An NLP Approach to a Specific Type of Texts: Car Accident Reports

Dominique Estival
ISSCO, Université de Genève
54 rte des Acacias, CH-1227 Genève
<estival@divsun.unige.ch>
+41-22-705-71-16

Françoise Gayral
LIPN, Université Paris-Nord
Av. J.-B. Clément, F-93430 Villetaneuse
<fg@lipn.univ-paris13.fr>
+33-1-49-40-36-25

1 Introduction

The work reported here is the result of a study done within a larger project on the “Semantics of Natural Languages” viewed from the field of Artificial Intelligence and Computational Linguistics. In this project, we have chosen a corpus of insurance claim reports.

These texts deal with a relatively circumscribed domain, that of road traffic, thereby limiting the extra-linguistic knowledge necessary to understand them. Moreover, these texts present a number of very specific characteristics, insofar as they are written in a quasi-institutional setting which imposes many constraints on their production.

We first determine what these constraints are in order to then show how they provide the writer with the means to create as succinct a text as possible, and in a symmetric way, how they provide the reader with the means to interpret the text and to distinguish between its factual and argumentative aspects.

1 The Project Inter-PRC Sémantiques des Langues Naturelles, sponsored by the French Ministère de la Recherche, involves a number of research centers and university laboratories. The texts were provided by the French insurance company MAIF, after being made anonymous. They have been translated into English by D.E. and the original French texts are given in the annex.
2 Characteristics of the texts

This type of texts is culturally well-defined and possesses several characteristics, which both the writer and the reader are perfectly aware of when writing or reading one of them. It is not a newspaper story, nor a letter to a friend narrating the car accident, but an insurance claim report which has to follow several constraints, defined in (1).

(1) Text Parameters

A. the text involves at least two participants, generally two vehicles, one of which is the author’s;
B. the text is obligatorily short, at most one paragraph;
C. by definition, the text is a narration in which an accident takes place;
D. the text is sent to the author’s insurance company.

Beyond these four parameters which are determined by the nature of the reports, we also find in this text presuppositions due to the particular domain involved, the “road” domain. This domain-specific knowledge, which is part of the more general context $C$, is called here $K$. $K$ concerns vehicles, vehicle motions, traffic rules, the usual behavior of drivers and pedestrians, and also some elements of “naive” geometry.

Parameter D has a special bearing in so far as the writers know that the insurance agents must pass a judgement on their behavior and will determine their share of responsibility in the accident. Necessarily, the authors of those reports, while supposedly describing in an impartial way the different events which have occurred, will attempt to lessen their responsibility. The texts thus present many instances of argumentative devices, whose usage forms part of the more general knowledge of the language conventions, $LC$. In a symmetric way, the reader, i.e. the insurance agent, must untangle the factual description from the argumentative presentation of the events.

We can define the tasks that this type of texts presents for the writer and for the reader as in (2) and (3) respectively.

(2) The Writer’s Problem: The writer $W$ knows the factual content $P$ corresponding to the circumstances of the accident and wants
to convey it through a text $T$. $W$ must then choose a $T$ such that (a) it will allow a reader $R$ to rediscover $P$, and (b) it will minimize $W$’s responsibility.

(3) The Reader’s Problem: The reader $R$ knows the language conventions $LC$ and a part of the context $C$. $R$ must then determine (a) the factual content $P$ of the text $T$ and (b) the argumentation presented by its writer $W$.

These two symmetrical tasks are thus both composed of a factual and an argumentative part. These two parts also coincide with the two goals we can define for an NLP approach to understanding and processing these texts. At the first level, we try to extract from the text the objective content corresponding to a factual analysis in order to recreate the event: “What happened? What real world events concerning the motions of these vehicles or the scene geometry actually occurred?”

At the second level, we take into account the nature and intent of the text. Our problem is then to uncover the argumentative devices used by the writer and to determine how they can be used by the reader, and later by our system, in interpreting the texts.

Accordingly, the remainder of this paper is divided into two parts. In section 3, we show the importance of the situational and cultural presuppositions for parameters A, B and C, and in section 4, we take into account parameter D, which determines the argumentative aspect of the texts.

3 Factual content of the texts

3.1 Parameter A

Parameter A (the fact that car accidents usually involve two participants, most often two vehicles) is used to infer the identity of some entities in the texts, or to establish coreference between two entities.

There is a specific naming convention in French insurance claim reports for the vehicles involved in an accident: claimants must refer to their own vehicle as “A” and to their opponent’s as “B”. This convention, although it is part of the shared knowledge about $LC$, is not always followed, and indeed
it seems to be a burden for W. The reason is probably that a stereotypical description using only labels “A” and “B” for the vehicles involved sounds very neutral, such as could have been made by any independent observer of the accident, while in fact W was directly involved in the accident, and is thus personally implicated, as a person endowed with awareness and intentionality. Thus, the authors often do not seem to be able to choose between a narrative style using the first person (“I”) and a descriptive style using the third person (“vehicle A”). Most of the texts are not homogeneous in this respect and combine the two styles, as if there was a struggle, probably unconscious, between a spontaneous narration of the different events and a stereotyped description using the convention.

(4)  Vehicle A waiting and stopped at the Pont de Levallois lights. Vehicle B arrived and hit my left side mirror with its right side mirror.

This hesitation which we observe in our texts is reinforced by the use of metonymy. Metonymy is often used to allow the identification of the container with its content, and a common use of metonymy in our texts concerns the vehicle and its driver. Metonymy builds a unique discourse entity, and as a consequence some properties from the vehicle are transferred to the driver, and vice-versa. Personalization of the vehicles is a typical example of this transfer: a vehicle becomes endowed with the properties of a human being, for instance by transferring from the driver to the car the property of intentionality as in (5 a.), or that of agentivity as in (5 b.).

(5)  a. Vehicle B wanted to turn right
    b. Being momentarily stopped in the right lane on Boulevard des Italiens, I had switched my blinker on; I was at a stop and getting ready to change lanes. Vehicle B coming from my left squeezed too close to me and damaged the whole left front side.

(T7) We can see from the example in (6 a.) that this unique entity does not consist only of the vehicle and its driver, but can also include its passengers. In (6 b.), there is an identification between the vehicle and the writer’s husband, the writer probably being the insured person.
(6)  a. One of the cars in front of me opened its right front door (T3)

b. My husband had entered the intersection when Mr. X’s car hit the front of the vehicle.

Conversely, transference of properties can be made from the car to the driver, as in (7 a.) or (7 b.). In (7 a.), objects (here the bumper) belonging to the vehicle are treated as belonging to the driver. In (7 b.), the property of “rolling along” (the literal meaning of the verb rouler) is transferred to the driver.

(7)  a. my bumper (T11)
   b. Je roulais (I was driving, literally I was rolling)

This use of metonymy follows the coercion of semantic types (see [8]) in a predictable way: the properties being used to make an entity of one type (e.g. car: “inanimate mechanical object”) into an entity of another type (e.g. driver: “human agent”) are extractible in a regular way from the predicate (e.g. squeeze: “requires an agentive subject”).

This coercion, economical for W because it allows a greater conciseness, requires additional work on the part of R, because R must make some inferences to undo it and to find the referent of some expression. For instance, a number of inferences, some of them spatial, are necessary to find the identity of the agent, i.e. the passenger in the right front seat, in (6 a.).

Finding the exact referent of an expression is necessary in order to block wrong inferences. For instance, in (5 b.), the 1st person refers successively to the car and to the driver:

- in I had switched on my blinker, the referent of I is the driver;

- being stopped can be understood with I referring to the driver as well as to the vehicle;

- in the last sentence, the word me must refer to the vehicle: from this text, R would never conclude that the driver’s left cheek had been bruised.
3.2 Parameter B

When setting to the task of writing such a report, the writer knows parameter B, the constraint that only about a paragraph may be used to relate the accident. At the same time, W must not forget any important information whose absence would prevent R from discovering the correct content P.

So, W is thus faced with two goals: to be exhaustive and to be concise. These aims are not contradictory but force W to select the information that will be given: the text T must provide all the information that is necessary in order to be understood, but only that much. We rediscover here Grice’s Maxims, in particular the Maxim of Quantity, or Ducrot’s exhaustivity law. Every detail mentioned by W can be assumed to be significant and every adjective and adverb will carry some significance for the narration, as in (8), where extremely relevant modifiers are piled up after the head noun.

(8) the road on which the intense traffic is going one-way in two lanes;

(T5)

This constraint on the choice of information to give, which we call “W’s selection problem” and which we will later exploit to infer some argumentative points, is part of the wider language conventions LC and constitutes a “meta-knowledge”, essential for the success of communication.

Because of “W’s selection problem”, W will generally mention an event or an entity only in case its presence cannot be deduced from K or from other types of shared background knowledge, and only in case an explicit reference is absolutely necessary to understand the text. From this, it follows that the number of entities introduced in the text will be kept to a minimum. We can schematize this “Minimality Assumption” as follows:

(9) Minimality Assumption:

---

2 There is a predefined area on the printed form for the writer to write this text.

3 Of course, this exhaustivity is not absolute, but is relative to the context for these texts. There is an “informational norm” in any type of texts and the relevance of the information to be given is judged relative to this informational norm, which is very difficult to define precisely and which can only be known empirically (see §).

The absence of information is as meaningful as its presence, but is much harder to assess, since in order to bring it to light, we need a basis for comparison. In this context, the comparison could be provided by the opponent’s accident report; although difficult to achieve, this would constitute an interesting study.
W’s selection problem + Maxim of Quantity
−− > minimal number of entities introduced

We can see a direct application of the “Minimality Assumption” in (10):

(10)  *I was driving on the right hand side of the road when a vehicle arriving in front of me in the curve was completely thrown off course. Keeping as close as possible to the right, I wasn’t able to avoid the car which was coming with great speed.* (T8)

The text in (10) mentions only two vehicles. The first one, W’s, is implicit in *I was driving*. The other one is mentioned in two different expressions, *a vehicle arriving in front of me in the curve* and *the car which was coming with great speed*. It is clear that the second expression is anaphoric to the first, but this coreference is not explicit in the text.

The coreference is allowed first by the use of two compatible terms: indeed a car is a particular type of vehicle. This fact can be extracted from a hierarchy of concepts which is part of the background knowledge $K$ (a car is the most typical kind of vehicle). Secondly, this coreference is licensed by the use of the definite article, which allows the inference that the entity has already been mentioned. Finally, it is confirmed by the “Minimality Assumption”, which prevents the introduction of a third vehicle which would not play any role in the scene.

### 3.3 Parameter C

In many of our texts, the accident is explicitly mentioned with verbs such as *percuter, endommager, toucher, heurter* (“collide”, “damage”, “touch”, “hit”), or with nouns such as *choc, collision* (“impact”, “collision”). But this is not the case in (11), a text for which, if it was another type of narrative, we might imagine other endings to the incident (e.g. *but I was able to swerve and avoid it*).

(11)  *We were in Saint-Ouen, I was surprised by the person who braked in front of me, not being able to change lanes, and the road being wet, I couldn’t stop completely in time* (T15)

---

4 See [3] for a more detailed presentation and more examples of this type of inferences permitted in our texts.
We can see here the effect of Parameter C: since these texts are accident reports, the series of events they relate must by default contain an accident. The interpretation of the texts often requires the reconstruction of an impact between the two vehicles, otherwise the incident which is described would not warrant the existence of the report.

The existence of the impact can then be deduced from a combination of several clues, some linguistic, some inferential. Among the former, we often find the combination of the negation with a verbal group of the form “can/be able to + V”, for instance I couldn’t stop completely in time in (11), or I wasn’t able to avoid the car which was coming with great speed in (10).

4 Argumentation

So far, we have examined the texts from a purely factual point of view. Now, we take into account the argumentative aspect of these texts. Indeed, the authors know that these few lines, meant for their insurance company, may contribute to the final decision about their share of legal and financial liability. So, they will try to minimize their own responsibility. There are two ways W can justify his own behavior and make excuses for it:

A. trying to push the blame onto his opponent by accusing him of an abnormal behavior;

B. contrasting what was expected and what happened in reality, by invoking unforeseeable circumstances.

With either strategy, W must first show that he has done everything that was required in the given circumstances and will always try to appear as innocent as possible.

4.0.1 Strategy A: Blaming the other driver

With strategy A, W wants to suggest or to say explicitly that the other driver is at fault. Background knowledge K may be used implicitly by W to suggest that his opponent has misbehaved, and it also allows R to infer which behaviour is “right” and which one is “wrong”. For instance, in (12), it is clear, but not explicitly mentioned, that the driver of vehicle B did something illegal, since in France one must pass on the left.
The driver of vehicle B passed me on the right. (T11)

In (13) since vehicle B was not respecting the ground markings it made a mistake in “cutting back in” on W’s vehicle. Of course, W has taken care to mention that his own vehicle was in the correct lane.

I was driving in my vehicle A in the right lane reserved for vehicles going straight ahead. Vehicle B was driving in the left lane reserved for vehicles going left (ground markings with arrows). It cut back in on my vehicle. (T12)

These two examples show the importance of implicit knowledge, but blaming the opponent can also be done explicitly. Besides the example in (14a.), where the truck driver is clearly said to be responsible for the manoeuvre, there are lexical clues, such as slalom in (14b.) (the driver of (12) is committing fault after fault!), or blinding in (14c.), suggesting that the other driver was at fault. In example (14d.), even without the background knowledge of the French right-of-way rules, the words denies and right-of-way strongly accuse the other driver. Driving at an excessive speed is of course a very common characteristic of the other driver..., see (14c.) and (14e.).

a. the latter turned left, forcing me to steer left to avoid it. (T2)
b. According to the witness who was following me, the driver of vehicle B was doing a slalom between the cars. (T11)
c. A vehicle with full white headlights blinding us struck us with great speed in the back of the vehicle, taking us into a series of barrel rolls before the vehicle stopped in a ditch. (T10)
d. Vehicle B coming from my left, I find myself at the intersection, at moderate speed, about 40 km/h, when vehicle B hits my vehicle, and denies me the right-of-way from the right. (T4)
e. at that moment vehicle B passed me with great speed (T9)

4.1 Strategy B: Blaming unforeseeable circumstances

Here, the indications are mostly at the lexical level (e.g. être surpris “to be surprised”) and make frequent use of the negation.

a. I was surprised by the person who braked in front of me, not being able to change lanes, and the road being wet (T15)
b. I didn’t expect that a driver would wish to pass me for there weren’t two lanes marked on the portion of the road where I was stopped. (T5)

The use of negation is also a favorite clue to indicate an opposition between what should have happened and what actually occurred.

(16) a. I wasn’t able to avoid the car which was coming with great speed. (T8)
   b. and the road being wet, I wasn’t able to stop completely in time. (T15)

Another device is the reverse of the metonymy conflating the vehicle and its driver which we saw in (3.1). For instance, in (17), it is not W, but the car which is the subject of the two verbs, as if it was responsible for the events.

(17) on impact, and because of the slippery pavement, my vehicle skids, and hits the metal railing around a tree, whence a second front impact. (T4)

Of course the two strategies are not mutually exclusive; (11) and (18) are actually instances of a mixture of both, in particular (18) where W piles up all sorts of attenuating circumstances and also emphasizes (immediately put the brakes on) his own appropriate reactions.

(18) I was driving at about 45 km/h in a small one-way street where cars were parked on both sides. Popping suddenly on my right coming out of a private building garage, Mrs.Glorieux’s vehicle was at a very short distance from my vehicle; passage being impossible: surprised, I immediately put the brakes on but the impact was unavoidable. (T14)

Moreover, the authors may choose to describe only that part of reality which is in their favor, and the reader must thus be able to reconstruct the items that were left out (intentionally or not).

With strategy B, linguistic clues include the use of reflexive verbs (la porte s’est ouverte “the door opened”) and of the passive voice (j’ai été déporté “I was thrown off course”) instead of a plain active voice. These constructions, by suppressing the agent, suggest that W was not involved in the course
of events and cannot be held responsible for what happened. We also find 
here all the adverbials and modifiers denoting unexpected events or unusual 
states of affairs. In addition to [18], some more examples are given in [19].

(19)  
a. *but I hit the second car which hadn’t yet gone through the stop-
sign.* (T1)  
b. *I wasn’t able to avoid the car which was coming with great speed*  
(T8)  
c. *at that moment vehicle B passed me with great speed* (T9)

4.2 Resolving Ambiguity and Drawing Inferences

These texts provide a number of examples of clearcut ambiguity between two 
situations A and B, which an argumentative type of justification helps resolve. 
The question that allows resolving the ambiguity is: “What advantage would 
there be for W in implying situation A? or in implying situation B?” We 
go in more details into some examples.

4.2.1 Lexical Ambiguity

As shown in [20], the original French text of the example given in [10] 
presents a common kind of ambiguity, since in French, the word *droite* is 
ambiguous between the two interpretations *right* and *straight*.

(20)  
Je roulais sur la partie droite de la chaussée (T8)  
*I was driving on the (right-hand side)/(straight portion) of the 
road*

Here, even though the whole text can also be interpreted with the *droite/straight* 
meaning, the *droite/right* interpretation is more plausible. However, only an 
argumentative type of reasoning can lead R to prefer the latter.

Since the fact that in France one drives on the right is well-known, in 
specifying that he was driving on the *right* side of the road, W violates the 
Maxim of Quantity (i.e. not to say anything superfluous) and therefore must 
be taken as intending to convey some other information. In this case, it must 
be in order to assert that his behavior was conforming to the “Rules of the

---

5 If the adjective *droite* means *straight*, its opposite is then *courbe/curved*, if it means *right*, the opposite is then *gauche/left*. 

11
Road”, which is a pertinent fact to mention. Here, informational redundancy by itself carries some information which allows inference.

We can thus formulate the following rule:

(21) In case of ambiguity, prefer the interpretation which allows $R$ to infer a “correct behavior” on $W$’s part.

4.2.2 Time Reference Ambiguity

In example [6b.], repeated here as [22] for convenience, the use of the pluperfect *had switched on* is ambiguous.

(22) *Being momentarily stopped in the right lane on Boulevard des Italiens, I had switched my blinker on; I was at a stop and getting ready to change lanes. Vehicle $B$ coming from my left squeezed too close to me and damaged the whole left front side.* (T7)

The pluperfect implies that the process being talked about is perceived with another past event as a point of reference, which may not yet have been mentioned (the situation is exactly parallel in both French and English). Here, two different referential situations can be envisaged, with two different consequences:

- If the accident itself is chosen as the point of reference, switching the blinker on signals a future change of lanes. It must therefore be the left blinker. This conclusion requires geometrical reasoning: “If $X$ is stopped in the right lane and if $X$ wants to change lanes, $X$ can only go left”.

- If the time of stopping is chosen as the point of reference, switching the blinker on is prior to the time of stopping and thus signals it. It must then be the right blinker, since the vehicle is in the right lane.

To make a decision, arguments of the “Maxims” type must be used. $R$ cannot assume that too much information is present in the text. The fact that the blinker would be switched on before stopping would not be relevant since the accident occurred after the act of stopping, when $W$ started again. On the other hand, the fact that $W$ did switch the blinker on before starting again is very relevant from an argumentative point of view, since the message
conveyed is then “W behaved in the right way and did what was required”.

Therefore, by appealing to the rule proposed in (21), the first interpretation is chosen and R may conclude that W had his left blinker on.

4.2.3 Action or Intention?

Sometimes, the problem for R is to determine whether an action presented as an intended future event has remained at a purely intentional level or whether actions have been taken to attain it. For instance, when the intended action belongs to a script with sequential steps, the question arises whether some of the preparatory actions belonging to the script have already been accomplished.

In (22), we saw that there were two possible choices for a point of reference in the interpretation of the pluperfect. In addition, the verb s’apprêter à can have several interpretations. Like to get ready (which we give here as its translation), it can mean to be about to and then it is a simple aspectual auxiliary focussing on the beginning of the action (inchoative). It can also have a more agentive interpretation and then it means to actively prepare for.

In the inchoative to be about to interpretation, the action of “switching the blinker on” is an event independent of “changing lanes”; in the agentive to prepare for interpretation, that same action corresponds to one of the preparatory acts. But more crucially, in the agentive interpretation, W may already have started changing lanes and then probably would be at fault, while in the inchoative reading, W would still be stopped and would be innocent.

It seems that in most cases, such an intended future event is more than simply intentional and that W has indeed already started to act. Otherwise it would not be possible to explain the accident in (22), since there would be no reason for W’s car to have been damaged if W hadn’t already started turning left.

Similarly in the case of the texts given in (23) and (24) below, the only plausible reconstruction of the accident requires vehicle “A” to have already started the action which is presented as an intention (Wanting to pass a hauler in (23) and I wanted to enter the second lane in (24)).

6 The semantic interpretation of the verb itself can also help in making the choice, see next section.
(23) Wanting to pass a hauler with its right blinker on, the latter turned left, forcing me to steer left to avoid it. The car skidded on the wet pavement and struck a sidewalk then a fence straight ahead. The truck driver had indeed switched on his left blinker, but the trailer was inverting the signal to the right. Not having touched me, the driver declared himself unconcerned by the situation and refused to draw a report. Having left my car to call a mechanic, I came back to find it with the right back door bashed in with no note left by the guilty party. (T2)

(24) I was stopped at the intersection wishing to take the road on which the intense traffic is going one-way in two lanes; as the last vehicle of the flow was coming, I wanted to enter the second lane, leaving the first one free for it. The moment I started, I heard the shock in the back; I wasn’t expecting a driver would wish to pass me for there weren’t two lanes marked on the portion of the road where I was stopped. (T5)

Instead of using an imperfective verbal form (i.e. étant en train de dépasser un semi-remorque (“while passing a hauler”) in [23], or j’étais en train de tourner à gauche (“I was turning left”) in [24]) which would clearly indicate that the action had already started, W chooses the intentional form and in doing so, creates an ambiguity for R: “Had W actually already done something or not?” This lack of precision (or downright lie?) is intentional and allows W to try to lessen his responsibility, which will succeed if R opts for a purely intentional reading of the verbal form.

5 Conclusion

In this paper we have tried to show the importance of situational, cultural and textual presuppositions from the point of view of both the writer W and the reader R. As this work constitutes a first step in the study of natural language semantics in the context of an NLP project, the approach adopted here is an attempt to automate the process of understanding these texts and deriving inferences from them. Crucial issues for NLP are how to define and describe the different types of knowledge involved in the processes of writing and
reading texts, and how to establish rules that mimic the reasoning involved in these activities.

Here, we take advantage of the specificity of the texts – the authors narrate events leading to a car accident while trying to lessen their responsibility – to circumscribe the type of knowledge required and to give some rules of interpretation, valid for this type of text, in this type of context. We have determined four parameters, and two types of knowledge necessary for both the production and the interpretation of these reports. Two of these parameters (A and C) and K belong to the factual domain, while the other two parameters (B and D) and LC pertain to discourse.

For clarity of exposition, we have distinguished these two types of characteristics in our texts by examining first the factual content of the texts and then their argumentative aspect, but it is not always easy to separate them and we can also ask whether there actually can be a purely factual reading of a text that would not take into account discourse and argumentation phenomena.

In any case, even if such a reading existed, it would be insufficient to account for the inferences that the reader can and must make from the textual data in order to reconstruct the events described by the text and to determine each participant’s role in it. We have shown for instance that inferences based on argumentation could often help the reader clarify the text or choose between several interpretations. We find here the well-known difficulty of precisely defining the border between semantics and pragmatics.

It would be interesting to analyze the two corresponding texts by the two opponents reporting the same accident in order to establish which part of the information is objectively factual and shared by both texts, and which part of the information is argumentatively biased, thus better distinguishing the subjective part of both discourses. The omission of information, which was mentioned as one of the argumentative devices on the part of W and as a basis for inference on the part of R, would then become an even more important factor in the analysis. Very few such pairs of texts are available, but in the continuation of this project, we may try to do some further work based on these.

Lastly, we have shown that some inferences rely on assessing the relevance or the quality/quantity of the information given. This assessment itself refers to a norm which is shared by the community of speakers and thus belongs to LC. However, it remains extremely difficult to define this norm in advance.
and this type of inference, though crucial for language understanding, still appears beyond what is currently possible in NLP.

References

[1] Barwise, J. (1988). “On the circonstancial relation between meaning and content” in The situation in logic. CSLI n017, pp59-76.

[2] Ducrot, O. (1972). Dire et ne pas dire. Principes de sémantique linguistique. Paris: Hermann

[3] Estival, D. & F. Gayral (to appear) “Contexte et Inférence”. Journée ATALA: Inter-PRC Sémantique des Langues Naturelles, Paris, November 1993. to appear in Traitement Automatique des Langues, vol.35.

[4] Gayral, F. (1992). Sémantique du langage naturel et profondeur variable : une première approche. Thèse de l’université Paris-Nord, LIPN, Villetaineuse.

[5] Grice, H.P. (1975). “Logic and conversation”, in Syntax and Semantics. New York: Academic Press. pp.41-58.

[6] Rapport d’activité du groupe de travail inter-PRC (IA et CHM). (1990). Université de Nancy.

[7] Kerbrat-Orecchioni, C. (1986). L’énonciation de la subjectivité dans le langage. Paris: A. Colin.

[8] Pustejovsky, J. (1989). “Type Coercion and Selection”. Proceedings of WCCFL VIII, Vancouver.

[9] Schank, R.C. & R.P. Abelson (1977). Scripts, Plans, Goals and Understanding. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
Annex: Texts

Text 1
Me rendant à Beaumont sur Oise depuis Cergy. Je me suis retrouvée à un carrefour juste après la sortie Beaumont sur Oise. J’étais à un stop avec 2 voitures devant moi tournant à droite vers Mours. Alors que la première voiture passait ce stop je fis mon contrôle à gauche et je démarrais mais je percutais la deuxième voiture qui n’avait pas encore passé le stop.

Text 2
Voulant dépasser un semi-remorque qui tournait à droite, ce dernier tourna à gauche m’obligeant à braquer à gauche pour l’éviter. La voiture a dérapé sur la chaussée mouillée et a percuté un trottoir puis un mur de clôture en face. Le conducteur du camion avait bien mis son clignotant à gauche mais sa remorque inversait le signal sur la droite. Ne m’ayant pas touché le conducteur s’est déclaré hors de cause et n’a pas voulu établir de constat. Ayant quitté ma voiture pour appeler un dépanneur j’ai retrouvé celle-ci avec la portière arrière droite enfoncée sans coordonnées du responsable.

Text 3
Fort trafic à 17h15 Bd Sébastopol. Je roulais entre deux files de voitures arrêtées quand l’une des voitures à ma gauche a ouvert sa porte avant droite. Pour l’éviter, j’ai fait un écart qui m’a fait toucher le véhicule B avec l’arrière de ma moto ce qui a provoqué ma chute. Vu l’importance du trafic à cette heure là nous avons juste échangé nos assurances et noms ce qui explique que mon constat amiable ne soit signé que par moi.

Text 4
Véhicule B venant de ma gauche, je me trouve dans le carrefour, à faible vitesse environ 40 km/h, quand le véhicule B, percute mon véhicule, et me refuse la prioritée à droite. Le premier choc atteint mon aile arrière gauche, sous le choc, et à cause de la chaussée glissante, mon véhicule dérape, et percuté la protection métallique d’un arbre, d’où un second choc frontal.
Text 5

J'étais arrêté à l'intersection désirant emprunter la route où la circulation intense s'effectue à sens unique sur deux voies; lorsque le dernier véhicule du flot arrivait, j'ai voulu m'engager sur la deuxième file, lui laissant libre la première. Au moment où je démarrais, j'ai entendu le choc arrière; je ne m'attendais pas à ce qu'un usager désire me dépasser car il n'y avait pas deux voies matérialisées sur la portion de route où je me trouvais à l'arrêt.

Text 6

Mr C.Delon, abordant le carrefour, laissait le passage aux véhicules roulant sur la voie abordée, car d'ordinaire se trouve un feu à ce carrefour. (hors fonctionnement ce jour-là). Venant de derrière moi, roulant dans le même sens, dans la même file, Mr Oms n'a pas vu que j'étais arrêté et a percuté fortement mon véhicule, l'abîmant gravement. De ce fait, j'ai subi (C.Delon) "le coup du lapin"; le siège conducteur a été endommagé; les gendarmes se sont rendus sur place; j'ignore s'ils ont établi un rapport.

Text 7

Étant arrêté momentanément sur la file de droite du Boulevard des Italiens j'avais mis mon clignotant j'étais à l'arrêt et m'apprêtant à changer de file. Le véhicule B arrivant sur ma gauche m'a serré de trop près et m'a abîmé tout le côté avant gauche.

Text 8

Je roulais sur la partie droite de la chaussée quand un véhicule arrivant en face dans le virage a été complètement déporté. Serrant à droite au maximum, je n'ai pu éviter la voiture qui arrivait à grande vitesse.

Text 9

Nous roulions en ville sur une portion de route à deux voies où la vitesse est limitée à 45km/h. Je clignotais et m'apprêtais à tourner à gauche vers le chemin de Condos. A ce moment, le véhicule B a doublé à grande vitesse
notre véhicule et s’est immobilisé sur le trottoir gauche de la chaussée après m’avoir touché.

Text 10
Nous roulions sur une route à 90km/h. Un véhicule plein phares blancs nous aveuglant nous a percutés à grande vitesse à l’arrière du véhicule, nous entraînant dans une série de tonneaux avant l’immobilisation du véhicule dans un fossé.

Text 11
Le conducteur du véhicule B me doublant par la droite a accroché mon pare-choc avant droit et m’a entraîné vers le mur amovible du pont de Genevilliers que j’ai percuté violemment. D’après les dires du témoin qui me suivait, le conducteur du véhicule B slalomait entre les voitures. Après m’avoir heurté, il a pris la fuite et n’a pu être rejoint par le témoin cité.

Text 12
Je circulais à bords de mon véhicule A sur la file de droite réservée aux véhicules allant tout droit. Le véhicule B circulait sur la voie de gauche réservée aux véhicules allant à gauche (marquage au sol par des flèches). Celui-ci s’est rabattu sur mon véhicule A me heurtant à l’arrière gauche.

Text 13
Je roulais dans la rue Pasteur quand une voiture surgit de ma droite; pour l’éviter, je me rabattaïs à gauche et freinais. Je pus l’éviter et mon rétroviseur heurte le sien. La voiture continue car elle n’eut rien et moi, je heurtai une benne qui stationnait sur le côté de la chaussée. La benne n’a pas été du tout endommagée. Ma voiture a été touchée à l’avant ainsi qu’au rétroviseur.

Text 14
Je circulais à environ 45 km/h dans une petite rue à sens unique où stationnaient des voitures de chaque côté. Surgissant brusquement sur ma droite
sortant d’un parking d’immeuble, le véhicule de Mme Glorieux était à très peu de distance de mon véhicule; le passage étant impossible: surpris, je freinais immédiatement mais le choc fut inévitable.

Text 15
Nous étions à Saint-Ouen, j’ai été surprise par la personne qui a freiné devant moi, n’ayant pas la possibilité de changer de voie et la route étant mouillée, je n’ai pu m’arrêter complètement à temps.

Text 16
Je m’engageais (véhicule A) dans une file de station service. La pompe étant en panne, je reculais pour repartir lorsque j’ai heurté le véhicule B qui s’était engagé également dans la même file pour prendre de l’essence.

Text 17
La conductrice de l’autre véhicule et moi amorçions le virage sur la gauche dans un carrefour. Nous étions à la même hauteur. Nous nous sommes certainement rapprochées et par conséquent percutées, sa voiture s’emboîtant dans la mienne, son aile gauche dans l’avant latéral droit de ma voiture.