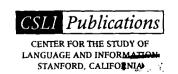
## CONCEPTUAL STRUCTURE, DISCOURSE and LANGUAGE

edited by

Adele E. Goldberg

# CONCEPTUAL STRUCTURE, DISCOURSE and LANGUAGE

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### Preface

This collection of papers is the outcome of the first Conceptual Structure, Discourse and Language conference (CSDL) held at the University of California, San Diego in October 1995. CSDL was organized by Ron Langacker, Gilles Fauconnier and myself with the intention of bringing together researchers from both "Cognitive" and "Functional" approaches to linguistics.

The papers in this volume span a variety of topics, but there is a common thread running through them: the claim that semantics and discourse properties are fundamental to our understanding of language. Several recurrent themes can be recognized in the following collection. These include an emphasis on the dynamic nature of language, both diachronically and synchronically, the relevance of a notion of viewpoint in grammatical analyses, the role and nature of metaphor and cognitive blends, the possibility of non-derivational ways to capture relationships among constructions, and the importance of detailed lexical semantics. Other papers provide detailed and illuminating analyses of particular constructions.

Many of the articles stress the dynamic nature of ongoing discourse. Chafe's article builds on his earlier work providing a non-linear model of understanding discourse structure. One and Thompson discuss how interlocutors jointly construct meaningful discourse in a dynamic way. Van der Leek suggests that the lexicon be viewed as dynamically interacting with various constructions. Liu suggests that the semantics of the de complement in Mandarin is determined by dynamic aspects of speakers' construals.

Other articles stress the importance of a diachronic view of language, noting that the diachronic facts often have synchronic repercussions. Carey offers a detailed analysis of how the English and Spanish perfect tenses evolved from resultatives, by providing specific links in the grammaticalization chain. Gerdts and Hinkson discuss lexical suffixes in Salish languages as the end of a grammaticalization process involving noun incorporation, thereby positing a cline between lexical and grammatical elements. Israel provides a detailed analysis of the history of the way construction that helps motivate the verb clusters that appear in the construction today. Huang and Chang provide an analysis of the Mandarin -quilai, relating its directional, inchoative and completive meanings.

The importance of establishing a viewpoint is another theme that is echoed in several papers. Epstein stresses the importance of viewpoint in his analysis of the definite article in English, as does Laury in her discussion of demonstratives in Finnish. Poulin discusses the way that shifts in viewpoint are captured in ASL by subtle bodily shifts. The viewpoint-related notions of Figure and Ground are discussed by Polinsky, who argues that these notions are independent of thematic roles, and grammatical or discourse functions. Forrest's contribution provides some experimental data suggesting that a change in viewpoint and the attendant reconstrual occurs in real time.

Another group of papers breaks new ground in the theory of conceptual metaphor and the related process of blending. Grady, Morgan and Taub argue that conceptual metaphors should be broken down into component parts, each experientially grounded and capable of interacting with other parts to yield more complicated mappings with emergent properties. Anticipating this suggestion, Hines offers an illuminating look into the metaphorical uses of dessert terms to refer to women. She suggests that several component metaphors conspire to motivate these uses. Also anticipating the relevance of considering independent components of metaphorical schemas is Lakoff's contribution concerning the experiential grounding of our various conceptual schemas for morality. Fauconnier and Turner explore the idea of grammatical blending as a cognitive process that includes metaphor and grammatical fusion as special subcases. Coulson provides a case study making use of this mechanism.

Several contributions address the nature of relationships among families of constructions. Ward and Birner look at the discourse function of three constructions involving rightward movement in English; Lambrecht considers the partially analogous rightward anti-topic (A-TOP) position in various French constructions, particularly vocatives. The contribution of Michaelis & Lambrecht analyzes a family of constructions defined by their exclamative semantic/pragmatic function.

Quite rich lexical semantic properties are shown to be relevant in various ways. Countering the recent claim that only aspect is relevant

to syntactic expression, Filip argues that detailed lexical semantics also must be taken into account, particularly for psychological predicates in English and Czeck. Ackerman and Goldberg argue that detailed lexical semantics together with general pragmatic principles can explain why certain adjectival past participles require modification when used prenominally (?baked cake, half-baked cake).

Other contributions explore the properties of particular constructions. Langacker offers a Cognitive Grammar analysis of a variety generic constructions. Sheffer provides a Cognitive Grammar analysis of deictic adjectives such as previous, former. Dancygier and Sweetser analyze conditional constructions. Matsumoto distinguishes and analyzes two types of fictive motion constructions, exemplified by the directional phrases in The highway goes from LA to NY and The bike is parked across the street. Kemmer and Barlow discuss the discourse properties of the emphatic -self construction. The role of motivation in analyses of modal verbs is explored in two papers. Wilcox argues that the grammatical form of modal verbs in ASL is motivated as opposed to arbitrary. Achard makes a similar point for the various complement types of modals in French.

### French Modals and Speaker Control

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#### 1. Introduction

A modal system is usually composed of a small class of verbs which exhibit certain structural and semantic characteristics. For example, the English modals do not have infinitive forms, they do not agree with their subject, and they do not have participial forms. The French modal class is by no means as distinctive. The verbs traditionally considered as modals are generally included in the broader class of auxiliaries because they are followed by infinitival complements, but they are not morphologically different from other verbs. I argue elsewhere (Achard 1993) that pouvoir 'can', devoir 'must', and the capability sense of savoir 'know how' constitute the French modal class. This paper focuses on the different modal senses illustrated in (1)-(4). Example (1) presents the capability sense of savoir. (2a) illustrates the ability sense of pouvoir, and (2b) illustrates the possibility sense of the same verb. Example (3) presents the necessity sense of devoir, and (4a) and (4b) respectively present the epistemic senses of pouvoir and devoir:

- (1) Marie sait nager
  - 'Mary knows how to swim'
- (2) a. Marie est forte, elle peut soulever 100 kilos 'Mary is strong, she is able to lift 100 kilos'
  - b. Le docteur peut vous voir demain, elle n'a pas de rendez-vous<sup>2</sup> 'The doctor can see you tomorrow, she has no appointments'
- (3) Jean doit partir immédiatement 'John must leave immediately'
- (4) a. Je ne vois pas de lumière, il peut ne rentrer que demain 'I don't see any light, he may only come back tomorrow'
  - b. Il a laissé la porte ouverte, il doit revenir bientôt 'He left the door open, he must be coming back soon'

<sup>&</sup>lt;sup>1</sup> In Achard (1993), I argue that the conceptualizing role of the main clause subject with respect to the complement scene allows us to differentiate between different classes of verbs which take infinitival complements. The subject of cognition or volition verbs such as *espèrer* 'hope' and *vouloir* 'want' acts as a conceptualizer towards the complement scene (Langacker 1991), whereas the subject of modals has little (if any) conceptualizing role. According to that analysis, *savoir* is a polysemous verb, and its capability (modal) sense presented here is to be kept separate from its cognition 'know that' sense.

<sup>&</sup>lt;sup>2</sup> Pouvoir also has a sense of permission which will not be considered here. See Achard (1993) for further details.

The analysis of sentential complements has been a very prolific area of research in Romance linguistics, but very little has been said about the specific forms the complement of modals might take. In this paper, I am specifically concerned with the possible presence of the grammatical markers of aspect and voice on the infinitival complement following the different senses of the modals presented in (1)-(4). I will show that the distribution of those markers with a given modal is a direct manifestation of the conceptual structure evoked by that modal. The paper is structured in the following fashion: Section 2 presents the problem. Section 3 provides a semantic/conceptual analysis of the French modals. Section 4 presents the analysis of the distribution of the markers with the different modals. Section 5 summarizes the results obtained in the paper.<sup>3</sup>

### 2. THE PROBLEM

Infinitival complements in French can usually combine with the grammatical markers of perfect aspect (auxiliary être 'be' or avoir 'have' + past participle of the main verb) and passive (être + past participle of the main verb). In control constructions for example, the infinitive freely combines with both aspect and voice markers, as illustrated in (5).

- (5) a. Jean espère finir à l'heure 'John hopes to finish on time'
  - b. Marie espère avoir fini à l'heure 'Mary hopes to have finished on time'
  - c. Marie espère être élue
     'Mary hopes to be elected'

In (5a), the content verb *finir* is in the infinitive. (5b) is in the so-called past infinitive. The auxiliary *avoir* is in the infinitive, and *finir* is in the past participle. (5c) is a passive sentence. The auxiliary is *être*, and the main verb is in the past participle.

However, certain constructions place tighter restrictions on the presence of these markers on their complement structures. For example, in a causative construction, the infinitive can only be used in its bare form, as shown in (6a). It cannot be inflected by an aspect marker as in (6b), or a voice marker as in (6c):

(6) a. Marie fait travailler Jean 'Mary makes John work'

- b. \*Mary fait avoir travaillé Jean
  - 'Mary makes John have worked'
- c. \*Marie a fait être élu Jean
  'Mary made John be elected'

With the modals, the possible presence of grammatical marking on the infinitival complement varies depending on the sense of the verb considered. The distribution of the markers of aspect and voice with the different senses of the modals illustrated earlier is presented in (7)-(20).

### 2.1 The Data

The ability sense of *pouvoir* and *savoir* are both most felicitous when they are followed by a straight infinitive. This is illustrated for *savoir* in (7) and (8), and for *pouvoir* ability in (9) and (10).

- (7) \*Il sait avoir nagé
  'He knows how to have swum'
- (8) ??Il sait être enfermé 4
  - 'He knows how to be locked up'
- (9) \*Il est très fort, il peut avoir soulevé la table 'He is very strong, he can have lifted the table'
- (10)??Il peut être enfermé dans le placard

'He can be locked in the closet'

At first sight, the possibility sense of *pouvoir* seems similar to the ability sense. In (11) and (12), the infinitival complements cannot be marked for aspect or passive morphology:

- (11)\*Il peut avoir nagé à cinq heures ce soir
  - 'He can have swum at five o'clock tonight'
- (12)\*Jean peut être frappé par la police
  - 'John can be hit by the police'

However, in other cases, the presence of the perfect or passive markers on the complement is perfectly felicitous, as illustrated in (13) and (14):

- (13)a. Marie peut être revenue à six heures si vous voulez 'Mary can have returned at six o'clock if you'd like'
  - b. Jean peut avoir fini dans cinq minutes si c'est important 'John can have finished in five minutes, if it is important'

<sup>&</sup>lt;sup>3</sup> The analysis presented here makes use of the concepts developed within the theory of Cognitive Grammar (Langacker 1987, 1991). Throughout the paper, I will assume basic familiarity with the CG framework.

<sup>&</sup>lt;sup>4</sup> Some speakers have found that sentence remotely possible, if être enfermé 'be locked up' represents a specific skill the subject possesses, as for example in the case of a magic act, or an experienced burglar who relies on his capacity of being locked up in different places to rob them. However, my consultants all point to the marginality of the sentence, and invariably favor constructions such as Il sait se laisser enfermer 'He knows how to get himself locked up' to describe such situations.

- (14)a. Paul pourra être raccompagné par un professeur si vous voulez 'Paul will be (able to be) taken home by a teacher if you want'
  - b. Votre voiture pourra être réparée dans deux heures "Your car will be (able to be) fixed in two hours'

The root sense of *devoir* (necessity) imposes no constraints on the following infinitival process, as illustrated in (15) and (16).

- (15) Il doit avoir étudié la leçon avant de faire l'exercice
  - 'He must have studied the lesson before doing the exercise'
- (16)Il doit absolument être libéré tout de suite
  - 'He must absolutely be released right away'

In their epistemic senses, neither *devoir* nor *pouvoir* places any constraints on the following complement process. This is illustrated in (17) and (18) for *devoir* and in (19) and (20) for *pouvoir*.

- (17) Il doit être parti, je ne vois pas sa voiture
- 'He must have left, I don't see his car'
- (18) Il doit être enfermé, je l'entends crier
  - 'He must be locked up I hear him scream'
- (19) Il peut ne pas avoir compris, il faudrait répéter
  - 'He might not have understood, we should repeat'
- (20) Il peut être enfermé, il vaut mieux l'appeler
  - 'He might be locked up, we had better call him'

The distribution of the markers of aspect and voice with the different modals presented in (7)-(20) is summarized in Table 1.

Table 1: Distribution of Grammatical Markers after Modals

	Epist.		Root			
	Pouvoir	Devoir	Devoir	Pouvoir /po.	Pouvoir/ah	Sougir
Aspect	+	+	+	+/-	-	Davoir
_Voice	+	+	+	+/-		

Table 1 clearly shows that the modals divide into three natural classes with respect to the kind of grammatical marking each verb allows on its complement. The first one is composed of the epistemic modals and the root sense of *devoir*. The second one contains the possibility sense of *pouvoir*. The third one is composed of the ability sense of *pouvoir* and *savoir*. The goal of this paper is to explain the distribution presented in Table 1. In the following sections, I will now show that the constraints on the possible form of the complement are a direct manifestation of the conceptual configuration which constitutes the semantics of each modal.

#### 3. SEMANTIC ANALYSIS OF THE FRENCH MODALS

It was Talmy (1976, 1988) who first recognized that modality partakes of the general semantic category of force dynamics (henceforth FD). Sweetser (1990:51) thinks that it is best understood "in terms of our linguistic treatment of force and barriers in general." The term "force" applies to the category of necessity. The notion of "barrier" applies to the category of possibility. The semantic characterization of French modal verbs involves making specific the different FD configurations of devoir, pouvoir and savoir.

In his analysis of modality, Langacker (1991) notes that the English modals historically come from main verbs which denoted capability or volition, but later developed into modals via semantic change. These verbs share important semantic characteristics. First, they make schematic reference to the process in their complement, and secondly, their subject is "the locus of some kind of potency directed at the landmark process, i.e. a physical or mental force that, when unleashed, tends to bring about an occurrence of that process" (Langacker 1991:270). The French modals are interesting because they present synchronically the whole range of modal uses analyzed diachronically for English by Langacker, namely main-verb constructions, root meaning, and epistemic modality. Consistent with Langacker's analysis, the term "locus of potency" (henceforth LP) will refer to the origin of the force responsible for the potential realization of the complement process. The ability sense of pouvoir and savoir represent the "main verb constructions".

### 3.1 Main verb Constructions: Pouvoir (ability), Savoir

With the ability sense of *pouvoir* illustrated in (2a), the subject is construed as the locus of potency of the physical force required to perform the activity evoked in the complement, should the circumstances so require. Depending on the nature of the activity, the force can also be mental, emotional, or intellectual. The FD configuration of the modal is quite simple. The force stored in the subject allows the latter to overcome the resistance coming from the activity profiled in the complement, and therefore perform an occurrence of that process.

The difference between *pouvoir* and *savoir* illustrated in (1) mainly concerns the nature of the subject's potency. The subject of *savoir* has mastered the process evoked in the complement to the point that the latter has become a well-established routine. That mastery goes beyond the possible physical accomplishment of a process, and involves the mental

<sup>&</sup>lt;sup>5</sup> The term main verb constructions is used specifically to refer to the ability sense of *pouvoir* and *savoir*. Importantly, these verbs do not have an epistemic sense. The technical use of the term should not overshadow the fact that all modals are main (i.e. content) verbs in French.

integration of what it takes for that process to be realized. This is true even when the process is very physical. For example, what is being evoked in (1) is the mental integration of the swimming routine. It is that integration which makes every instance of the physical realization of the infinitival process possible. In that sense, we can say that the ability sense of pouvoir presents a physical capacity, while savoir presents a more mental capacity. The meaning of savoir can also be analyzed in terms of force dynamics. The obstacles inherent to the activity profiled by the infinitive have been overcome once and for all, and the subject is capable of performing any random instance of that activity.

Notice that for both the capability sense of savoir and the ability sense of pouvoir, the obstacles to be overcome are part of the activity itself, and not due to outside circumstances. The FD configuration of the pouvoir (ability) and savoir is given in Figure 1:

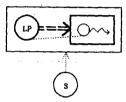


Figure 1. Main verb constructions

Figure 1 gives us an opportunity to present the notational system used throughout this paper. The sentence is represented by the larger rectangle. The speaker is indicated as S. The single arrow going from S to the sentence indicates that the sentence represents his/her conceptualization. The speaker's conceptualizing role is independent from his/her possible participation in the FD configuration of the modal. Its relevance will become clearer in the course of the analysis. The dashed double arrow represents the modal force directed at the infinitival process. The infinitival process is represented by the inner (heavy lined) rectangle. The subject of the modal is represented by the heavy lined circle.6

In Figure 1, the subject of the modal is identified with the locus of potency, therefore marked LP. It is the sole locus of the force which can produce an instance of the infinitival process. Notice, importantly, that the speaker does not partake in the FD configuration. It is a mere observer (a conceptualizer) of the potency displayed by the subject of the modal.

### 3.2 Pouvoir (possibility)

It was indicated earlier that possibility involves the notion of barrier (Sweetser 1990). A barrier represents any sort of external obstacle which might prevent the subject from performing the process evoked by the infinitive. The possibility sense of pouvoir profiles the absence of such obstacle. In (2b) for instance, the subject is able to perform the infinitival process, because no adversary outside circumstance (previous appointments) stands in her way. The kind of configuration illustrated in (2b) is given in Figure 2:

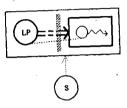


Figure 2. Possibility

The speaker points to the absence of a barrier (represented by the dotted rectangle), and thus to the fact that nothing prevents the subject from realizing the infinitival process. In (2b), that pointing to external favorable circumstances represents the extent of the speaker's participation in the FD configuration.

Note that Figure 2 looks quite similar to Figure 1. In particular, the subject of the modal is marked as the locus of potency in both cases. However, this merely illustrates a convenience of representation. In the possibility sense of pouvoir, the exact location of the locus of potency is not as clear as with the ability sense. The modal force directed towards the infinitival process is no longer concentrated in the subject alone. It is more diffuse, and incorporates the circumstances surrounding the possible occurrence of the infinitival process. For example, in (2b), the LP incorporates the doctor's daily schedule, which allows her to perform the activity evoked in the complement. Notice that the diffusion of the locus of potency away from the subject correlates with the involvement of the speaker in the FD configuration of the modal scene. His/her role is minimum, namely to point out the circumstances which surround the modal situation. S/he is nonetheless, in that limited way, associated with the locus of potency.

In spite of these differences in their FD configurations, I propose that in examples such as (2b), where it shows initial impulse towards the realization of the infinitival process (going to see patients is what doctors

<sup>&</sup>lt;sup>6</sup> Consistent with the conventions of Cognitive Granumar, the heavy lines in the diagrams represent the profiled entities, i.e. the focal entities within the base (Langacker 1987, 1991).

do), the subject is still most strongly associated with the locus of potency, precisely because of its intentionality. Consequently, for convenience of presentation, it will be identified as LP in the diagrams. It should be clear, however, that the semantic extension of pouvoir from the basic sense of ability to possibility involves the diffusion of the locus of potency away from a clearly delineated source (the subject) to incorporate the circumstances surrounding the modal situation. An important consequence of that diffusion is the change of role of the speaker. From a mere observer in the ability sense, s/he becomes in a minimal sense part of the FD pattern of the modal since s/he has access to the circumstances surrounding the complement process and can point to them.

### 3.3 Devoir (necessity)

Necessity partakes of the category of force. The root sense of *devoir* illustrated in (3) profiles a relation of obligation, self-imposed or imposed by external elements, between a participant in the speech situation (usually the subject) and the complement process. Unlike the cases considered up to now, the locus of potency, i.e. the origin of the modal force, cannot be identified with the subject of the modal, but with the "target" (T) of that force, namely the entity in charge of bringing about the complement process. Notice that the target itself is not deprived of agentivity. It must be able to perform the infinitival process, but it lacks the initiative to provide the original impulse. The motivation for that force is with the locus of potency, and the target is treated like an instrument.

A situation of necessity can be represented by four different force-dynamic configurations which vary along two parameters, namely i) the role of the speaker vis-à-vis the LP, and ii) the role of the subject vis-à-vis the target of the modal force. The speaker can have a strong role, i.e. be identified with the locus of potency of the modal force, or a weak role, where s/he merely reports that force. Figure 3 presents the speaker's strong role, Figure 4 its weak role.

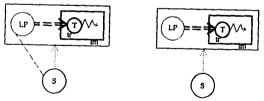


Figure 3. Necessity S=LP

Figure 4. Necessity S≠ LP

In Figure 3, the subject (the trajector of the modal) is the target, therefore marked T. It is located downstream from the force emanating from the locus of potency which remains unprofiled (identified as the speaker). In Figure 4, the speaker is distinct from the source of obligation. This is simply indicated in the diagram by the absence of a correspondence line between S and LP. (Sweetser 1990) shows that there is no formal way to indicate the speaker's role. The example in (3) can be interpreted with a speaker's strong or weak role depending on pragmatic considerations.

The second area of variation concerns the relation between the subject of devoir and the modal force. In all the examples considered so far, the subject is identified with the target. It is the endpoint of the deontic force which forces it to perform the infinitival process. Talmy (1988) discusses examples such as (21), where the trajector of relation profiled by the modal verb is not the target. The latter remains an unprofiled part of the base.

### (21) La pizza doit aller au four à onze heures

'The pizza must go in the oven at eleven o'clock'

The pizza in (21) is not capable of exercising any force or going anywhere. The target of the force of obligation is another participant which remains unprofiled. The configuration of (21) is given in Figure 5:

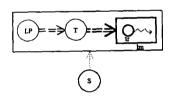


Figure 5. Necessity, Unprofiled Target

The target of the force of obligation is unprofiled in Figure 6. It must, however, perform the task of putting the pizza into the oven. In spite of its patient role, the relation profiled by the modal recognizes the pizza as the trajector. It is therefore profiled.

### 3.4 Epistemic Senses

In order to describe epistemic modality, Langacker (1991) presented the Dynamic Evolutionary Model, which incorporates as its components different ways we think about the world. First, that it is structured in a particular way, so that certain situations are possible, while others are precluded. Secondly, that it contains certain force dynamic properties, which yields the notion of "evolutionary momentum" when applied metaphorically to the model.

<sup>7</sup> Notice also that the possibility sense of *pouvoir* is different from the ability sense considered earlier, because it focuses on the adversary circumstances outside the process, and not on the force (resistance) coming from the activity itself.

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Even though reality is usually considered stable, it is conceived as evolving through time. Its evolution along the time axis yields a force-dynamic dimension to our conception of reality. Evolutionary momentum allows the future course of events to be predictable to some extent, because it constraints the elements which unfold within it. Some elements are seen as possible, while others are definitely excluded from the possible turn of events. Part of our conception of reality includes the understanding that the way it has already evolved leaves the potential for further evolution in constrained directions. These elements are illustrated in the Dynamic evolutionary Model presented in Figure 6 (from Langacker 1991:277):

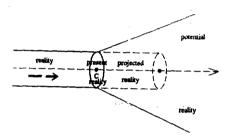


Figure 6. Dynamic Evolutionary Model

Reality is depicted by the cylinder, and C is a conceptualizer (identified as the speaker). The dashed double arrow represents evolutionary momentum, which tends to carry reality along a certain path and precludes it from taking others. Those paths which are not excluded are referred to as "potential reality". Reality is often constrained enough that the future course of events can be predicted with reasonable confidence. Such cases are referred to as "projected reality".

With respect to this model, *pouvoir* places the process in potential reality. In (4a) for example, the observation of certain elements of current reality (the absence of light) suggests to the speaker that the subject's coming back tomorrow is a possible occurrence. *Devoir* places the infinitival process in projected reality. In (4b), given the nature of current reality, namely the open door, the subject's imminent return can be considered with confidence, and therefore considered as an element of projected reality.

### 4. MARKING ON THE INFINITIVAL PROCESS: SPEAKER CONTROL

We are now in a position to provide an explanation to the issues considered in Table 1, namely: i) the grouping as a natural class of the root sense of *devoir* and the epistemic modals, ii) the variation observed in the case of *pouvoir* possibility, and iii) the absence of grammatical marking on the

complement following savoir and pouvoir ability. The hypothesis I propose is the following: The possible presence of grammatical markers on the infinitival complement correlates with the "conceptual control" (to be defined shortly) of the speaker over that complement.

One of the key issues in any discussion about complementation concerns the respective roles of the main clause subject and the speaker in the conceptualization of the complement scene (Achard 1993, Langacker 1991). With modals, the subject has little (if any) conceptualizing role with respect to the complement process. In the following sections, I show that the presence of grammatical marking on the complement is a consequence of the speaker's direct conceptual relationship with the infinitival process (independently of his/her conceptualization of the whole sentence). I will call that direct conceptual relation the "control" of the speaker over the infinitival process. One can legitimately wonder why the speaker's conceptual control over the complement process should be reflected by the possible presence of grammatical markers on that process. The question cannot be answered without considering the semantic import of the grammatical markers themselves

### 4.1 Semantic Import of the Grammatical Markers

From a semantic point of view, an infinitive provides information regarding the core content of a process type (Langacker 1991). The addition of the markers of aspect and voice provides information relative to the internal structure of that process. The aspectual marker is traditionally analyzed as indicating, with respect to some temporal reference point, whether the process is completed or still in progress. Concerning the passive marker, Langacker (1991:197) writes that it "overrides the content verb with respect to one dimension of imagery, namely which processual participant assumes the status of trajector." In other words, the passive marker provides information concerning the specific coding of the participants in the complement process, i.e. their figure/ground organization.

These cursory observations do not do justice to the complexity of the problem of the semantic characterization of the grammatical markers concerned, but they should be sufficient for the purposes of this paper. The important point is that the addition of a specific grammatical marker (aspect or voice) to a process type imposes its own particular meaning on the conceptual content provided by the infinitival process. By doing so, the addition of a grammatical morpheme derives a higher-order process type, much in the same way that the addition of a plural marker to a singular noun stem derives a higher-order plural noun type (Langacker 1991). That higher-degree process type is quite different from the original (underived) process type, because it contains information about the inner-structure of

the process which goes beyond its conceptual content. I will say that the creation of that higher-level type involves some "conceptual manipulation" of the original type. In that light, the speaker's ability to conceptually manipulate the complement process is the manifestation of his/her conceptual control over that process. The presence of grammatical marking on the infinitival complement can therefore be viewed as the morphosyntactic manifestation of speaker control. The crucial point in the analysis consists in precisely determining the elements which facilitate the speaker's direct conceptual relationship with the complement process. In the following section, I show that the control of the speaker with respect to the complement process crucially depends on his/her role in the FD configuration evoked by the modal, and more specifically its relation to the LP of the modal force.

### 4.2 Pouvoir: Diffusion of the Locus of Potency

Pouvoir is the most interesting verb, because its three configurations (ability, possibility and epistemic modality) illustrate the three levels of restriction on the possible grammatical marking on the infinitival process. In light of the hypothesis presented above, we can speak of an increase in speaker control from the ability sense to epistemic modality. Crucially, that increase in speaker control correlates with the progressive diffusion of the locus of potency of the modal force, and therefore with the increasing participation of the speaker in the FD configuration of the modal. Let us briefly review the three stages in turn.

With the ability sense (this is also true for savoir), the LP is exclusively concentrated in the subject. The latter has total (physical) control over the complement process, and the speaker is a mere observer of the relation between subject and complement. The speaker's external position with respect to the FD configuration of the modal parallels his/her lack of control over the complement. The absence of any marking following savoir and the ability sense of pouvoir is fully consistent with our analysis, where such marking is imputable to the speaker's direct conceptual control over the complement process.

The sense of possibility is characterized by two different configurations. Recall that in the first one, illustrated in (11) and (12), marking on the infinitival process is impossible. In the second one, illustrated in (13) and (14), both aspectual and passive markers can appear on the infinitival complement. Consistent with our analysis, the difference in marking is imputable to the difference in the speaker's role in the two configurations. The first configuration is very similar to the ability sense. The speaker's role is merely to point out the absence of a barrier standing between the subject and its accomplishment of the complement process. The speaker has knowledge of the circumstances which enable the subject

to perform that process, but s/he has no power to influence them. Crucially, in this configuration, the speaker is still only an observer of the modal force. Here again, the speaker's lack of control over the complement process is reflected by the impossibility of grammatical marking on that process. In the second configuration, the speaker's role in the FD configuration is more active. S/he takes responsibility for the occurrence of the complement. In (13) and (14), the speaker is in a position to impose a schedule on the subject, and can therefore easily be associated with the locus of potency of the modal force. (13a) for example is most natural uttered by the people in charge of a children's' party to the parents of one of the guests. The correlation between the speaker's proximity to LP and his/her control over the complement process is straightforward. In order to make a commitment relative to the occurrence of the infinitival process, the speaker must establish a direct conceptual relationship with that process. Consistent with the hypothesis formulated earlier, the speaker's control is manifested by the absence of restrictions on the complement.

The passage to epistemic modality involves the diffusion of the locus of potency to the point where the latter can only be identified with the evolutionary momentum of reality. The speaker's control over the complement process is obvious, because the appreciation of the evolutionary momentum is speaker internal by definition.<sup>8</sup>

### 4.3 Devoir. Necessity

The subject of *devoir* cannot be identified with the locus of potency of the modal force, because it lacks the initial impulse, or initiative towards the realization of the complement process. The control of the speaker in that case is obvious. In order for him/her to use the subject as an instrument to perform the complement process, s/he must have a direct conceptual relationship with that process. What necessity shares with epistemic modality, and therefore justifies their similar behavior considered in Table 1, is that under no circumstances can the subject be identified as the locus of potency of the modal force. The (conceptual) control over the complement process resides with the speaker.

#### 5. CONCLUSION AND IMPLICATIONS

This paper was concerned with the restrictions placed on the complements of French modal verbs. It was shown that the distribution of the grammatical markers of aspect and voice with each individual modal is a manifestation of the conceptual organization evoked by that modal, and

<sup>8</sup> The total diffusion of the locus of potency is reflected by the absence of restrictions on the nature of the subject of epistemic modals. Impersonals and weather expressions can be main clause subjects, as in *Il doit faire du vent aujourd 'hui* 'It must be windy today' for example.

more specifically, of the role of the speaker in its FD configuration. The closer the speaker is to the locus of potency of the modal force, the more control s/he has over the complement process. Control has been defined as a direct conceptual relationship between the speaker and the complement structure.

Much recent work in Cognitive Linguistics has shown that the form of a grammatical expression reflects the specific construal of the scene it describes. As a conclusion to this paper, I would like to briefly show how it contributes to the investigation of a specific dimension of construal, namely the "viewing arrangement" (Langacker 1985, 1990) existing between a conceptualizer and the entity s/he conceptualizes. We have seen that the loosening of the restrictions imposed on the complement of modals follows a gradual shift of control from the subject to the speaker. That shift can be expressed naturally, if we consider the process of diffusion of the locus of potency examined earlier in terms of the "subjectification" (Langacker 1985, 1990, 1991) of the modal force. The main-verb constructions present a maximally objective construal of the complement scene. The locus of potency is a clearly identifiable and well-defined entity, and the modal force is also objectively construed. The externality of the speaker is representative of the maximally objective construal of the scene. Subjectification "involves some facet of the profiled relationship being reoriented from the objective axis shere from the subject to the complement process] to the subjective axis [here from the speaker to the complement process), so that it is no longer anchored by an objective participant (the subject) but rather by a reference point construed more subjectively, the default case being the ground itself' (Langacker 1991: 270 insertions in brackets mine). In the case of modality, the diffusion of the locus of potency can therefore be interpreted as a kind of subjectification of the modal force. It is quite natural that the speaker's control over the complement process should follow subjectification, because in that process, the modal force gets more and more associated with him/her. From maximally objective between well delineated elements, the modal force becomes maximally subjective and speaker internal.

The notion of viewing arrangement allows us to relate the behavior of the modals to that of other verbs which take infinitival complements. We saw in (6) that the causative verbs impose on their complements constraints similar to *pouvoir* ability and *savoir*. <sup>10</sup> It is interesting to note that both constructions present a maximally objective construal of the

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relation between the subject and the complement process, from which the speaker remains external. It therefore seems that the kind of viewing arrangement existing between the subject and the complement process correlates with the level of restrictions on the possible marking of the infinitival complement. A more thorough examination of this observation, however, goes beyond the scope of this paper, and I leave the matter for further research.

#### REFERENCES

- Achard, Michel. 1993. Complementation in French: A Cognitive Perspective. Doctoral Dissertation, UCSD.
- Langacker, Ronald W. 1985. Observations and Speculations on Subjectivity. In John Haiman, ed., *Iconicity in Syntax*, 109-150. Amsterdam: John Benjamins.
- Langacker, Ronald W. 1987. Foundations of Cognitive Grammar. Vol. 1: Theoretical Prerequisites. Stanford, Calif.: Stanford University Press.
- Langacker, Ronald W. 1990. Subjectification. Cognitive Linguistics 1: 5-38.
- Langacker, Ronald W. 1991. Foundations of Cognitive Grammar. Vol. 2: Descriptive Application. Stanford, Calif.: Stanford University Press.
- Sweetser, Eve E. 1990. From Ethymology to Pragmatics. Cambridge, Mass.: Cambridge University Press.
- Talmy, Leonard. 1976. Semantic Causative Types. In Masayoshi Shibatani, ed., Syntax and Semantics, Vol.6: The Grammar of Causative Constructions, 43-116. New York: Academic Press.
- Talmy, Leonard. 1988. Force Dynamics in Language and Cognition. Cognitive Science 2: 49-100.

<sup>9</sup> The terms "objective" and "subjective" are used here in the technical sense of Langacker (1985, 1990).

<sup>1990).

10</sup> The same analysis also holds for movement verb constructions such as Marie court chercher le journal 'Mary runs to get the paper' for instance.

### **Constraints on Adjectival Past Participles**

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### 1 Introduction

In this paper, we examine certain distributions of deverbal adjectives based on past participles and used attributively, (hereafter, APPs). These distributions, although widely recognized, have not been sufficiently explained in the rather substantial literature on the subject of APPs (e.g., Lakoff 1965, Hirtle 1971, Wasow 1977, Bresnan 1982, Levin & Rappaport 1986, Langacker 1987, Grimshaw & Vikner 1993). <sup>1</sup> That is, certain types of contrasts are well-known and are accounted for in a fairly straightforwardly way by various approaches. These include the examples in (1):

- (1) a. \* a worked man
  - b. a frozen river

But less discussed are APPs which are sensitive to context: they are permitted only when modifying certain head nouns:

- (2) a. # paid physician<sup>2</sup>
  - b. paid escort

<sup>&</sup>lt;sup>1</sup>We would like to thank Tony Davis, Rich Epstein, Michael Israel, Laura Michaelis, Susanne Preuss, Ron Sheffer and members of the UCSD Cognitive Linguistics Working group for helpful discussion on this topic.

<sup>&</sup>lt;sup>2</sup>Here and below, we use the # to indicate unacceptability in a 'neutral' context; the same APP can appear felicitously with other head nouns or with additional adverbs. We reserve \*'s for cases which cannot be rescued by a changed context.

Finally, there is a third phenomenon that "...as is well known, some APPs sound peculiar unless qualified, for reasons that are not entirely clear" (Levin & Rappaport 1986:634, cf. also Wasow 1977). For example, certain verbs allow APPs only with the addition of adverbial modifiers or prefixes such as *un*-. This applies to (3) in contrast with (2a), as well as to the examples in (4).

- (3) the highly paid physician
- (4) a. # a built house
  - b. a recently built house

While few attempts have been made to account for examples such as those in (2)-(4), one notable exception is a recent article by Grimshaw and Vikner (1993) which is discussed below.

The basic claim we will explore is that:

APPs can only occur if they are construable as predicating an informative state of the head noun referent.

First we provide a brief overview of aspectual properties standardly assumed to be relevant. We then briefly discuss Grimshaw and Vikner's account of obligatory modification, and then we turn our attention to the main focus of this paper: addressing in more detail what allows a state to be considered sufficiently informative.

### 2 APPs must designate a state

Researchers from various theoretical perspectives have noted that the notion *resultant state* is a crucial characteristic of APPs. For example, relevant characterizations from Langacker and Parsons are given below:

each [APP] derives a stative relation by confining the target's profile to the final, resultant state of the process that constitutes the standard. Observe that the profiled relationship is limited to the resulting condition of the entity undergoing the change of state. (Langacker 1991:202-203)

PastP-Adj(Verb) is true of a state s if and only if s is the resultant state of an event of which the Verb is true. (Parsons 1990:236)

Aspectual distinctions such as these can help account for the distinct distributions of "unaccusative" vs. "unergative" predicates. For example, it is generally recognized that only unaccusative predicates make felicitous APPs. Notice that unaccusatives are conventionally analyzed as profiling or designating a state (e.g., Van Valin 1990):

- (5) a. the frozen river
  - b. a fallen leaf
  - c. a broken spoke

Unergatives, on the other hand, as activity predicates, do not profile an endstate, and they are correspondingly unacceptable as APPs:

- (6) a. \*the run man
  - b. \*a coughed patient
  - c. \*a swum contestant

There is much more to say about the aspectual constraints on APPs (see Goldberg & Ackerman, forthcoming), but for present purposes we will simply assume that some notion relevantly like that of *statehood* is important in accounting for the English data. We also will not be discussing observations by Levin and Rappaport (1986) which are complementary to the present discussion.<sup>3</sup> In the remainder of this paper, we will concentrate on certain instances where APPs require modification.

### 3 An Event Structure Account

In a recent article, Grimshaw & Vikner (1993) point out that verbs of creation generally require some type of "obligatory adjunct" to form acceptable APPs. They provide examples such as those in 4, repeated below:

- (7) a. # built house
  - b. recently built house

and the contrasts in (8):

<sup>&</sup>lt;sup>3</sup>In particular, we will leave aside whether all of the APPs must be interpretable as modifying OBJs at some level of representation, as well as the role of Levin and Rappaport's Sole Complement Generalization (see Hoekstra 1984 for observations foreshadowing this proposal.)

### (8) a. # a created house

### b. a carefully created house

They note that APPs based on verbs of creation correspond to accomplishment predicates which have two subevents, a process and a state. Extending a notion of "identification" in a new way, they claim that both subevents must be "identified" by some element in the sentence. They further claim that in APPs the head noun argument only serves to "identify" one subevent, the state. The process subevent is not identified. They claim that the adverbs serve the purpose of identifying the process component of the complex event. As they note, it would seem to follow from this idea that all APPs related to accomplishment verbs, and not only APPs corresponding to verbs of creation would require that the process aspect of the event be further identified with an adverbial of some kind. And yet change of state verbs such as cool, broil are fully acceptable as APPs without further qualification. For example:

### (9) a. the cooled metal

### b. the broiled potatoes

To account for related facts<sup>4</sup> they note that the role of the head noun is different in verbs of creation vis a vis other accomplishment verbs. They diagram the difference as follows:

1. x recorded y

2. x created y



The crucial thing to note is that the y variable is considered to "identify" the process part of the event in the case of *record* but not in the case of *create*, the rationale being that the theme argument does not exist until the building is completed. In what follows, we will refer to this as the "event structure" account.

### 4 Non-Redundancy

In this section, we propose an alternative account of these cases of obligatory adverbs which we argue has several advantages: 1) it accounts for a wider range of data, 2) it is motivated by general pragmatic principles, 3) it allows us to explain why it is that contrastive situations often alleviate the need for otherwise obligatory adverbs, and 4) it is not a constraint specifically on APPs, but holds of adjectives generally.

The event structure account does not generalize to other cases which we argue are related. Consider the contrasts in 10:

- (10) a. # served customer; but well-served customer
  - b. # fed child; but well-fed child
  - c. # sent letters, but recently sent letters
  - d. # married father; but recently married father

Notice that serve, feed, send and marry are not verbs of creation, and therefore the previous account does not explain why adverbs are necessary in these cases.

Notice that in each of the examples, the first APP designates a property that is implied by the frame semantics of the head noun. We expect customers to be served, children to be fed, letters to be sent, etc. At the same time, the second APP given in each example is not implied by the frame semantics of the head noun: the frame semantics associated with customers does not imply that the customers be well served. We claim that the following descriptive generalization holds:

### Non-redundancy constraint

If the referent of the head noun, N, implies a property P as part of its frame-semantic or encyclopedic knowledge, then an APP is not allowed to simply designate P; it must be further qualified.

That is, the APP must designate a property which is not already implied by the frame semantics associated with the head noun. This generalization also accounts for the contrasts in (2) repeated in (11), wherein the APP's acceptability is dependent on the choice of head noun:

- (11) a. #paid physician
  - b. paid escort

<sup>&</sup>lt;sup>4</sup>For some reason that is not clear to us, Grimshaw and Vikner do not make this point for change of state predicates such as *cool* or *broil* specifically. Instead they claim that predicates such as these are expected to require obligatory adverbs, and seem to imply that they do (1993:145). Since these examples are in fact fully acceptable to us and we see no reason why G & V need to classify all change of state verbs as "constructive accomplishments" we attempt to strengthen their argument by supposing that these cases can be accounted for in a way parallel to other acceptable APPs they do discuss.