

Exploring the Role of Clause Subordination in Discourse Structure – The Case of French *Avant que*

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Abstract

The goal of this paper is to explore the role of clause subordination in discourse structure. Through the study of the French subordinating conjunction *avant que* (English *before*) and its interaction with discourse context, I will attempt to show that clause subordination can affect temporal structure and also discourse structure, by conveying either subordination or coordination between discourse units.

1. Introduction

This paper deals with the interaction between the French subordinating conjunction *avant que* (*before*) and discourse context, and with the effect of this interaction on both temporal structure and discourse structure.

In a discourse *CI avant que C2¹*, the subordinate clause has an adverbial function: it temporally anchors the eventuality conveyed in the main clause, (Kamp & Reyle, 1993). This function allows the subordinate clause to be replaced by another temporal adverbial, as illustrated in (1) and (2).

- (1) Paul a trouvé la solution avant que Marie la lui donne².
'Paul found the solution before Marie gave it to him.'

- (2) Paul a trouvé la solution { avant la tombée de la nuit / avant 20h00 }.
'Paul found the solution { before nightfall / before 8.00 pm }.'

Interestingly, this adverbial function is lost in some discourse contexts. Indeed, in discourses (3a) and (3b), the subordinate clause cannot be replaced by a temporal adverbial, cf. (4a) and (4b) respectively.

- (3) a. Paul a d'abord cherché la solution avant que Marie la lui donne.
'Paul first sought the solution before Marie gave it to him.'
- b. Paul a longtemps cherché la solution avant que Marie la lui donne.
'Paul sought the solution for a long time before Marie gave it to him.'
- (4) a. * Paul a d'abord cherché la solution avant la tombée de la nuit.
'Paul first sought the solution before nightfall.'
- b. * Paul a longtemps cherché la solution avant la tombée de la nuit.
'Paul sought the solution for a long time before nightfall.'

From this mere observation, several questions arise: how can a temporal subordinate clause lose its adverbial function? What does the contrast between discourses such as (1) and (3) hide? Does the loss of adverbial function have an effect on temporal structure and discourse structure? I will try to provide some answers in this paper.

The paper is organized as follows. First, I propose an analysis of the interaction between the conjunction *avant que* and discourse context which gives rise to non-adverbial uses of the subordinate clause, as exemplified by discourses (3). Then, I present some effects of this interaction on temporal structure (in particular, *avant que* conveys a strongly constrained temporal relation, rather than a simple one), and on discourse structure (in particular, *avant que* conveys coordination, rather than subordination, between discourse units).

2. Interaction between “*avant que*” and discourse context

As observed in discourses (3), a subordinate clause introduced by *avant que* can lose its adverbial function. *Avant que* does not introduce an eventuality providing a temporal anchor for the eventuality conveyed in the main clause. If no circumstantial interpretation is at stake, what does a discourse *C1 avant que C2* express?

My hypothesis is that interaction between the semantics of *avant que* and discourse context gives rise to two interpretations:

- ‘continuation’: e1 and e2 are in a narrative sequence, such as e2 is the continuation of e1;
- ‘pre-condition’: e1 is the (necessary) condition of the realization of e2, i.e. realization of e2 depends on e1.

In these two interpretations, as well as in a ‘circumstance’ interpretation, the temporal relation conveyed by *avant que* is the same: a temporal precedence between the eventualities, i.e. $e1 < e2$. The central idea behind this work is that it is discourse context, and also sometimes extra-linguistic knowledge, that allows *avant que* appear in non-circumstantial discourses (and trigger coordination in discourse, see section 3). To argue for this idea, the next two subsections investigate what kind of discourse context supports ‘continuation’ (§2.1) and ‘pre-condition’ (§2.2).

2.1. Continuation

‘Continuation’ can be inferred thanks to linguistic cues capturing either a topic elaboration or a preparatory event.

2.1.1. Topic Elaboration

There are some linguistic cues, such as verbs and adverbs, which unambiguously express a continuation between two eventualities. These cues can be found in combination with *avant que*: for instance, the adverb *d'abord* (*first*) in (5), or the verb *commencer par* (*to start off*) in (6).

- (5) Permettez-moi **d'abord** de présenter quelques réflexions générales **avant d'**entrer dans les détails. (A. de Tocqueville – Correspondance avec H. Reeve)³

‘Let me first present some general comments before going into the details.’

- (6) Ils **commencèrent par** se dévisager, les uns les autres, **avant de** se parler. (P. Loti – Mon frère Yves)

‘They started off by staring at one another, before speaking.’

When made explicit by such lexical items, ‘continuation’ is constrained by a common theme, called topic, shared by the eventualities, (Danlos, 2005). That is, *avant que* conveys ‘continuation’ only if the eventualities linked share a topic (supported by identical subjects). For instance, in (7), there is no thematic link between e1 ‘to try to bring me out’ and e2 ‘to blow up’. In fact, e1 is continued by e3, introduced by *ensuite* (*then*). *Avant que* in (7) does not convey ‘continuation’, but ‘circumstance’.

- (7) Eh bien, elle a **d'abord** essayé de m'entraîner hors du club **avant que** cela n'éclate. **Ensuite**, elle a fait preuve d'un sang-froid [...] que bien peu de femmes possèdent en pareille occasion. (M. Droit – Le retour)

‘She first tried to bring me out the club before it blew up. Then, she kept her head, such as few women do in such a situation.’

The cues in (5) and (6) are cataphoric, because they call for a succeeding eventuality. Sometimes, *avant que* is in combination with anaphoric cues, calling for a preceding eventuality, as illustrated in (8) and (9), with the verbs *ajouter la suite* (to add) and the verb *conclure* (to conclude), respectively.

- (8) Il répondit en reprenant une phrase de Virginie : «Faut pas se plaindre...» **avant d'ajouter la suite** : «...y'a plus malheureux que nous !». (R. Sabatier – David et Olivier)

‘He answered by borrowing a sentence from Virginie: « There is no need to complain...» before adding: « There are people more unfortunate than us!».’

- (9) Pour ma part je me demandai surtout si je pouvais arrêter ma carrière – **avant de conclure** que non. (M. Houellebecq – La possibilité d'une île)

‘I was wondering if I could stop my career – before concluding that I couldn’t.’

All these lexical cues for ‘continuation’ reflect the fact that e1 cannot occur after e2. The eventualities occur in a certain temporal order, with respect to a topic, which they elaborate. So, these discourses *C1 avant que C2* have nothing to do with a circumstantial interpretation.

Lexical cues are necessary with *avant que* when a topic elaboration with ‘continuation’ is at stake. If there are cues, e1 can be either instantaneous or durative, cf. (10a) and (10b) respectively, and there is no ambiguity.

- (10) a. Paul **a d’abord donné** la solution à Marie **avant de** la donner à Lisa.

‘Paul first gave the solution to Marie before giving it to Lisa.’

b. Paul **a d’abord cherché** la solution *avant que* Marie la lui donne.

‘Paul first sought the solution before Marie gave it to him.’

If there are no cues, when e1 is instantaneous, there is an ambiguity between ‘continuation’ and ‘circumstance’, cf. (11a). When e1 is durative, there is no ambiguity, cf. (11b).

(11) a. Paul **a donné** la solution à Marie *avant de* la donner à Lisa.

‘Paul gave the solution to Marie before giving it to Lisa.’

b. Paul **a cherché** la solution *avant que* Marie la lui donne.

‘Paul sought the solution before Marie gave it to him.’

Discourse (11b) reflects another discourse configuration where *avant que* conveys ‘continuation’.

2.1.2. Preparatory Event

Some discourses display no thematic link between eventualities, i.e. there is no topic elaboration. Nevertheless, they express ‘continuation’ with *avant que* in combination with lexical semantics of verbs. In particular, there is ‘continuation’ when e1 is a durative situation, as in (12) and (13).

(12) Il **erra longtemps** *avant de* s’asseoir sur un banc de pierre. (R. Sabatier – Les noisettes sauvages)

‘He wandered a long time before sitting on a stone bench.’

(13) Quand je suis entré, elle **a attendu quelques secondes** *avant de* lever les yeux vers moi. Je l’avais encore jamais trouvée aussi belle. (P. Djian – 37.2 Le matin)

‘When I entered, she waited a few seconds before looking at me. I had never found her so beautiful.’

One can observe that none of the subordinate clauses can be replaced by a temporal adverbial, cf. respectively (14) and (15).

(14) * Il erra longtemps avant 20h00.

‘He wandered a long time before 8.00 pm.’

(15) * Elle a attendu quelques secondes avant 20h00.

‘She waited a few seconds before 8.00 pm.’

The eventuality expressed by the main clause can be interpreted as a preparatory phase for e2: there is no thematic link between e1 and e2, but e1 leads to e2 (not necessarily naturally). This preparatory phase is even clearer when one observes discourses such as (16) where e1 is an interval of time between two events e0 ‘the noise echoes through the whole house’ and e2 ‘he walks down’.

(16) La porte claque très fort et le bruit résonne dans toute la maison.

Quelques minutes s'écoulent *avant qu'*il redescende. (B. Clavel – La maison des autres)

‘The door bangs very loudly and the noise echoes through the whole house. A few minutes go by before he walks down.’

The situation e1 can be iterative, as illustrated by (17).

(17) La porte battit derrière lui, **oscilla plusieurs fois *avant de*** s'immobiliser. (M. Genevoix – Eva Charleboix)

‘The door banged behind him, hovered several times before coming to a standstill.’

In this case, the subordinate clause can be substituted by a temporal adverbial in (18), but it doesn't mean that (17) and (18) share the same meaning. In (17), e1 leads to e2: 'to hover several times' leads to 'to come to a standstill'. While in (18), e1 does not lead to e2, e1 is only temporally anchored by the adverbial phrase.

- (18) La porte oscilla plusieurs fois avant 20h00.
'The door hovered several times before 8.00 pm.'

In discourses (12), (13), (16) and (17), lexical semantics of verbs (conveying that e1 is a durative/iterative situation leading to e2) explicitly represents the semantic relation 'continuation' between the eventualities.

The next interpretation 'pre-condition' arises from this interpretation: e1 is a preparatory (durative or iterative) event that is realized in the purpose of realizing e2.

2.2. Pre-condition

'Pre-condition' means that e1 is the necessary condition of the realization of e2. It can be either explicit, thanks to linguistic clues, or inferred, thanks to the semantics of eventualities (in particular e1). Here again, *avant que* interacts with discourse context to trigger a non-circumstantial interpretation.

2.2.1. Explicitness of 'pre-condition'

'Pre-condition' can be expressed via lexical cues like modal verbs, in addition to expression of durative or iterative situations. These cues can be

either in *C1*, as *devoir* (*must, to have to*) in (19) and (20), or in *C2*, as *pouvoir* (*to be able to*) in (21) and (22).

- (19) Arlequin **dut** tambouriner longtemps **avant que** la porte s'ouvrît. (M. Tournier – Le medianoche amoureux)
'Arlequin had to drum a long time before the door opened.'
- (20) L'air siffla entre les lèvres de Bensoussan qui **dut** s'y reprendre à deux fois **avant d'**évacuer un nom : - Toni. (A. Page – Tchao Pantin)
'Bensoussan had to try twice before saying a name: - Toni.'
- (21) J'ai attendu encore une ou deux secondes **avant de pouvoir** débloquer mes mâchoires. (P. Djian – 37.2 Le matin)
'I waited one or two seconds longer before I could unlock my jaw.'
- (22) J'en étais tellement déconcertée et froissée qu'il se passa une minute **avant que** je **puisse** réagir. (P. Labro – Des bateaux dans la nuit)
'I was so stumped and piqued that an entire minute went by before I could react.'

In all these discourses, e1 must be realized in order to make e2 realized. Modal verbs trigger this interpretation unambiguously. For instance, if a modal verb is inserted in the 'continuation' discourse (16), cf. (23a), e1 is interpreted as a necessary condition for his walking down, cf. (23b). See also the parallel between (13) and (21), and between (16) and (22).

- (23) a. Quelques minutes s'écoulaient **avant qu'**il redescende.
'A few minutes go by before he walks down.'
- b. Quelques minutes s'écoulaient **avant qu'**il **puisse** redescendre.
'A few minutes go by before he can walk down.'

Some contexts do not display lexically specified modalities for conveying ‘pre-condition’. Semantics of eventualities and extra-linguistic knowledge represent clues for the inference of ‘pre-condition’.

2.2.2. Inference of ‘pre-condition’

Sometimes, modalities are not expressed but e1 is such that it is easily understood as the necessary condition of the realization of an event, which is e2. Corpora show numerous ‘continuation’ discourses (where e1 is a preparatory event) parallels to ‘pre-condition’ discourses. For instance, discourses (12) and (24) (see (19) with modality) both display a durative situation but in (12), e1 leads (with no intent) to e2, while in (24), e1 is realized in order to realize e2. The same observation can be made on discourses (17) and (25) (see (20) with modality): both display an iterative situation but in (17), the hovering several times is not realized in order to come to a standstill (it just leads to it), while in (25), the trying twice is realized in order to speak. Finally, discourses (13) and (26) (see (21) with modality) show the same distinction between ‘continuation’, on the one hand, when there is no intention, and ‘pre-condition’, on the other hand, when there is intention.

- (24) Lucie **tambourina longtemps** à la porte de sa chambre **avant qu’il** se décidât à ouvrir. (J. Rouaud – Les champs d'honneur)
‘Lucie drummed a long time at the door before he decided to open.’
- (25) Il **s’y reprit à deux fois avant de** parler, mais enfin il dit : - Pourquoi ? (L. Guilloux – Le pain des rêves)
‘He tried twice before speaking, but at last he said: - Why ?’

- (26) **J'ai attendu que la bonne femme se décide à aller chercher son argent *avant de* considérer le boulot comme terminé.** (P. Djian – 37.2 Le matin)
'I waited the woman to take her money before considering the job done.'

Interaction between *avant que* and lexical semantics cues licenses 'continuation' or 'pre-condition'. Differences with 'circumstance' pertain to semantics, as we have seen, but also to temporal structure and discourse structure, as we will see in the next section.

3. Effects on temporal structure and discourse structure

Avant que appears in several discourse contexts and I put forward that this subordinating conjunction licences different interpretations: 'circumstance', 'continuation' or 'pre-condition'. These three interpretations are summed up respectively by the discourses (27) (=1), (28) (=3), and (29), which are a (built) sample of discourses taken from corpora and illustrating the previous analysis in section 2.

- (27) Paul a trouvé la solution avant que Marie la lui donne.
'Paul found the solution before Marie gave it to him.'
- (28) a. Paul a d'abord cherché la solution avant que Marie la lui donne.
'Paul first sought the solution before Marie gave it to him.'
b. Paul a longtemps cherché la solution avant que Marie la lui donne.
'Paul sought the solution for a long time before Marie gave it to him.'
- (29) a. Paul a dû longuement insisté avant que Marie lui donne la solution.

‘Paul had to insist strongly before Marie gave the solution to him.’

b. Paul a longuement insisté avant que Marie lui donne la solution.

‘Paul insisted strongly before Marie gave the solution to him.’

‘Circumstance’ and ‘continuation’ echo two discourse relations from *Segmented Discourse Representation Theory* (SDRT) of Asher and Lascarides (2003): *Background* and *Narration*, respectively. Since I didn’t find a detailed description of a possible corresponding discourse relation for ‘pre-condition’ in SDRT, or in Mann and Thompson’s (1988) *Rhetorical Structure Theory* (RST), I put this interpretation aside in this section. Nevertheless, one interesting thing arises from *Background* (for ‘circumstance’) and *Narration* (for ‘continuation’): they do not involve the same effects on temporal structure and discourse structure. Does *avant que* convey *Background* in (27) and *Narration* in (28)? If proven to be the case, it would mean that the subordinating conjunction *avant que* has an important role at the discourse level.

After a general definition of *Background* and *Narration* in SDRT (§3.1), I try to show that *avant que* can be a marker of these discourse relations in contexts like (27) and (28) (§3.2).

3.1. Definition of *Background* and *Narration* in SDRT

3.1.1. *Background* in SDRT

Background is defined as follows in (Asher & Lascarides, 2003: 460): “this relation holds whenever one constituent provides information about the surrounding state of affairs in which the eventuality mentioned in the other constituent occurred”. That is, the eventuality described in the first clause is the main event, and the eventuality described in the second clause is the (e.g. temporal, spatial) circumstance of this main event. Since temporal progression is broken, it is a subordinating discourse relation (Vieu &

Prévoit, 2004). Discourse (30), taken from (Asher & Lascarides, 2003), illustrates *Background* between the two constituents π_1 and π_2 (noted as $Background(\pi_1, \pi_2)$), standing for the semantics of eventualities e_1 and e_2 , respectively.

(30) Max opened the door. The room was pitch dark.

The semantic effect of *Background* is a temporal overlap between the eventualities, as axiom (A1) expresses. Namely, e_2 overlaps e_1 .

(A1) $Background(\pi_1, \pi_2) \rightarrow overlap(e_2, e_1)$

3.1.2. Narration in SDRT

Narration is defined as follows in (Asher & Lascarides, 2003: 462): “this relation holds if the constituents express eventualities that occur in the sequence in which they were described”. That is, the eventuality described in the first clause occurs, then, the eventuality described in the second clause occurs. Since temporal progression is continuous, it is a coordinating discourse relation. Discourse (31), taken from (Asher & Lascarides, 2003), illustrates $Narration(\pi_1, \pi_2)$.

(31) Max came in the room. He sat down.

This discourse relation implies semantic effects on discourse interpretation. The first effect is the temporal relation between the denoted events, cf. axiom (A2) proposed in (Bras *et al.*, 2001). This axiom means that, when *Narration* holds between π_1 and π_2 , “ $post(e_1)$ persists up to the beginning of e_2 , and $pre(e_2)$ starts when (or before) e_1 ends”, i.e. there is a strong contiguity between the events expressed in the units linked by *Narration*,

that is, no relevant event can occur between the events. Hence, this temporal relation has to be distinguished from the simple temporal relation $e_\alpha < e_\beta$.

$$(A2) \quad Narration(\pi_1, \pi_2) \rightarrow e_1 \supset \subset (\text{post}(e_1) \cap \text{pre}(e_2)) \supset \subset e_2$$

The second effect of *Narration* is both semantic and structural: it is the need for a common topic between the events, and the insertion in the discourse structure of a constituent corresponding to this topic, cf. axiom (A3). If *Narration* holds, then there should exist a unit (the topic, noted π^*) summarizing the units linked by *Narration*, and structurally dominating the complex unit (π') made by *Narration*(π_1, π_2) via the discourse relation *Topic*.

$$(A3) \quad Narration(\pi_1, \pi_2) \rightarrow \exists \pi^* (\pi^* = \pi_1 \cap \pi_2) \wedge Topic(\pi^*, Narration(\pi_1, \pi_2))$$

This topic constraint is a means for ensuring coherence in a narrative text. For instance, the representation in SDRT of discourse (31) is in Figure 1. It illustrates that, in SDRT, a coordinating relation like *Narration* is drawn with a horizontal arrow, while a subordinating relation like *Topic* (or *Background*) is drawn with a vertical arrow, cf. (Asher & Lascarides, 2003: 146-147).

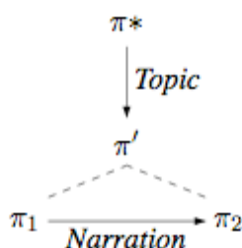


Figure 1: SDRT structure for discourse (31)

3.2. Is “avant que” a marker of *Background* and *Narration*?

3.2.1. “Avant que” and *Background*

Given the definition of *Background* in SDRT, one can easily see that *avant que* triggers this discourse relation in discourse (27): π_1 describes the main event (conveyed by the main clause), and π_2 describes the temporal circumstances (conveyed by the subordinate clause introduced by *avant que*). It is also the case in discourse (32), where the subordinating nature of *Background* is indubitable because of the attachment of the subsequent constituents (π_3 and π_4) on π_1 via *Narration*, with respect to the right frontier constraint, (Polanyi, 1988).

- (32) Il remit soigneusement sa casquette avant de sortir, salua de nouveau et ouvrit maladroitement la porte. (R. Sabatier – David et Olivier)
‘He carefully put on his cap before leaving, said good-bye once again and opened the door awkwardly.’

Moreover, the temporal effect of *Background* is compatible with the semantics of discourses conveying ‘circumstance’. Namely, for instance, in (27) and (32), e_1 doesn’t really occur before e_2 , but e_1 occurs during an event occurring before e_2 . In more formal terms: there is not simply $e_1 < e_2$, but $overlap(e, e_1)$ and $e < e_2$, i.e. e overlaps e_1 , and e occurs before e_2 (same temporal overlapping operator as in axiom (A1)). Nevertheless, a detailed investigation remains to be done.

Because of the subordinating nature of *Background*, the fact that *avant que* is a marker of *Background* exemplifies the hypothesis of the mapping between clause subordination and discourse subordination made by Matthiessen & Thompson (1988). But this issue is discussed in the next subsection.

3.2.2. “Avant que” and Narration

There is some linguistic evidence showing that the temporal precedence relation in discourse (27), on the one hand, and discourse (28), on the other hand, is not the same. First, the temporal relation can be modified in (27) but not in (28), cf. (33) and (34) respectively.

- (33) Paul a trouvé la solution **trois heures** avant que Marie la lui donne.
‘Paul found the solution three hours before Marie gave it to him.’
- (34) a. * Paul a d’abord cherché la solution **trois heures** avant que Marie la lui donne.
‘Paul first sought the solution three hours before Marie gave it to him.’
b. * Paul a longtemps cherché la solution **trois heures** avant que Marie la lui donne.
‘Paul sought the solution for a long time three hours before Marie gave it to him.’

This adverbial modification with *trois heures* (as well as with *juste*, *quelques secondes*, *longtemps* (*just*, *a few seconds*, *a long time*), etc) works with ‘circumstance’, but not with ‘continuation’. This reflects the fact that not only the temporal relation cannot be modified, but also the temporal distance between the eventualities is not extendible. That is, when there is ‘circumstance’, the distance between the eventualities can be quantified, while when there is ‘continuation’, this distance is constrained such that e2 occurs immediately after e1, i.e. there is no distance between e1 and e2. Inserting a third eventuality between e1 and e2 can test this constraint, cf. (Bras *et al.*, 2001): in (35), e3 can occur between e1 and e2, whereas in (36), it cannot.

(35) Paul a trouvé la solution avant que Marie la lui donne. Entre-temps, il l'avait donnée à Lisa.

‘[...]Meanwhile, he had given it to Lisa.’

(36) a. Paul a d'abord cherché la solution avant que Marie la lui donne.

* Entre-temps, il l'avait trouvée.

‘[...] Meanwhile, he had found it.’

b. Paul a longtemps cherché la solution avant que Marie la lui donne.

* Entre-temps, il l'avait trouvée.

I didn't find in corpora discourses such as (36). But one can find in corpora discourses like (37), where the third eventuality always corresponds to an eventuality occurring during the time interval of e1. So, this is not a contradicting observation.

(37) J'ai passé quinze ans à donner des cours et à écrire des livres avant de comprendre que je n'étais pas fait pour cela, mais je ne peux vraiment me retirer, car, entre-temps, j'ai acquis quelque renommée et les collègues me retiennent. (J. Kristeva – *Les samouraïs*)

‘I spent fifteen years lecturing and writing books before understanding that I am not made for this, but I cannot withdraw because, meanwhile, I had gained a reputation and my colleagues retain me.’

It seems clear that the temporal relation between the end of e1 and the beginning of e2 is constrained. With ‘continuation’, the temporal relation is like the one proposed by Bras *et al.* (2001) for describing the temporal effect of *Narration*, see axiom (A2). So, with respect to temporal structure, in discourse (28), and in other discourses pertaining to ‘continuation’, *Narration* is at stake.

The topic constraint, expressed in axiom (A3), is satisfied in topic elaboration, but not in a preparatory event. These two subtypes of ‘continuation’ share the same temporal relation but not the topic constraint. Nevertheless, they imply the same structural effect: coordination between discourse units. Finally, by conveying *Narration*, *avant que* is a challenge to the hypothesis of a mapping between clause combining and discourse structure.

To put it in a nutshell, *avant que* is a subordinating conjunction that can trigger (at least) two discourse relations, involving different temporal and structural effects. On the one hand, *avant que* can trigger *Background*, which implies a temporal overlap relation between the main event and its temporal location, and subordination in discourse (i.e. narrative digression). On the other hand, *avant que* can trigger *Narration*, which implies a temporal precedence relation between two main events, and coordination in discourse (i.e. narrative progression).

4. Conclusion and Perspectives

The goal of this paper was twofold. First, its aim was to shed light on the fact that the subordinating conjunction *avant que* can convey several interpretations when it interacts with discourse context. Second, it aimed at showing that *avant que* has an important role in discourse structure, by triggering either subordination or coordination between discourse constituents. It follows that there is no direct mapping between clause combining and discourse structure: a subordinating conjunction can convey a coordinating discourse relation.

If *avant que* is a cue-phrase of *Narration*, a comparison between *avant que* and *puis* would be interesting, as the following quick observations show.

When there is a topic elaboration, *avant que* can be translated by *and then*, such as observed in the bilingual database TransSearch⁴, cf. (38).

- (38) a. En deux heures à peine, l'espace aérien nord-américain a été plongé dans le chaos le plus complet ***avant d'***être complètement fermé.
b. In the space of a few hours, North American air space was thrown into complete chaos ***and then*** shut down completely.

When 'continuation' is at stake, and e1 is durative, one can find *puis* in place of *avant que*, cf. (39).

- (39) Il **a attendu un moment** ***puis*** m'a touché l'épaule et s'est relevé. - Je sors par les cuisines, il a fait. (P. Djian – 37.2 Le matin)
'He waited for a while and then touched my shoulder and got up.'

But *puis* cannot always be replaced by *avant que* without losing original meaning of the discourse. The 'continuation' interpretation of (40a) is totally lost with *avant que*: (40b) rather conveys 'circumstance' despite the thematic link (topic) between eventualities.

- (40) a. Il frappa à la porte. ***Puis*** il entra.
'He knocked at the door. Then he entered.'
b. Il frappa à la porte ***avant d'***entrer.
'He knocked at the door before entering.'

That confirms that *avant que* needs particular discourse context for conveying a discourse relation such as *Narration*. But further investigation is needed.

Finally, this paper gives an account of several interpretations illustrated by unambiguous discourses. But corpora display many ambiguous discourses for which it is hard to find a clear interpretation, especially to decide if there is ‘circumstance’ (or *Background*), or ‘continuation’ (or *Narration*). ‘Pre-condition’ discourses are not ambiguous because there are always (extra-)linguistic clues for inferring such an interpretation. But from discourses without lexical clues (such as *d’abord, commencer par*) or no possible semantic inference, ambiguity arises. Future research will concentrate on other clues for inferring the correct interpretation of *avant que*, such as taking into account a wider discourse context or discourse attachment on the content of the subordinate clause, as discourses (41) and (42) illustrate. In (41), e2 is part of a set of events, all elaborating the topic expressed in the first sentence. In (42), the last sentence is to be attached to the subordinate clause and not to the main clause (as in discourse (32), for instance).

- (41) Heureusement, Mme Bernard arracha les autres à la torpeur en **jouant la meneuse de jeu**. Elle entraîna les jeunes dans **une partie de croquet**, puis organisa une **partie de mikado avant de** faire des **tours de cartes** et de montrer des **jeux avec une simple ficelle**. (R. Sabatier – Les filles chantantes)

‘Fortunately, Mrs Bernard acted as a leader. She dragged the young into a match of croquet, then organised a game of pick-up-sticks before doing card tricks and showing games with a simple piece of string.’

- (42) Olivier trouva là une heureuse occasion de promenade. Il jeta un regard dans la glace **avant de** sortir en sifflotant. **Il faisait beau**. (R. Sabatier – David et Olivier)

‘Olivier found an opportunity for a stroll. He peeked in the mirror before going out whistling. The sun was shining.’

Notes

¹ Or *CI avant de V2*, if subject is identical in both clauses. Notation: *Ci* is a clause, and *Vi* is an infinitive verb, which denotes an eventuality (also called situation – state or event, (Asher, 1993)) noted *ei*.

² The fact that the subordinate clause has a factual or a counterfactual interpretation is not my point here. Whatever the interpretation of the subordinate clause, this discourse has a circumstantial interpretation.

³ Most of examples are taken from the French literature database Frantext (<http://www.frantext.fr/>). If no indication of author, discourses are built. All examples in French are followed by their translation in English.

⁴ TransSearch is a database of past translations between English and French accessible from <http://www.tsrali.com/>.

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