

**Information Structure and its alternatives:  
In search of the common features of Subject Inversion in French**

Subject Inversion (SI) is the realization of the first argument to the right of finite verbs with agreement in number : (1) illustrate SI, unlike sentences with an impersonal verb (*Il est venu [sg] trois soldats [pl]*, there came three soldiers). SI occurs in three distinct constructions in French. STYL(istic)-SI is licensed in extraction contexts (a. o. Kayne 1973, Bonami & Godard 2000), UNAC(cusative)-SI is licensed by presentational verbs (Marandin 2001), PERM(utation)-SI has no formal licensing conditions and is not reducible to the heavy NP shift phenomenon (Marandin 1997).

- (1) a. Je me souviens de l'argument qu'a prudemment avancé Marie [STYL-SI]  
Lit. *I remember the argument that has wisely put forward Marie*  
b. Je voudrais que cesse la guerre [UNAC-SI]  
Lit. *I would like that stop the war*  
c. Sont reçus tous les élèves qui ont bien travaillé [PERM-SI]  
Lit. *Are admitted all the students who worked hard*

Given the differences between the three constructions, a natural question is: do they share common features (see a.o. Fuchs 1997, Lahousse 2006)? My claim is that there are indeed common features across the three syntactically distinct constructions. They concern Perspective Structure (Borshev & Partee 2002) rather than Information Structure (contrary to what is commonly accepted, a. o. Zubizarreta 1998, Lahousse 2006), or semantic construal (theticity) (a. o. Matras & Sasse 1995), or a Discourse presentational function (Lambrecht 1994). Assuming an HPSG framework, the communality across SIs can be captured at the level of SOA structure.

### **1. Information Structure**

The first dimension that one can turn to is information structure (the focus vs background partition). However, PERM-SI parts company with both STYL-SI and UNAC-SI. In PERM-SI, verbs and subjects are independent informationally, allowing for clauses that are either all focus or partitioned with a narrow focus on the subject. On the other hand, in STYL-SI and UNAC-SI, verbs and subjects are not independent informationally, which only allows for clauses where verbs and subjects have the same informational status: focus or ground. Thus, sentences with PERM-SI are appropriate as answers to questions bearing on the subject (3), while sentences with STYL-SI or UNAC-SI never are (see UNAC-SI in (4b)).

- (3) Sp1.: Quelles pièces sont valides? *Which papers are valid*  
Sp2.: Sont valides le passeport et la carte d'identité.  
Lit. *Are valid the passport and the identity card*  
(4) Sp1 : Qui sera élu à ton avis ? *Who will be elected to your opinion*  
Sp2 : a. Je crains que Marie Dupont soit élue  
b. # Je crains que soit élue Marie Dupont  
Lit. *I fear that be elected Marie Dupont*

More precisely, we can show that in both STYL-SI and UNAC-SI SI is subject to the same constraint as focus projection from the subject in English (Saeboe 2004): subject and verb should not give rise to distinct alternative sets. Hence, neither postverbal subjects nor verbs in STYL-SI or UNAC-SI can play the role of narrow foci or that of links à la Vallduví 1992 or contrastive topics à la Büring 1997. For instance, subjects playing the role of contrastive topic

– sorting key – in incomplete answers, must be preverbal: answer (b) is not felicitous in dialogue (5) (Marandin *et al.* 2002). In the same way, incomplete answers with contrastive verbs must have a preverbal subject (Marandin 2010).

- (5) Sp1: Quels sont les résultats en natation? *What are the results in swimming*  
 Sp2: a. Les coureurs que Pierre entraîne réussissent bien en crawl, ceux que Marie entraîne explosent en papillon.  
 b. # Les coureurs qu’entraîne Pierre réussissent bien en crawl, ceux qu’entraîne Marie explosent en papillon.  
 Lit. *The guys that trains Pierre are good in the crawl, those that trains Marie excel in the butterfly*

## 2. Semantic construal: Theticity

UNAC-SI parts company with both STYL-SI and PERM-SI in terms of theticity: UNAC-SI gives rise to the thetic construal of the proposition, while the other two types are unconstrained, which explains why UNAC-SI is only licensed in the declarative clause type contrary to STYL-SI or PERM-SI. Theticity has been associated with two distinct constraints: (i) a ban against presuppositional subjects (Kuroda 1972, Ladusaw 1994); (ii) a ban against i-level predicates (Krifka 1995, McNally 1998). While the three types of SI abide by the first criterion, only UNAC-SI abides by both. We interpret the data as follows: theticity requires both properties, while the property of having non-presuppositional subjects has a wider extension.

SI bans postverbal presuppositional subjects: see (6),(7),(8). I subsume under presuppositional NPs quantificational NPs whose domains of quantification are contextually restricted.

- (6) a. Des soldats sont entrés. Je voudrais que la plupart meurent.  
 b. \*Des soldats sont entrés. Je voudrais que meurent la plupart [UNAC-SI]  
 Lit. *Soldiers came in. I would like that die most*
- (7) D’après une enquête auprès de mes étudiants, *According to a survey among my students*  
 a. les romans que la plupart apprécient relèvent du genre sentimental.  
 b. \*les romans qu’apprécient la plupart relèvent du genre sentimental. [STYL-SI]  
 Lit. *the novels that like most belong to the romantic genre*
- (8) Mes étudiants sont tous excellents. *All my students are good*  
 a. La plupart m’ont pourtant rendu un devoir exécrationnel  
 b. \* M’ont pourtant rendu un devoir exécrationnel la plupart [PERM-SI]  
 Lit. *Turned me in an awful copy most*

Furthermore, an NP subject such as *beaucoup d’étudiants* (many students) in STYL-SI is only open to a cardinal reading when postverbal (9b), while the partitive reading – requiring contextual restriction – is the preferred reading when preverbal (9a).

- (9) a. Le stade de l’université, où beaucoup d’étudiants s’entraînent le soir, est très sympathique.  
 b. Le stade de l’université, où le soir s’entraînent beaucoup d’étudiants, est très sympathique.  
 Lit. *The stadium on campus where at night train many students is very friendly*

Note that the ban does not extend to structural partitive NPs (*la plupart / beaucoup de mes étudiants*, most of / many of my students). Arguably, structural partitive NPs do not pattern with presuppositional NPs and, thus, do not prevent the thetic construal.

UNAC-SI is the only SI to abide by the second criterion: it only welcomes s-level verbs. Moreover, it abides by the stronger constraint proposed by McNally 1998: UNAC-SI clauses only describe location dependent situations. On the other hand, STYL-SI and PERM-SI welcome i-level predicates.

- (10) a. Les langues que connaissent mes étudiants sont toutes indo-européennes. [STYL-SI]  
 Lit. *The languages that know my students are all indo-european*  
 b. Sont les inventeurs de l'informatique moderne Babbage et Turing. [PERM-SI]  
 Lit. *Invented modern computer science Babbage and Turing*

### 3. Discourse function: presentational sentences

SI is often related to the discourse function of presentation (i. a. Wehr 1984, Lambrecht 1994, Marandin 1997). From the point of view of discourse, presentation amounts to explicitly introducing inactive Discourse Referents (DR) into the universe. Semantically, it corresponds to a predication of existence relativized to a situation. It has been observed that it is associated with a decreased agentivity or dynamicity of the described situation. Among others, Lambrecht observes: "there is a limit to the degree of agentivity a predicate can have to be exploitable as presentational" (1994: 181). The three types of SI have the low agentivity flavor, but all their usages cannot be associated with the presentational function.

Indeed, both UNAC-SI and STYL-SI give rise to specific presentational constructions, while PERM-SI is commonly used in discourse to introduce sub-topics (13).

- (11) a. Soudain éclata la rumeur. [UNAC-SI : event-centered presentation]  
 Lit. *Suddenly broke the rumor*  
 b. Soudain entra un soldat aviné. [UNAC-SI : entity-centered presentation]  
 Lit. *Suddenly came in an inebriated soldier*
- (12) Dans un coin tricotait une femme. [STYL-SI : Locative inversion]  
 Lit. *In a corner knitted a woman*
- (13) Jean-Marie Le Pen a annoncé, vendredi 11 décembre, la "suspension des traîtres et des félons". Au premier rang d'entre eux figure Bruno Mégret [...]. Sont également touchés par cette mesure quatre membres du bureau politique du parti d'extrême droite : Jean-Yves Le Gallou, [...]. (Le Monde 13/12/98, p1, col. b). [PERM-SI]  
 Lit.: *Jean-Marie Le Pen announced last friday the suspension of the traitors and scoundrels. Among the first ranks Bruno Mégret [...] . Are also concerned by the decision four members of the political committee of the extreme right party : Jean-Yves Le Gallou...*

Outside those specific constructions, sentences with SI are not presentational (see (1)-(10) above). However, independently of the discourse function of presentation, they have a low agentivity flavor. Sentences with PERM-SI essentially have a specificational semantics. Sentences with UNAC-SI only welcome subjects with patient properties. Crucially, sentences with STYL-SI do not block the agentive interpretation of the subject (for example, agent-oriented adverbials are felicitous (see (1a) above), but the agentive interpretation is less pregnant. The contrast between preverbal vs postverbal subjects in (restrictive) relative clauses parallels that holding between the identification of a DR via a relation with another DR –the relation being contextually given or not relevant– and the identification via participation in a situation in which each participant plays its role. The postverbal subject in (14a) is less felicitous than the preverbal subject in (14b) because the agency of Zola is highlighted by the purpose clause.

- (14) J'ai relu les articles a. ? qu'a écrits Zola pour défendre Dreyfus.  
 b. que Zola a écrits pour défendre Dreyfus.  
 Lit. *I have reread the papers that Zola wrote to defend Dreyfus*

### 4. Perspective structure

Two features are common across the three types of SI and their usages:

- (15) a. Ban against presuppositional subject NPs;  
 b. Bleaching of the agentive or dynamic content of the relation.

An analogous cluster of features is found in Russian existential sentences that Borshev & Partee 2002 describe as “decreased referentiality/individuation of NPs” and “decreased referentiality of verbs”. They observe that information structure has nothing to offer to describe –let alone to account for– such phenomena. Therefore, they introduce the notion of perspective structure (based on the notion of empathy, see a. o. Kuno 2004). A perspective structures the situation described by the sentence. Metaphorically, it is similar to making a choice of what to track with a video camera: “the perspectival center is the participant chosen as the point of departure for structuring the situation” (ibid.). Thus, the perspectival center is the distinguished participant which cumulates several semantic and pragmatic properties: (a) it is the salient participant in the situation; (b) it corresponds to the most active and the most identified DR among the DRs involved in the situation; (c) it is “normally presupposed to exist” (Borshev *et al.*). Furthermore, depending on the construction, (d) it may play the role of discourse hinge, which extensionally corresponds to Webelhuth’s 2007 theme.

In relation to SI, the analysis is as follows. By default, the perspectival center is the preverbal subject in French. The postverbal realization of subjects amounts to demoting them as perspectival centers. Consequently, postverbal subjects are no longer presented as the salient participants in the situation, which results in toning down their qualities as agent. Moreover, their activity and identification statuses are no longer at stake: they may correspond to entities whose existence and identification remain vague. Notice that the same analysis extends to the analysis of focus projection from subject in English – the present proposal may be seen as a reformulation of Faber 1987 and Kennedy 1999.

The thrust of the present proposal is that it allows one to account for an intricate cluster of properties. It is true that postverbal subjects are not categorical subjects in UNAC-SI or in PERM-SI, but they may be in STYL-SI. However, when they are, they fail to have the typical properties of preverbal categorical subjects (presuppositionality, agency, salience), which blurs their status and makes them look like complements inthetic sentences. It is also true that propositions are not agentive in UNAC-SI or in PERM-SI, but they may be in STYL-SI. However, when they are, they do not have the typical propertie observed in sentences with preverbal subjects (the agentive or dynamic interpretation of the participant corresponding to the subject), which once again blurs the boundaries.

## 5. HPSG Analysis: Structured SOAs

The analysis in HPSG does not require positing a brand new dimension in grammar. Most importantly, it allows one to keep the current analyses of SI in French. Assuming Ginzburg & Sag 2000 (G&S), I take it that SOAs are the core of the message conveyed in clauses. Moreover, I draw on Abeillé, Godard & Sabio’s 2008 analysis of NP extraction in French.

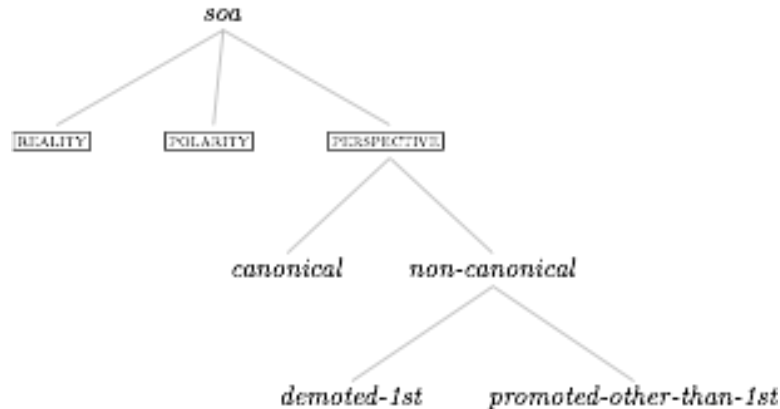
In essence, we have to capture how elements of the description of the situation differ in salience. The canonical SOA presents the first argument of the relation as its perspectival center. In non-canonical SOAs, the first argument is demoted from its status. Two cases arise: the perspective is on the whole SOA or another participant than the first is promoted to the status of perspectival center. The second case is illustrated by the construction resorting to NP extraction (e. g. *une antenne ils lui ont jeté sur la tête* ‘an antenna they threw to his head’ = ex. 27 in Abeillé *et al.*).

Essentially, the analysis relies on the hierarchy in Fig 1 (see below), where the dimension PERSPECTIVE is substituted to Abeillé *et al.*’s PARTITION (REALITY and POLARITY are taken up from G&S). SI is only licensed in clauses whose content is constructed from *demoted-1<sup>st</sup>* SOAs. To cater for the three types of SI, three constraints should be added to constrain the assignment of the *inverted* case responsible for the postverbal placement of the subject in STYL-SI (Bonami & Godard 2000), the construction responsible for the unaccusative linking of the first argument in UNAC-SI (Marandin 2001) and the Head-Subject construction with permuted subjects in PERM-SI.

**6. Conclusion.** The view that constituent order variation naturally belongs to information structure (focus/background or topic/comment articulations) is deeply entrenched in current linguistics. All the more so that information structural notions are flexible enough to save all sorts of phenomena. French subject inversions make up a telling case: they share features that cut across syntactic construals and information structural configurations. To account for those features, syntax and information structure must be supplemented. This is precisely where the notion of perspective comes in: it enables one to capture differences in salience holding in the descriptive content of utterances.

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**Figure 1:**



**Selected references (abbreviated presentation)**

**Abeillé A, D. Godard & F. Sabio.** 2008. Two types of preposing in French. *Proceedings of the 15<sup>th</sup> HPSG Conference*. **Bonami O. & Godard D.** 2000, Inversion du sujet, constituance et ordre des mots, [Marandin J.-M ed] *Cahier Jean-Claude Milner*. **Borschev V. & B. Partee.** 2002. The Russian genitive of negation: Theme-rheme structure or perspective structure? *Journal of Slavic Linguistics* 10. **Büring D.** 1997. The meaning of topic and focus. The 59th Street bridge accent. **Faber D.** 1987. The accentuation of intransitive sentences in English. *Journal of Linguistics* 23. **Fuchs C., ed.** 1997, La place du sujet en français contemporain. **Ginzburg J. & I. A. Sag.** 2000. *Interrogative Investigations*. **Kayne R.** 1973, L'inversion du sujet en français dans les propositions interrogatives, *Français Moderne* 41. **Kennedy B.** 1999. Focus constituency. *Journal of pragmatics* 31. **Krifka M.** 1995. Genericity : an introduction. [Carlson G. & F. Pelletier, eds.] *The generic book*. **Kuno S.** 2004, Empathy and Direct Discourse Perspective. [L. R. Horn & G. Ward, eds] *The handbook of pragmatics*. **Kuroda S-Y.** 1972. The categorial and thethetic judgment : Evidence from the Japanese. *Foundations of language* 9. **Ladusaw B.** 1994, Thetic and Categorical, Stage and Individual, Weak and Strong, *Proceedings of SALT IV*. **Lahousse K.** 2006. NP subject inversion in French: two types, two configurations. *Lingua* 116-4. **Lambrecht K.** 1994, *Information structure and sentence form*. Cambridge : Cambridge UP. **Marandin J.-M.** 1997. *Dans le titre se trouve le sujet. Ou : l'inversion locative en français*. Habilitation U. Paris-Diderot. **Marandin J.M.** 2001. Unaccusative inversion in French. [Y. D'Hulst et al., eds] *Going Romance 1999: Selected papers*. **Marandin J.M., C. Beyssade, E. Delais & A. Rialland** 2002. Discourse Marking in French: C Accents and Discourse Moves. [Bel B. et al., eds.] *Proceedings of the Speech Prosody 2002*. **Marandin J.M.** 2010. Subject Inversion and Discourse in Romance. [D. Godard, ed.] *Fundamental Issues in the Romance Languages*. **Matras Y. & H.-J. Sasse.** 1995, Verb-subject order and theticity in European languages. *Sprachtypologie und Universalien Forschung*. **McNally L.** 1998. Stativity and Theticity. [Rothstein, ed] *Events and grammar*. **Saeboe K.** 2004. Optimal conditions for integration. *Szklarska Poreba Workshop 5*. **Vallduví E.** 1992. The informational component. **Webelhuth G.** 2007. Complex topic-comment structures in HPSG. *Proceedings of the 14<sup>th</sup> HPSG Conference*. **Wehr B.** 1984. *Diskusstrategien im Romanischen*. **Zubizarreta M.-L.** 1998. *Prosody, Focus and Word Order*.