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Temporal and discourse analysis in a corpus of 19th century French narratives

This work is realized in the context of the ITIPY project which aims to provide a solution for automatic extraction of the itineraries. As a database for this project a corpus of 19th century French narratives about travel in the Pyrenees is used. In (Loustau, 2008) we find already some results on the way of extracting itineraries. The problem is that not much attention is paid to the temporal analysis. In this context we draw our attention to the temporal analysis of the text (Boguraev and Ando, 2005; Muller and Denis, 2010). Moreover, we suppose that the temporal analysis itself is not always sufficient to reconstruct the correct order of events and we need also to look at the discourse structure of the text (Lascarides and Asher,1993). Let us look at the simple example:

Je partis en conséquence pour Bagnères-de-Luchon une seconde fois et <...> j'arrivai à Luchon le 17 juillet.

/I went consequently to Bagnères-de-Luchon for a second time and <...> I arrived to Luchon on the 17th of July./

In this paragraph one event (partis /went/) follows the other (arrivai /arrived/), forming a simple narration. We have in this case two verbs in Passé Simple (which corresponds more or less to English Past Indefinite). This time is not ambiguous in French and presents a finished action. Nevertheless, different discourse relations can exist between two phrases in Passé Simple (narration, elaboration, etc.) In this case we deal with a Narration (one event logically follows the other).

Now we shall take a more complex example:

Nous nous dirigeons donc vers Fost qui est un peu éloigné <...> Nous traversâmes la Garonne au dessus d'Estenos pour se diriger à droite sur Luchon, à gauche sur Saint Béat. La plaine que nous traversons est celle que nous avions vu la veille.

/So we are going to Fost that is a little bit far <...> We crossed Garonne over Estenos so that to go to Luchon to the right, to Saint Béat to the left. The plain we are crossing is the same we had seen the day before./

We have a sequence of Présent – Passé Simple – Présent in this paragraph (Présent corresponds to English Present Indefinite). The French Présent is ambiguous between a progressive, a narrative and a habitual reading (in our corpus, the habitual reading does not occur frequent enough for us to take it into consideration in our analysis). The choice between these readings influences the discourse relation between phrases. A sequence Progressive Présent - Passé Simple, as in the current example, excludes both the Background and Narration relation between the two events and leaves place to Elaboration. The second Présent (in the relative clause) is also progressive. Following precedent discourse that gives us one more time an Elaboration. In the full paper, we are going to analyse, using the Présent and Passé simple as examples, the different possible discourse relations presupposed by one or the other temporal sequence.

References

Boguraev, Branimir and Rie Ando. 2005. TimeML -- compliant text analysis for temporal reasoning. In Kaelbling, Leslie Pack and Fausto Giunchiglia, editors, Proceedings of IJCAI05.

Lascarides, Alex and Nicolas Asher. 1993. Temporal Interpretation, Discourse Relations, and

Commonsense Entailment. In: Linguistics and Philosophy, Springer, Vol. 16, p. 437-493.

Loustau, Pierre. 2008. Interprétation automatique d'itinéraires dans des récits de voyages. D'une information géographique du syntagme à une information géographique du discours. PhD Thesis, Université de Pau et des pays de l'Adour.

/Loustau, Pierre. 2008. Automatic interpretation of itineraries in the corpus of french voyage narratives. From geographical information of clause to geographical information of discourse. PhD Thesis, University of Pau./

Muller, Philippe and Pascal Denis. 2010. Comparison of different algebras for inducing the temporal structure of texts. In Proceedings of the 24th International Conference on Computational Linguistics (Coling 2010).