THE PROPOSITIONAL CONTENT OF ABSOLUTE CONSTRUCTIONS AND EPISTEMIC SDRS CONDITIONS

Our purpose is to provide a unified analysis of the semantic-pragmatic interface of the so-called ([3], [6]) absolute constructions (AC). Our working language is French, but the conclusions are general.

(1)   Premier ministre, Jean pourrait faire de très bonnes choses
Being the Prime Minister, John would do many good things

      The two main points of our analysis are that (1) a syntactic construction can introduce a discourse fragment and that (2) SDRS conditions can be epistemic. Extending [1], we consider the modalities in AC to be morphisms (or SDRS conditions) between the propositional content (represented by K_1) introduced by the AC under the form of a descriptive situation and the content (represented by K_2) introduced by the instantiation of the construction under the form of the actual situation.

1   Identification of the category. The data.

There are different categories of AC [3]. From a syntactic point of view, following [5], we consider that AC are analysable into a head-adjunct structure (2) where Y*"* and XP are both *phrases* and the adjunct modifies its head.

(2)   XP $\rightarrow$ Y*"* [MOD [XP]], XP

      In this paper we limit ourselves to the analysis of AC that present the following features: (i) the adjunct is set off by a pause, (ii) it introduces a predication, (iii) it is co-referential with one of the elements in the finite clause, generally the subject, (iv) there is a possibly overt, epistemic modality in the finite clause (or a speaker's evaluation can be recovered from some other elements– intonation, lexically...). The modality can be of different kinds (*possibility*, *necessity*, *genericity*, *concession*, *law formation*):

(1)   Premier ministre, Jean pourrait faire de très bonnes choses   POSSIBILITY
Being the Prime Minister, John would do many good things

(3)   Premier ministre, Jean fait beaucoup d'erreurs diplomatiques   GENERICITY
Being the Prime Minister,   John makes many diplomatic mistakes

(4)   Un homme, Jean est forcément fragile   NECESSITY
Being a man,   John is necessarily fragile

(5)   Très talentueux, Jean fait du mauvais travail   CONTRADICTION (epist.)
Very talented,   John does a very bad work

(6)   Avec Jean Premier ministre, ce pays rencontre de vraies difficultés   LAW FORMATION
With John as Prime Minister,   this country encounters many difficulties

2   Weak and strong adjuncts

Traditional accounts [6] of AC claim that their semantics is variable. AC's adjuncts with a *S*tage *L*evel *P*redicate (weak adjunct) function as arguments of a modal (1) and generic (3) operators, and they are interpreted as *if*-clauses and temporal restrictors (3'). AC's adjuncts with *I*ndividual *L*evel *P*redicate (strong adjuncts) are to be interpreted causally (4'), an individual property being independent from any kind of restriction. Only strong adjuncts are adsentential. Very informally:

(3')   ***generic (each time that** prime minister(john), makes diplomatic mistakes(john))*

(4')   ***(because** a man(john)), (fragile(john))*

      Finally, [6] considers *with* to be an operator that converts *ILP* to *SLP*.

      The overall theory is questionable in some respects: (a) (3') is not the expected interpretation of (3), (b) in "*with her strong character, Jane scares many men"*, "*with her strong character"* is not a weak adjunct, (c) more fundamentally, it seems that the semantics of the construction is in-variable and that its task is to introduce its own propositional content as discourse fragment.

3   Descriptive situations, actual situations and epistemic conditions

Our analysis of the semantics of AC is the following:

- The *construction* of the sentence introduces a parametric propositional content (K_1) that is a parametric situation.

- The sentence introduces a propositional content (K_2) that is the actual situation.

- K_2 is an *instantiation* of K_1.

- The modalities in the finite clause are epistemic, they have scope on the relation between K_1 and K_2, and we treat them as morphisms between K_1 and K_2 (or conditions on the relation between K_1 and K_2).

- Finally, given the internal structure of the AC in (2), K_1 and K_2 can each be analysed into two parametric propositions corresponding to the adjunct phrase and the finite clause.

Let us develop these claims. Following [2] we consider that a situation s supports a proposition p (notation $s : p$). A situation type ($\check{s}$) is not actual: it specifies the characteristics that any actual situation of this type must have and supports parametric propositions ($\wp$) (notation $[\check{s} \mid \check{s} : \wp]$). A constraint is a causal link between two parametric situations, by virtue of their types.

(7)   **Constraint:** $[\check{s}' \mid \check{s}' : \wp\,'] \Rightarrow \Diamond[\check{s}'' \mid \check{s}'' : \wp\,'']$

For instance a situation type $\check{s}'$ supporting the proposition $\forall x\ (prime\ minister(x))$ implies, among others, another situation type $\check{s}''$ supporting the (overt) proposition *(do many good things (x))*. This means, that, $\check{s}'$ *can* imply $\check{s}''$ $\forall x\ ((prime\ minister(x)) \Rightarrow \Diamond\ (do\ many\ good\ things\ (x)))$: $\check{s}''$ is in the *choice space* of $\check{s}'$. The constraint can be assimilated to CAUSE in the sense of [4].

(8)   **The meaning of AC**: an AC introduces a law of the form $[\check{s}' \mid \check{s}' : \wp\,'] \Rightarrow \Diamond[\check{s}'' \mid \check{s}'' : \wp\,'']$, where $\check{s}'$ and $\check{s}''$ are situations types supporting parametric propositions introduced respectively by the adjunct phrase and the finite clause.

The AC introduces a parametric proposition (K_1). Its content is a complex descriptive situation (**des-s**) containing parametric entities linked by a constraint. The AC can be syntactically analysed into two components: Y'' and XP. K_1 can thus be analysed into two constituents $k_1^{[\check{s}' \mid \check{s}' : \wp\,']}$ and $k_2^{\Diamond[\check{s}'' \mid \check{s}'' : \wp\,'']}$ that are linked by a CAUSE coherence relation. $k_1^{[\check{s}' \mid \check{s}' : p']} \Rightarrow k_2^{\Diamond[\check{s}'' \mid \check{s}'' : p']}$, where $\check{s}'$ and $\check{s}''$ are respectively in the universe of k_1 and k_2.

The descriptive situation is instantiated by specific lexical items into the reference situation (**act-s**) containing individuals. K_2 represents the content of the sentence and is also structured into k'_1 and k'_2 corresponding to the propositional content of the actual adjunct phrase and the actual finite clause. k'_1 and k'_2 are instantiations of situation types introduced by k_1 and k_2 and $k'_1{}^{[s':p']} \Rightarrow k'_2{}^{[s'':p']}$.

The modalities in XP are epistemic and they represent the speaker's evaluation of the degree of instantiability of the descriptive situation by the actual one. Extending [1], we treat them as morphisms between K_1 and K_2.

(9)   **Modal:**   *possible_instantiation* $(K_1^{([\check{s}' \mid \check{s}' : \wp\,'] \Rightarrow \Diamond[\check{s}'' \mid \check{s}'' : \wp\,''])}, K_2^{([s':p'] \Rightarrow [s'':p'])})$

Interpretation: "It is possible that John, *as Prime Minister* would possibly do many good thinks". It follows that John is not the Prime Minister but that, if he were, he would do many good things.

(10)   **Generic:**   *expected_instantiation* $(K_1^{([\check{s}' \mid \check{s}' : \wp\,'] \Rightarrow \Diamond[\check{s}'' \mid \check{s}'' : \wp\,''])}, K_2^{([s':p'] \Rightarrow [s'':p'])})$

(11)   **Necessity:**   *necessary_instantiation* $(K_1^{([\check{s}' \mid \check{s}' : \wp\,'] \Rightarrow \Diamond[\check{s}'' \mid \check{s}'' : \wp\,''])}, K_2^{([s':p'] \Rightarrow [s'':p'])})$

The concessive reading is obtained whenever K_1 and K_2 are in the scope of an epistemic negation: that signals that the expectation (K_1) is deceived by the actual situation (K_2). The epistemic negation is usually instantiated by two antinomic items in the adjunct phrase and finite clause.

(12)   **Contradiction:**   *impossible_instantiation* $(K_1^{([\check{s}' \mid \check{s}' : \wp\,'] \Rightarrow \Diamond[\check{s}'' \mid \check{s}'' : \wp\,''])}, K_2^{(\neg[s':p'] \Rightarrow [s'':p'])})$

Using *avec* (as well as *with*) the speaker abstracts a law from an actual situation.

(13)   Les nuages arrivant de loin, Marie se presse de renter

(14)   Avec les nuages arrivant de loin, Marie se presse de rentrer
        (With) the clouds arriving form far away, Mary hurries up to go home

(14) is interpreted as a law, but not (13).

(15)   **Avec:**   *epistemic_law_of*$(K_1^{([\check{s}' \mid \check{s}' : \wp\,'] \Rightarrow \Diamond[\check{s}'' \mid \check{s}'' : \wp\,''])}, K_2^{([s':p'] \Rightarrow [s'':p'])})$

4   Conclusion

To conclude, let us recall the main features of this semantic analysis of AC: (i) it sticks to the syntactic analysis, (ii) it does not rely on hidden operators, (iii) it keeps the meaning of the construction constant, (iv) it integrates the speaker's point of view. Moreover, it extends the theory of [1] in that: (i) syntactic structures are meant to introduce a (parametric) propositional content and thus a discourse fragment, (ii) epistemic modalities are considered to be possible SDRS conditions.

AC are not then semantically variable but they introduce a descriptive situation. Their apparent variability results from their contextualisation in modal environments that represent speaker's evaluation of the instantiability of the descriptive situation (K_1) by the actual one (K_2).

References
[1] Asher, N. (1993). *Reference to Abstract Objects in Discourse*. Dordrecht: Kluwer Academic Publishers.
[2] Barwise, J et Perry, J. (1978). *Situations and Attitudes*. Cambridge, MA : MIT Press.
[3] Combettes, B. (2000). L'apposition comme unité textuelle et constituant phrastique. *Langue Française, 125*, pp. 90-105.
[4] Lewis, D. (1970). General Semantics, *Synthese 22*, pp. 18-67.
[5] Pollard, C and Sag, I.A. (1994). *Head-Driven Phrase Structure Grammar*. Chicago: The University of Chicago Press.
[6] Stump, G. T. (1985). *The Semantic Variability of Absolute Constructions*. Dordrecht : D. Reidel.