensait [recommander pour l'examen [le professeur de philosophie]<sub>Subject</sub> à ses élèves]<sub>VP</sub>
  - Lit. I do not find the book that intended [to recommend for the exam [the philosophy professor]<sub>SUBJECT</sub> to his students]<sub>VP</sub>

The other properties characterizing EXTR-INV are the unconstrained choice of verbs and the ban against referential NPs as direct object. In (4a), the bare noun *cours* is grammatical while the fully referential *des cours de logique* is not.

(4) a. la salle où fait cours Marie
Lit. the room where makes class Marie
b. ?? la salle où fait des cours de logique le tout nouveau prof de philo
Lit. the room where makes classes of logic the newly appointed philosophy teacher

The second construction – *inversion via permutation* (PERM-INV) – resembles a permutation of VP and the subject NP (5).

(5) a. [Les cartes de crédit et le permis de conduire] $_{NP-SUBJ}$  [ne sont pas des pièces d'identité] $_{VP}$  NP < VP

Lit. credit cards and the driving license are not IDs

b. [Ne sont pas des pièces d'identité] $_{VP}$  [les cartes de crédit et le permis de conduire] $_{NP-SUBJ}$  VP < NP

'The credit cards and the driving license are not IDs'

There is no constraint on the verb but, unlike EXTR-INV, no licensing context is required, referential objects are grammatical (6a) and scrambling is not possible (6b).

(6) a. Fait [un cours de logique aux linguists]<sub>NP-OBJECT</sub> [tout nouveau prof de philosophie]<sub>NP-SUBJECT</sub>

Lit. gives a class of logic to linguists each newly appointed philosophy teacher b. \* Fait un cours de logique [tout nouveau prof de philosophie]<sub>NP-SUBJECT</sub> aux linguistes.

Lit. gives a class of logic each newly appointed philosophy teacher to linguists

The third one – *presentative inversion* (PRES-INV) – is not always analyzed as a separate construction (see Lahousse 2006, 2011). However, it does have specific features that set it apart from STYL-INV and PRES-INV. Firstly, the verb should be presentative (7a) or in the passive (7b) (Marandin 2001). Secondly, the postverbal subject has object properties; in particular, it requires the encliticization of quantitative *en* when it is an indefinite nounless NP, which is a received criterion for objecthood (7).

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<sup>&</sup>lt;sup>1</sup> The most frequent presentative verbs in the corpus Frantext (http://www.frantext.fr/) are: apparaître, arriver, commencer, cesser, éclater, mourir, naître, passer, retentir, surgir, ...

<sup>&</sup>lt;sup>2</sup> In order to help the reader in the terminological maze: (i) *Inversion in extraction context* corresponds to the stylistic inversion of the generative tradition (i.a. Kayne 1973, Milner 1978); (ii) *Presentative inversion* corresponds to the unaccusative inversion proposed in Marandin 2001; (iii) *Inversion via permutation* corresponds to the elaborative inversion in Marandin (1997, 2010) or the focus inversion in Lahousse (1997, 2011). Many illustrations of PRES-INV and PERM-INV may be found in Atkinson 1973, Le Bidois 1950, Lahousse 2011.

- (7) a. Alors en entrèrent deux autres [de soldats].
  - a'. \* Alors entrèrent deux autres [de soldats]
  - Lit. Then entered two others [soldiers]
  - b. Je voudrais qu'en soient votés deux autres [de décrets].
  - b'. \* Je voudrais que soient votés deux autres [de décrets]
  - Lit. I would like that be voted two others [decrees]

Accordingly, the study of subject inversion must investigate each construction. This means that one should verify whether each proposal (for example (1) above) holds for all three constructions or merely for a subset of them.

## 2.2 Information structure and subject inversion

Due to space limitations, I do no give a detailed account of the many different proposals assigning inverted subjects a role in information structure (either focus-ground or topic-comment articulation).<sup>3</sup> Here, I give the more telling observations that motivate a change of tack.

- Proposal (1a): Inverted subjects are narrow foci (i.a. Drijkoningen & Kampers-Manhe 2001, Zubizarreta 1998). The claim can only be put to the test naturally with PRES-INV sentences. I ran an informal survey and a pilot questionnaire (allowing statistical measures). Informants were given the description of a scenario (8a) and a question, either a partial question on the subject (8b) or a broad question (8c).
- (8) a. Une assistante sociale discute avec une patiente qui se plaint de ses problèmes avec ses enfants.
  - 'A social worker talks to a patient who complains about her problems with her children.'
  - b. Parmi tous vos problèmes, lequel devrait s'arrêter pour que soyez plus tranquille?
  - 'Among your problems, which one should stop so you could live more quietly?'

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<sup>&</sup>lt;sup>3</sup> In particular, I leave aside Lahousse's (2006, 2011) claim that the inverted subject is an informational focus in EXTR-INV and PRES-INV (her « inversion ordinaire ») and an identificational focus in PERM-INV (her « inversion focus exhaustif »).

<sup>&</sup>lt;sup>4</sup> Unfortunately, EXTR-INV cannot be tested. One could have thought of sentences featuring a locative inversion (extraction of locative PPs), but for some reason, their use is limited to narratives (contra Bonami & Godard 2000). For example, *sur la place principale se trouve la grande mosquée* ('on the main square stands the great mosque') cannot be used naturally to answer either *où se trouve la grande mosquée*? ('where is the great mosque') or *qu'est-ce qui se trouve sur la place principale*? ('what is on the main square').

c. Quel changement dans votre environnement personnel vous ferait le plus plaisir?

'What change in your life would please you most?'

They were asked to judge the appropriateness of the answer, either an answer with a preverbal or a postverbal subject (9).<sup>5</sup>

(9) a. Je voudrais que s'arrête [la brouille entre mes deux fils]<sub>Subject</sub> b. Je voudrais que [la brouille entre mes deux fils]<sub>Subject</sub> s'arrête. 'I would like that the quarrel between my two sons stops.'

The results are clear: informants or participants in the questionnaire clearly prefer the answers with preverbal subjects (9b) to answer partial questions (8b), while they accept answers with postverbal subjects (9a) to answer broad questions (8c).

Crucially, PERM-INV answers behave differently: they are judged appropriate to answer partial questions (10).

(10) Q: Quels papiers sont valides?

'Which papers are valid?'

A: Sont valides [le passeport et la carte d'identité]<sub>Subject</sub>

Lit. are valid the passport and the identity card

– Proposal (1b): Inverted subjects occur in broad or all focus sentences. The results above seem to support the proposal. But, this is not the end of the story. Consider what happens in codas of clefts. Inversion is appropriate whether it contributes focal (11a) or ground content (11b).

(11) a. Q. Qu'est-ce que c'est, ce bruit? 'What is this noise?'

b'. l'avare que Depardieu joue] 12

Lit. the car that the son of Paul has Lit. the car that the son of Paul owns Lit. the miser that Depardieu makes (= shows himself to be) Lit. the miser that Depardieu plays

<sup>&</sup>lt;sup>5</sup> Subject inversion is sensitive to metric constraints that should be respected in forged examples or questionnaire items. Unfortunately, those constraints have not yet been studied in detail. Nevertheless, it is commonly assumed that monosyllabic verbs are banned from the rightmost position of the utterance (corresponding to the rightmost position in the Intonation Phrase (IP)) especially when the subject NP is heavy. More exactly, the weaker in content the monosyllabic verb is (copula, light verb), the more the constraint applies.

<sup>(</sup>i) a. \* la voiture que le fils de Paul a]<sub>IP</sub>
a'. la voiture que le fils de Paul possède]<sub>IP</sub>
b. ?? l'avare que Depardieu fait]<sub>IP</sub>

A. C'est les poubelles que sort le concierge. Lit. it is the bins that puts out the janitor

b. Q. Qui sera reçu par le directeur? 'Who will be received by the boss?'

A. C'est Bernard que recevra le directeur. Lit. it is Bernard whom will-receive the boss

There is something true in proposal (1b): both inverted subject and verb have the same informational status in the coda: either focus or ground. We will see shortly that this is a characteristic of EXTR-INV and PRES-INV clauses.

- Proposal (1c): Inverted subject are detopicalized (i. a. Comorowski 1995). The notion of topic is complex; it subsumes several dimensions (Jacobs 2001). Here, we limit ourselves to predication. In that dimension, the topic is a categorical subject: the entity of which the property denoted by the VP is affirmed or denied of. Claims (1c) amounts to saying that inverted subjects cannot be categorical subjects. In fact, this is true of subjects in PERM-INV where they are specificational (Marandin, in prep). As regards PRES-INV clauses, they often have a thetic flavor (see (22) below), but they are not inherently thetic since they accept fully referential subjects (see for example (9a) above; (28a) below). Finally, subjects in EXTR-INV clauses may be thetic or categorical. For sure, they are categorical when used with I-level predicates (McNally 1998): J'ai été surpris par le nombre de langues que connaissaient mes étudiants ('I was surprised by the number of languages that my students knew'). Hence, it is not true of inverted subjects in general that they cannot be categorical. Again, PERM-INV clauses behave differently from EXTR-INV or PRES-INV clauses as regards the type of proposition conveyed by the clause.

Now, I turn to the factor explaining such a difference and thereby, to the proper characterization of the informational potential of the sentences depending on each construction. In essence, information structure is an interface between context and sentence content. In the following, I focus on the relations between context and information structure. The notion of licensing is not appropriate for capturing such relations. X licenses Y if both X and Y belong to the same dimension. For example, extraction licenses EXTR-INV. Secondly, licensing is a necessary condition of grammaticality: inversion is only grammatical in extraction contexts. Thirdly, it is categorical: either X licenses Y or it does not. The picture is different as regards the relation context/information structure. I borrow the notion of affordance – term and global insight – from Gibson 1979. A affords Y (resp. X hinders Y)

<sup>&</sup>lt;sup>6</sup> "In any interaction involving an agent with some other system, conditions that enable that interaction include some properties of the agent along with some

if X and Y belong to different dimensions (typically, X is a contextual feature and Y a grammatical one). X makes the use or occurrence of Y possible and the relation may be gradient.

# 3 Informational solidarity

#### 3.1 Definition

I introduce the notion of informational solidarity that is based on Saeboe's (2004) condition for the prosodic marking of the answer in (12) – one prosodic focus anchored on the subject– compared to that of (13) – double focus anchored on both subject and verb.

- (12) Q. What happened to make you leave home? A. [my MOther died]<sub>F</sub>
- (13) Q. What became of your parents? A. [my MOther]<sub>F</sub> [DIED]<sub>F</sub> (..)

Saeboe claims that it corresponds to a difference in the semantic construal of the question that the answer resolves. The question in (12) is made up of a single set of alternatives – a plausible illustration is given in (14) –, while the question in (13) is based on pairwise alternatives to « mother » and « die » as illustrated in (15).

- (14) {mother died, mother emigrated, father died, there was a fire, we lost our money, ..}
- (15) {{mother emigrated, mother died, ...}, {father died, father emigrated, ..}}

When two components of the proposition do not give rise to separate relevant alternatives (in the local context), we say that they are informationally interdependent ("they stick together"). Hence, we derive the general definition (16).<sup>7</sup>

properties of the system. [...] The term affordance refers to whatever it is about the environment that contributes to the kind of interaction that occurs. [..]"(Greeno 1994: 338)

<sup>7</sup> The definition (16) is reminiscent of that of informational nonautonomy (Jacobs 1999). It is meant to overcome the difficulties of the procedural definition given by Jacobs. According to Jacobs, X and Y are informationally nonautonomous when « they are processed in one step ». Jacobs's definition tends to confuse the referential nonautonomy of a constituent (the identification of its referent depends on the clause

(16) Informational solidarity: X and Y are informationally interdependent ('solidaires informationnellement') iff there are no salient alternatives to X and Y separately in the local context.

## 3.2 Hypothesis

I propose that EXTR-INV and PRES-INV are sensitive to the informational solidarity of the verb and its first argument realized as the subject, while PERM-INV is not. More precisely:

(17) Contexts where subject and verb are informationally interdependent afford EXTR-INV and PRES-INV.

Intuitively, when speakers use (1a) *le livre qu'a écrit Marie*, there are no relevant alternatives to *Marie* and/or *écrire* ('write') that are under discussion or merely relevant (say for contrast) in the current context. On the contrary, *le livre que Marie a écrit* is compatible with a context where *Marie* or *écrire* are singled out among other entities or relations in the current context. More technically, hypothesis (17) makes a prediction: EXTR-INV and PRES-INV clauses should be hindered – hence judged less appropriate by informants – when the discourse role of the subject requires alternatives. There are two such roles: (i) narrow focus resolving a partial question, (ii) contrastive topic à la Büring (1997; S-topic). Accordingly, EXTR-INV and PRES-INV clauses should be dispreferred when subjects – or verbs – are narrow foci or contrastive topics. Both predictions are borne out; the results come from informal surveys I ran following traditional linguistic methodology (Sprousse 2005).<sup>8</sup>

#### 3.3 Data

We already saw that PRES-INV clauses are dispreferred as answers to partial questions (see (8)-(9) above). The use of post-verbal subjects as contrastive topics can be easily tested in relative clauses (RC) used to split the answer to a question. For example, the speaker may choose to answer question (18) by distinguishing different groups of students as in (19). In such a case, informants clearly prefer the answers with preverbal subjects (19a).

it is a constituent of) and the informational nonautonomy (it does not give rise to it own set of alternatives, rather it belongs to a set where it co-varies with other constituents).

<sup>&</sup>lt;sup>8</sup> I am currently launching a series of questionnaires to assess the results quantitatively.

- (18) Que sont devenus les étudiants de Bernard?
  - 'What became of Bernard's students?'
- (19) a. Les étudiants que [Bernard]<sub>Subject</sub> a entraînés sont devenus des sportifs professionnels, ceux de Marie sont devenus des profs de gym.
  - b. Les étudiants qu'a entraînés [Bernard]<sub>Subject</sub> sont devenus des sportifs professionnels, ceux de Jean-Marie sont devenus des profs de gym.
  - 'The students Bernard trained became professional sportspersons, Jean-Marie's became PE teachers.'

Even more, a direct answer to (18) with preverbal subject like *Les étudiants que Bernard a entraînés sont devenus sportifs professionnels* is implicational, unless it is used with a marked parenthetical intonation: <sup>9</sup> the subject (*Bernard*) or the verb (*entraîner*) invoke alternatives (other teachers, other relations between teachers and students, ..) worth being elaborated to fully address the issue conveyed by (18).

We already saw that subjects in PERM-INV clauses may be narrow foci ((10) above). PERM-INV clauses may also feature a constrastive predicate or a contrastive subject (20), which means that subject and VP give rise to two distinct sets of alternatives. Moreover, they may simply be all focus sentences (21). Thus, it is confirmed that PERM-INV clauses are informationally different from EXTR-INV or PRES-INV clauses.

(20) Q. Dans cette société, qui est responsable d'un nouveau-né?

'In this society, who is responsible for a newborn baby?'

a. A. Est symboliquement responsable la lignée maternelle, alors que sont financièrement responsables les parents biologiques.

Lit. is symbolically responsible the mother's line, while are financially responsible the biological parents

b. A. Est responsable la lignée maternelle. Sont aussi responsables les oncles maternels du père.

Lit. is responsible the mother's line. Are also responsible the uncles on the mother's side of the father

(21) Q. Quel est le nouveau règlement? 'What's in the new regulation?'

A. Ne sont plus acceptés les permis delivrés avant 1960.

Lit. are no longer accepted the permits issued before 1960

<sup>9</sup> It implicates a residual topic (Büring 1997). Intuitively, it amounts to bringing about the effect that there is more to say about the question.

#### 3.4 Discussion

The fact that the informational solidarity between subject and verb affords EXTR-INV and PRES-INV has a direct impact on clauses: it limits their informational potential. They are either all focus or all ground. In other words, their informational structure is all in one piece: subject and verb together feed the focal or the ground part of the content of the whole sentence. Indeed, this is what is observed in actual discourses.<sup>10</sup>

PERM-INV clauses behave differently: they may convey an informationally partitioned content. Subjects in PERM-INV may be narrow foci or contrastive topics (but not categorical subjects!). In fact, PERM-INV clauses are just indifferent to the relation of informational solidarity between subjects and verbs.

Hence, we must conclude that the three constructions behave differently as regards information structure: EXTR-INV and PRES-INV on one side, PERM-INV on the other. Accordingly, the occurrence of the subject NP to the right of the verb cannot be associated with a single informational value. In fact, its value depends on the whole construction.

## 4 Non-dynamic construal

## 4.1 Informational lightness

Descriptive grammarians repeatedly mention the intuition that (in substance) some sort of weakening affects the verb's meaning when the subject is postverbal (i.a. Fuchs 1997, Korzen 1985). They adduce two observations to support their intuition. The first one pertains to the use of root EXTR-INV or PRES-INV clauses in discourse. They are mainly used in narratives with a presentative function, i.e. they are ancillary sentences introducing a circumstance or a discourse referent into the discourse universe. This is illustrated in (22) with a sentence featuring a locative inversion (an instance of EXTR-INV): in (22a) a circumstance is described; in (22b), a new discourse referent is introduced into the narrative. The common analysis is that the contribution of the verb is merely to provide a predicate of existence, of coming to existence or of disappearing.

(22) Pierre entra dans la ville. 'Pierre walked in the city'

a. Sur la place se pressaient des badauds. Il se dirigea vers le palais.

Lit. on the square were thronging onlookers. He went to the palace

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<sup>&</sup>lt;sup>10</sup> The question of how informational solidarity is brought about in context exceeds the limits of the present study.

These are the sentences with a thetic favor; they show the well-known "event-centered vs entity-centered reading" contrast. See also Wehr 1984.

b. Sur la place se pressaient des badauds. Immédiatement, ils le prirent à partie.

Lit. on the square were thronging onlookers. Immediately, they took him to task.

The other observation seems to point in the same direction. If one tries to paraphrase a *de*-PP complement, say *de Paul* in (23a), with a RC, most often a RC with an inverted subject turns out to be felicitous. This is verified when the underspecified relation denoted by *de* is predictable given the modified noun –write a novel in (23b)– or is given/well-known in the context: suppose (23c) is uttered in the context of a binding workshop.

(23) a. le roman de Paul Lit. the novel of Paul

b. le roman qu'a écrit Paul Lit. the novel that has written Paul c. le roman qu'a relié Paul Lit. the novel that has bound Paul

Taking advantage of studies on similar usages in English (i. a. Bolinger 1989, Zubizarreta 1998), one could reformulate the observation as in (24) from an informational perspective.

(24) The content of the verb is informationally light in EXTR-INV and PRES-INV.

In fact, generalization (24) is not satisfactory. Indeed, it is far from clear how to weight bits of information. Moreover, it is not even true of presentative sentences in general: the descriptive content of the verbs is not bleached. It is not the same to use *se presser* ('throng') to describe the onlookers in (22) above, rather than *flâner* ('stroll') or *manifester* ('demonstrate'), etc. As for (23), the observation is certainly to the point, but its import should be discussed. It is expected that the more the relation between subject and verb is given, the less it gives room for independent alternatives for subject and verb (Marandin 2010). Hence, the solidarity constraint alone explains the preference for a paraphrase with a RC featuring a postverbal subject. It says nothing regarding the weakening of verb meaning.

From now on, I radically change tack to account for the intuition that subject inversion is correlated with a modification of the sentence meaning.

## 4.2 Hypothesis

Based on two facts to be presented shortly, I propose that inversion is correlated with an attenuation of the dynamic dimension of the meaning of the clause. In particular, inversion is correlated with the attenuation of the causal efficacy of the agent (when the verb assigns such a role).

The first observation pertains to the use of agentive adverbs (Geuder 2002, henceforth Ag-ADV), such as *intelligemment* ('cleverly'), *courageusement* ('bravely'). Ag-ADVs indicate that the event described in the clause is a realization of the disposition of the agent: it "depends on the decisions of the agent" (Geuder, *ibid*.: 172). Informants' rating of Ag-ADVs occurring in RCs featuring EXTR-INV (25a) is telling: some consider them as ill-formed, others as weird, all would prefer the subject to be preverbal (25b).

- (25) a. ?? Ma voiture, qu'a gentiment révisée mon copain Pierre, devrait passer le test pollution sans problème.
  - b. Ma voiture, que mon copain Pierre a gentiment révisée, devrait passer le test pollution sans problème.
  - 'My car my pal Pierre has kindly overhauled should pass the pollution test easily'

Informants have no such reactions with VP-internal manner adverbs, – such as *soigneusement* ('carefully') in (26) – even if those adverbs refer to the action or behavior of the agent.

(26) Ma voiture, qu'a soigneusement révisée mon copain Pierre, devrait passer le test pollution sans problème.

They make the same judgment when Ag-ADVs occur in clauses featuring PRES-INV and verbs in the passive as in (27a): they clearly prefer preverbal subjects (27b).<sup>12</sup>

- (27) a. ?? Quand sont bêtement multipliées les niches fiscales, les recettes diminuent.
  - b. Quand les niches fiscales sont bêtement multipliées par dix, les recettes diminuent.
  - 'When tax breaks are stupidly increased ten times, tax collections are reduced.'

In (25a) or in (27a), there is an entity playing the role of agent (by virtue of the verb meaning), but the whole event cannot be presented as the result of the causal efficacy of this entity as is required by the semantics of Ag-ADVs.

The second observation pertains to the use of discourse connectors and has the same flavor: using an explicit causal connector – which brings the causal relation to the fore – renders inversion dispreferred. The observation is based on the use of causal connectors *du coup* and *de ce fait* ('as a result') whose arguments are situations and whose interpretation involves factual causality

 $<sup>^{12}</sup>$  PERM-INV clauses cannot be put to the test because there is no Agent role assigned in such clauses.

(Rossari & Jayez 1997). Informants readily accept (28a). One can infer a cause-consequence relation (based on world knowledge) between the two temporal clauses. If one makes it explicit (28b), informants bulk: they repute (28b) weird and clearly judge (28c) more appropriate.

- (28) a. Quand la température augmente et que s'écroulent les ponts de neige, il est trop tard pour partir en rando sur les glaciers.
  - b. ?? Quand la température augmente et que, de ce fait, s'écroulent les ponts de neige, il est trop tard pour partir en rando sur les glaciers.
  - c. Quand la température augmente et que, de ce fait, les ponts de neige s'écroulent, il est trop tard pour partir en rando sur les glaciers.
  - 'When temperature rises and , as a result, the snow bridges collapse, it's too late for a treck on the glaciers.'

The same judgment obtains with EXTR-INV ((28b) vs (28c)) and PERM-INV ((30b) vs (30c)).<sup>13</sup>

- (29) a. On a examiné les éléments de preuve qu'avaient livrés à la presse les avocats de la partie adverse et qu'avait dû accepter le juge d'instruction.
  - b. ?? On a examiné les éléments de preuve qu'avaient livrés à la presse les avocats de la partie adverse et que, de ce fait, avait dû accepter le juge d'instruction.
  - b. On a examiné les éléments de preuve qu'avaient livrés à la presse les avocats de la partie adverse et que, de ce fait, le juge d'instruction avait dû accepter.
  - 'One examined the proofs that the lawyers of the opposing party had disclosed to the press and that, as a result, the judge had to accept.'
- (30) a. Mes étudiants ont très bien réussi. Ont pu s'inscrire en master dix d'entre eux.
  - b. ?? Mes étudiants ont très bien réussi. Du coup, ont pu s'inscrire en master dix d'entre eux.
  - b. Mes étudiants ont bien réussi. Du coup, dix d'entre eux ont pu s'inscrire en master.
  - 'My students did well. As a result, ten of them could enrol in graduate school.'

Clauses featuring any type of inversion resist entering an explicit action chain, i.e. a discourse making explicit a causal link between two events, even if such a causal link is factually inferable.

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<sup>&</sup>lt;sup>13</sup> In the absence of any explicit link, the discourse relations between the two temporal clauses are additive rather than causal. Thus, the predominant relation to intuition is one of contiguity in (28a), addition in (29a) and elaboration in (30a) (following Keller's (2002) taxonomy).

#### 4.3 Absolute construal

Several authors have proposed a notion of perspective to capture differences in prominence holding among the entities making up the situation described in clauses (i.a. Kuno 1987, Borshev & Partee 2002). Langacker (2000) in the framework of Cognitive Grammar (CG) proposes to account for those differences with the general notion of construal. Construal refers to how the participants or aspects of situations are profiled in clauses. Differences in prominence may arise lexically (by virtue of the ranking of the arguments of lexical heads) and/or constructionally. Passive is a textbook case: the first argument of verbs (prototypically associated with the agentive role) is demoted to the advantage of the second. The agentive interpretation is still accessible, but the agent is no longer the center of the description (see (27) above).

Two types of construal have been distinguished in CG (i. a. Langacker 2000, Maldonado 1993):

- The force dynamic perspective: profiling the force interactions between participants/aspects of the situation (causation or energy transfer);
- The absolute perspective: profiling the participants/aspects of the situation independently of the force interactions between them.

The behavior of clauses featuring a postverbal subject is readily explained by hypothesis (31): the referent of the subject is no longer the center of the description because the perspective taken to describe the situation results in attenuating its dynamic participation in it.

(31) Subject inversion contributes to the absolute construal of the described situation.

Hypothesis (31) captures what the informants' judgments convey: the process is not profiled as dynamic « even though [it] may be clearly energetic in objective terms » (Langacker, 2000: 381). In (25a), (27a), there is an agent (explicit or implicit), but the situation cannot be presented as what comes about by virtue of her agency. In (28b, 29b, 30b), a cause-consequence is inferable on an encyclopedic or situational basis, but it cannot be profiled at the discourse level with an explicit causal connector.

Under hypothesis (31), the subject is no longer the center of the description (the "trajector" in Langacker's parlance). Thus, inversion breaks the default alignment (in construal) between "the most active participant" and "the primary figure of attention". This should impact the role the entity it refers to may play in discourse. For example, one may expect that postverbal subjects

are less prone to be the source of anaphoric chains than preverbal ones.<sup>14</sup> Obviously, this could be the basis for the common claim that postverbal subjects are less "topical" than preverbal ones.

# 5 Referential anchoring of the subject

Another feature is common to the three constructions featuring an inverted subject: the referential anchoring of the referent of indefinite NPs is blocked.<sup>15</sup>

#### 5.1 Data

Two types of interpretation are blocked for postverbal subject NPs. In (32)-(33) below, the fact is illustrated with RCs featuring EXTR-INV.

- specific nonpartitive reading for indefinite NPs. In (32), the only reading available for *un étudiant chilien* is specific given the negation (blocking the existential reading): (32b) is interpretable, while (32a) is not.
- (32) a. ?? L'examen que n'a pas pu passer un étudiant chilien la semaine dernière faute d'être prévenu à temps sera annulé.
  - b. L'examen qu'un étudiant chilien n'a pas pu passer la semaine dernière faute d'être prévenu à temps sera annulé.
  - 'The exam that a Chilian student couldn't take last week because he didn't receive the notice in time will be cancelled.'
- partitive reading for quantificational NPs without explicit partitive complement. In (33a), *beaucoup d'étudiants* ('many students') cannot give rise to a partitive reading 'many students of the university', while such a reading is the preferred one in (33b): in (33a), it only has a cardinal reading 'a great number of students'.
- (33) a. Le stade de l'université, où s'entraînent beaucoup d'étudiants le soir, est un lieu sympa.
  - b. Le stade de l'université, où beaucoup d'étudiants s'entraînent le soir, est un lieu sympa.
  - 'The stadium of the university, where many students are training at night, is a nice place.'

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<sup>&</sup>lt;sup>14</sup> I owe this prediction to Barbara Hemforth (pc).

<sup>&</sup>lt;sup>15</sup> To my knowledge, this feature has remained unnoticed until now, to the exception of Tasmowski & Willems 1987 and Marandin 2000 where it is wrongly analyzed as the reflex of some sort of anaphoric opacity.

The same ban is observed with bare strong partitive NPs (34).<sup>16</sup>

- (34) D'après une enquête auprès de mes étudiants,
  - a. \* les romans qu'apprécient la plupart sont du genre sentimental.
  - b. les romans que la plupart apprécient sont du genre sentimental.
  - 'According to a survey among my students, the novels that most like belong to the romantic genre.'

The ban holds across the three constructions. Examples (35) illustrate the ban against specific indefinites in both PRES-INV and PERM-INV. Similarly, the non-availability of the partitive reading of the postverbal NPs results in semantic weirdness in (36).<sup>17</sup>

- (35) a. [PRES-INV] ?? Je m'attends à ce que soit adopté un amendement demain en séance. Celui qui concerne le bisphénol A.
  - Lit. I expect that will be adopted an amendment during tomorrow session. That against bisphenol A
  - b. [PERM-INV] \* Je suis surpris; n'ont pas reçu la convocation des voisins et la concierge.
  - Lit. I am surprised; did not received the invitation some neighbors and the caretaker
- (36)a. [PRES-INV] ?? Dans ce service, il faudrait que soient renvoyés beaucoup d'employés pour améliorer la rentabilité.
  - Lit. in this service, it is necessary that are fired many employees to improve the profitability
  - b. [PERM-INV] ?? Les dernières élections ont été annulées dans le collège étudiants: se sont abstenus trop d'étudiants.
  - Lit. the last ballot has been declared void in the student college. Has abstained too many students

In sum, postverbal indefinite subject NPs cannot be specific and postverbal NPs with weak or partitive determiners cannot give rise to a partitive reading in the absence of an explicit partitive complement. Notice that indefinite NPs

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<sup>&</sup>lt;sup>16</sup> The ill-formedness of (34a) cannot be ascribed to the fact that *la plupart* occurs to the right of verb, as it makes a good object: *j'ai vu la plupart lire des romans policiers* (Lit. I saw most read detective novels).

<sup>&</sup>lt;sup>17</sup> Scopal specific indefinites also must be preverbal. In (i) below, the indefinite *un voisin* cannot be specific: (i) cannot be continued with *Tu sais, son ami qui est charpentier* ('You know, his friend who is a carpenter'), while a continuation like *Il ne sait pas encore* à *qui s'adresser* ('He does not know yet whom to ask') is perfect. The preverbal version of the RC (*qu'un voisin peut lui recommander*) allows both the specific and nonspecific reading.

Il veut uniquement une maison que peut lui recommander un voisin.
 Lit. He only wants a house that can recommend a neighbor

with an explicit indication of specificity (37a) and NPs with an explicit partitive complement (37b) are *bona fide* postverbal subjects, along with presuppositional NPs (i. e. definite NPs) or anaphoric NPs (37c).

(37) a. L'examen que n'a pas pu passer un étudiant chilien que nous connaissons tous sera annulé.

Lit. the exam that could not take a Chilian student we all know will be cancelled b. Les romans qu'apprécient la plupart des garçons sont du genre sentimental.

Lit. the novels that like most of the boys belong to the romantic genre

c. les romans qu'apprécient {Marie et ses soeurs | de tels étudiants} ...

Lit. novels that like {Marie and her sisters | such students} ..

Furthermore, bare quantificational NPs (personne, rien, tout, chacun ('nobody, nothing, all, each')) – whose interpretation is not partitive and which require a loose contextual restriction – are well-formed postverbal subjects even if they are not very frequent in actual use (38).

(38)a. Paul aimait cette Lina que ne plaignait personne.

Lit. Paul loved this Lina for whom felt-sorry nobody

b. une vie où ne se produit jamais rien

Lit. a life where happens never nothing

## 5.2 Analysis

I adopt Heusinger's (2002, 2011) analysis of specificity. Specific indefinites introduce novel discourse referents that are anchored to an already established discourse entity. The identification of the newly introduced referent depends both on the anchor – that is either intended by the speaker or present in the universe of discourse – and on the anchoring function that enables the discourse participants to single out an entity that is the value for the variable introduced by the indefinite determiner. Heusinger analyzes the partitive interpretation of NPs with weak determiners along the same lines: they introduce a novel referent that is part of another. The whole – or the superset – must be referentially anchored to an already established entity (in the speaker's or discourse universe). <sup>18</sup>

Remember that postverbal indefinite subjects may be specific (37a) and that NPs featuring a weak determiner may be partitive (37b) as long as the anchor or the partitive complement are explicit in the NP. Hence, the readings per se are not blocked for postverbal subjects; what is specifically blocked is the referential anchoring itself. It is hard to see why the anchors would be

 $<sup>^{18}</sup>$  I assume here that bare strong partitives (i.e.  $la\ plupart$ ) involve the same mechanism.

inaccessible from the postverbal position or to deem the context responsible: 19 the contexts are the same whether the subject is pre- or postverbal or the anchors implicit or explicit ((32a) vs (37a)).

What appears to go wrong is the identification function itself. It does not have enough content to single out the referent (in the case of indefinites) or the whole (in the case of partitives). More precisely, it goes through when the subject is preverbal; it does not when it is postverbal. One may conjecture that the prominence of the subject is the decisive factor. Thus, when the subject is preverbal, the selection/identification process can use the prominent status of the referent in the description and its full involvement in the described process. When it is postverbal, the referent is just another participant in the described situation. Another observation brings support to the conjecture that the identification of the referent does not go through because of the lack of identifying means. It suffices to enrich the description of the referent within the NP to make the specific reading of the indefinite NP felicitous. The identification means contributed by the NP compensate so to speak the lack thereof in the sentence: (39) is much better than (32a).

(39) L'examen que n'a pas pu passer un étudiant qui a séché tous les cours ce semestre sera annulé.

Lit. the exam that could not pass a student who cut all classes this term will be cancelled

In sum, referential anchoring is the only mechanism of accessing referents that is barred for postverbal subjects: anaphora and presupposition readily operate. If the conjecture presented here is on the right track, then the blocking of the referential anchoring would be another effect of the lack of prominence of inverted subjects with respect to the other participants in the described situation.

## 5. Conclusion

I have made three proposals to capture the fine-grained properties of the three constructions that feature the subject to the right of the verb.

- The informational solidarity holding in the context between the verb and its first argument affords EXTR-INV and PRES-INV, i. e. makes it possible without imposing it. This condition limits the information structure of EXTR-INV and PRES-INV clauses to be all in one piece: all focus or all ground. There is no constraint whatsoever on the information structure of PERM-INV.

<sup>&</sup>lt;sup>19</sup> Likewise, one cannot invoke a weak crossover effect since the blocking is observed in the three constructions, i. e. there are no operators playing around.

- Subject inversion conveys an absolute construal of the situation described in the clause, which results in the attenuation of the dynamic aspects of the description: causal efficacy of the agent, clausal relations between clauses.
- The referential anchoring of the referent is not available for postverbal indefinite or quantificational NPs, which, I conjecture, is due to the lack of prominence of the subject.

Two general points can be made in the light of the analysis I have just proposed for subject inversion in French.

- Construal, in particular the relative salience of entities in the described situation, should be considered a relevant factor to explain word order variations. The analysis given here reinforces a similar claim made by Abeillé & Godard 2008 to capture the difference between two constructions showing object preposing in French.
- Word order potential to convey informational values depends on the construction. The striking fact presented here is that its potential to convey an absolute construal is the same across the three constructions featuring an inverted subject. One should not conclude too hastily that word order variations per se are primarily exponents of construal values. This again should be investigated construction by construction.

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