

# A FEW REMARKS ON ROMANIAN SUPINE RELATIVES

Viorela-Valentina DIMA

**Abstract:** The aim of the current study is to examine the temporal values available for Romanian non-finite relatives containing supine verbal forms. Starting from the research in the area of the temporal interpretation of nominals, the paper highlights the mutual influence between the head nominal and the modifying Supine Relative as regards temporal interpretation. On the one hand, the semantics of the supine verb may locate the three times associated with nominal temporal interpretation: (i) the time of the nominal predicate, (ii) the time of the possessive relation or (iii) the time of existence of the entity denoted by the nominal in question (cf. Musan 1995, Lecarme 2005). On the other hand, from the three aforementioned times, only the third one affects the temporal interpretation of the adnominal participle in that a past time of existence of the entity denoted by the nominal head triggers a past interpretation of the modifying supine. These facts are accounted for within a novel theory, along the Cognitive Pragmatics of Sperber and Wilson (1986).

**Keywords:** nominal temporal semantics, reduced relatives, supine

## 1. Introduction

The issue of the temporal interpretation of nominals has been a matter of debate since the beginning of the 20<sup>th</sup> century. Starting with Sapir (1921), numerous linguists have studied a variety of languages, pointing out that nominal elements (nouns and their determiners) are equally important for the temporal interpretation of the sentences they occur in as verbal elements (verbs and their modifiers).<sup>1</sup>

Notwithstanding cross-linguistic morpho-syntactic variations, the researchers have pointed to the uniform *semantic* temporal interpretation of nominals. Thus, the latter are temporally interpreted via one of the following three nominals times:

- (i) the time of the nominal predicate (defined by Musan (1995: 12ff) as “the time interval during which the predicate is asserted to hold of an individual”);
- (ii) the time of the possessive relation (identified by Sadler and Nordlinger (2001), Nordlinger and Sadler (2003a and 2003b) or Lecarme (2005) as the time when the entity denoted by the nominal enters a possessive relation with another entity);
- (iii) the time of existence of the entity denoted by the nominal (defined by Musan (1995: 12ff) as “the time at which the individual exists”).

These times are exemplified for English and Romanian in (1a-c) and (2a-c) below, respectively. More explicitly, *his former house/fosta lui casă* in (1a)-(2a) refer to an entity which is no longer a house, as it has undergone some sort of destruction. Hence, the temporal adjectives *former/fosta* locate in the past the time of the nominal predicate. In (1a)-(2a) below, *his former house/fosta lui casă* denote entities which are no longer possessed by the seller/tenant, with the temporal adjectives *former/fosta* locating in the past the time of the possessive relation. Last but not least, *my former cat/fostul meu pisoi* in (1c)-(2c) denotes entities which no longer exist, with the temporal adjectives *former/fostul* locating in the past the time of existence of the entity denoted by the modified nominals *cat/pisoi*. This nominal

---

<sup>1</sup> For a brief historical presentation of the earlier and more modern papers on nominal temporal syntax and semantics see Tonhauser (2006: 109-118).

time is obtained from the lexical meaning of the respective nominals, i.e. the time of existence of the entity is specified by a past temporal adjective co-occurring with an individual-level predicate (cf. Musan 1995, Tonhauser 2006)<sup>2</sup>.

- (1) a. In 1919 **his former house** was burnt down by a fire [...].<sup>3</sup>  
 b. He sold **his former house** for \$2,571,500 on August 31<sup>st</sup>.<sup>4</sup>  
 c. This is **my former cat** Ingrid may she rest in peace.<sup>5</sup>
- (2) a. Profesorul stătea într-o odaie din **fosta lui casă** de pe strada Manutanței [...] Jumătate din casă este întreagă și astăzi.<sup>6</sup>  
 ‘The professor was living in a room from his former house from Manutanței Street. Half of the house still exists.’  
 b. [...] în calitate de chiriaș-locatar în **fosta lui casă** [...].<sup>7</sup>  
 ‘as tenant-inhabitant of his former house’  
 c. **Fostul meu pisoi** [...] - L-am avut 7 ani de zile până în vara aceasta pe 3 august când a fost călcat de o mașină și eu nu eram acasă [...].<sup>8</sup>  
 ‘My former kitten. I had it for 7 years, until this summer on August 3<sup>rd</sup> when he was run over by a car when I was not at home.’

The aim of this paper is to examine the way in which the temporal interpretation of nominals interacts with that of modifying non-finite supine forms. In section 2 we provide the data, whereas in section 3 we propose an account of the respective data. Section 4 summarizes the main findings of the paper.

## 2. The temporal interpretation of Romanian Supine Relatives

In what follows, we illustrate the way in which Romanian Supine Relatives (SRs) and their matrix nominals influence each other as concerns temporal interpretation. We start by presenting examples which attest to the fact that the semantics of SRs may affect the temporal readings of the matrix nominal, and then turn to contexts in which the matrix nominals affect the temporal interpretation of SRs.

### 2.1. The contribution of Supine Relatives to the temporal interpretation of their head nominals

The examples presented henceforth show that adnominal supines may locate any of the three times associated with nominal temporal interpretation. Firstly, the examples under (3) below show that supine verbs which denote ‘an end of state’ may locate in the past the time of existence of the entity denoted by the modified nominal. In other words, the *Lexical Conceptual Structure* (LCS) of the adnominal supine *de distrus* ‘to be destroyed’ refers to the destruction of the matrix nominal *obiectivele* ‘the objectives’<sup>9</sup>:

<sup>2</sup> For the distinction between individual-level, kind-level and stage-level predicates cf. Kratzer (1988).

<sup>3</sup> <<http://shanghai.cultural-china.com/html/Travel/Former-Residences-of-Celebrities/200811/13-1404.html>>.

<sup>4</sup> <<http://realestalker.blogspot.com/2009/09/update-patrick-dempsey.html>>.

<sup>5</sup> <<http://twitpic.com/17lkty>>.

<sup>6</sup> <<http://www.scribd.com/doc/27664/George-Balaita-Lumea-in-doua-zile>>.

<sup>7</sup> <<http://www.dilemaveche.ro/index.php?nr=153&cmd=articol&id=4710>>.

<sup>8</sup> <<http://deacris.piczo.com/fostulmeupisoi?cr=6&linkvar=000044>>.

<sup>9</sup> For the notion of *Lexical Conceptual Structure* see Pustejovsky (1995, 1998 and 2000).

- (3) [...] între tanc și **obiectivele de distrus** se află mereu diverse forme de relief.<sup>10</sup>  
 ‘between the tank and the objectives to be destroyed there are always various geographical formations’

Secondly, SRs may locate the time of the nominal predicate. Thus, the nominals *un angajat* ‘an employee’, *un președinte* ‘a president’ in (4a, b) below are, in fact, a future former employee and a future former president due to the LCS of the SRs, which point to the firing of the respective individuals:

- (4) a. **un angajat de concediat** datorită incompetenței  
 ‘an employee to sack for incompetence’  
 = a future former employee, a future unemployed person  
 b. **un președinte de demis** datorită corupției  
 ‘a president to fire for corruption’  
 = a future former president

When the head nominal of a SR is also modified by a temporal adjective, the latter must be compatible in meaning with the SR. More explicitly, the nominals *președinte* ‘president’, *soț* ‘husband’ and *șomeri* ‘unemployed’ in (5a, b and c) are in fact a future former president, a future former husband and future former unemployed people. The ‘future’ meaning is contributed by the supine form while the ‘former’ meaning is contributed by the LCS of the verbs *a demite* ‘to fire’, *a lăsa* ‘to leave, to divorce’ and *a angaja* ‘to hire’, respectively.

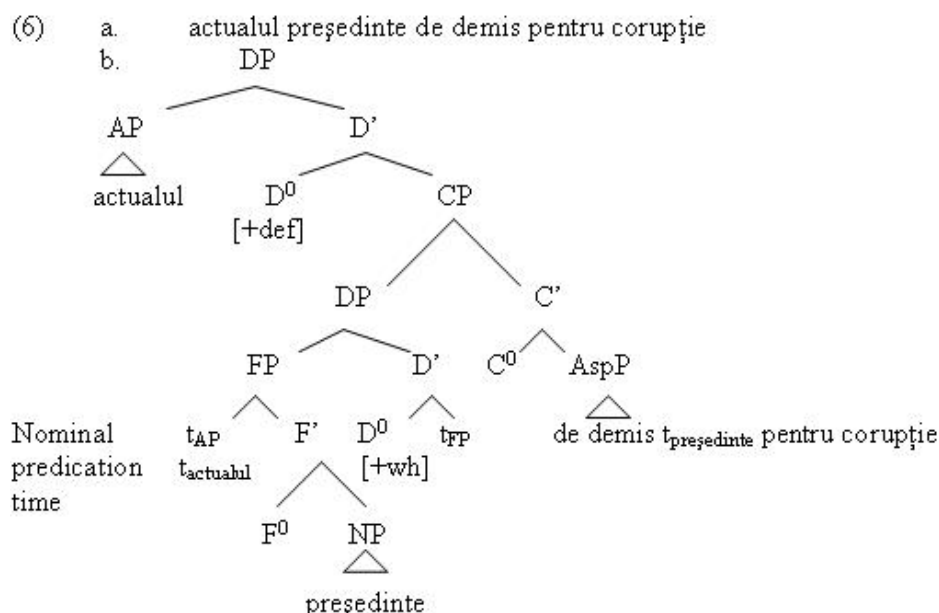
Soare and Zafiu (2006) point to the fact that Romanian Supine Relatives have a modal deontic reading. The latter implies that the event described by the verb used in the supine form has a future-time orientation. Hence, a past-time oriented temporal adjective is odd in (5a’, b’ and c’). Such contexts may be considered acceptable only if certain reinterpretation occurs. For example, (5a’) containing the adjective *fost* ‘former’ is about an individual who used to be president at some past moment and has probably been reinstated as a president, a current position from which he is likely to be fired in the future for reasons of corruption.

- (5) a. **actualul președinte de demis** datorită corupției  
 ‘the current president to fire for corruption’  
 = the current future former president  
 a’. ??**fostul președinte de demis** datorită corupției  
 ‘the former president to fire for corruption’  
 b. **actualul soț de lăsat**  
 ‘the current husband to leave/divorce’  
 = the current future former husband  
 b’. ??**fostul soț de lăsat**  
 ‘the former husband to leave/divorce’  
 c. **actuali șomeri de angajat** la Primărie  
 ‘the current unemployed people to be hired by the Municipality’  
 = the current future former unemployed people  
 c’. ??**fosti șomeri de angajat** la Primărie  
 ‘the former unemployed people to be hired by the Municipality’

In contexts such as those in (5) above, the adnominal supine has an extensional function (i.e. it picks out the individual denoted by the head nominal), whereas the temporal adjectives

<sup>10</sup> <[www.profamilia.ro/recenzii.asp?jocuri=p9419](http://www.profamilia.ro/recenzii.asp?jocuri=p9419)>.

have an intensional function (i.e. they pick up the concept resulted from the combination between the head nominal and the modifying supine form).<sup>11</sup> As for the syntactic derivation of such contexts, we may consider that two steps are involved: (i) the nominal is first modified by the supine form, the latter locating in the past the time of the nominal predicate, and (ii) the temporal adjective further modifies the complex nominal (head noun + adnominal supine). Consequently, the temporal adjective in question must be compatible with the meaning of the SR. This two-step derivation is given in (6) below:<sup>12</sup>



Last but not least, SRs can locate the time of the possessive relation. For instance, *cadourile* ‘the presents’ in (7) below will change owners when the event described by the supine *de cumpărat* ‘to buy’ occurs:

- (7) **cadourile de cumpărat** pentru ziua lui  
‘the presents to buy for his birthday’

Based on the examples presented in this section we arrive at the following generalization:

- (8) The lexical conceptual structure of adnominal supines may locate either of the three times associated with the head nominal’s temporal interpretation.

## 2.2. The influence of the matrix nominal upon the temporal interpretation of the modifying Supine Relative

There are contexts in which the temporal interpretation of the head nominal can influence that of the modifying Supine Relative. Examine, for instance, (9a and b) below:

<sup>11</sup> More discussion on extensional and intensional values obtained by adjectives is provided in Cornilescu (2004, 2005 and 2006).

<sup>12</sup> The representation in (6) above is based on the assumption that reduced relatives are CP complements of the determiner head (cf. Bianchi 2002a and 2002b, Kayne 1994, Sleeman 2008, de Vries 2002).

- (9) a. Proiectul anulat era despre **o casă de construit** pentru socrii mei.  
 ‘The annulled project was about a house to build for my in-laws.’  
 = a house to build then/\*now/\*in the future
- b. Decedatul a fost **un om de cunoscut** de către toți.  
 ‘The departed was a man to get acquainted with by everybody.’  
 = ... a man to get acquainted with then/after/\*now/\*in the future
- c. A ars **cartea de citit** până azi.  
 ‘The book to read until/for today was destroyed in the fire.’  
 = the book that was/\*is to read until/for today’

In the examples (9a and b) above, the head nominals *o casă* ‘a house’ and *un om* ‘a man’ denote entities that do not exist (any more). In other words, these nominals are associated with a past time of existence of the entity denoted by them. Notice that the supine forms modifying these head nominals denote events that can only take place in the past, and not at present or in the future, as highlighted by the paraphrases provided under each example. Similarly, the Supine Relative in (9c) above cannot be replaced by a finite relative containing a present tense morpheme, as the matrix nominal denotes an entity which no longer exists. Based on such examples we may arrive at the generalization in (10) below:

- (10) The temporal interpretation of the head nominal may affect the temporal interpretation of the modifying Supine Relative.

When the head nominal is not associated with a past time of existence, the modifying SR denotes an event that may occur in the past, present or future. Thus, in (11) below the temporal adjective *fostul* ‘former’ locates in the past the time of the possessive relation associated with the head nominal *soț* ‘husband’. This, however, does not trigger a past reading for the modifying supine *de uitat* ‘to forget’. In other words, the event of forgetting can take place sometime in the past, present or future.

- (11) **fostul soț de uitat** cât mai curând  
 ‘the former husband to forget as soon as possible’  
 = the former husband to forget then/ now/ in the future

Similarly, if the entity denoted by the matrix nominal still exists, the time of the nominal predicate associated with the latter does not trigger a past reading for the modifying SR. For example, the entities denoted by *un ministru* ‘a minister’ and *oameni* ‘people’ in (12a and b) below can be fired at any given moment which is posterior to the time of utterance, be this moment anterior to, simultaneous with or posterior to ‘now’:

- (12) a. **un ministru de concediat**<sup>13</sup>  
 ‘a minister to fire’  
 = a minister to fire then/ now/ in the future
- b. Dragnea îl trimite pe Boc să caute **oameni de dat afară** în altă parte<sup>14</sup>  
 ‘Dragnea sends Boc to look elsewhere for people to fire’  
 = people to fire now/ in the future

<sup>13</sup> <<http://new.ablog.ro/2010-03-15/un-ministru-de-concediat-un-diplomat-de-urecheat-macar.html>>.

<sup>14</sup> <<http://www.gandul.info/news/dragnea-il-trimite-pe-boc-sa-caute-oameni-de-dat-afara-in-alta-parte4735862>>.

In sum, this section has presented examples which testify to the fact that the temporal interpretation of the head nominal can influence that of the modifying Supine Relative. More specifically, a past time of existence of the entity denoted by the head nominal triggers a past temporal interpretation of the modifying supine form.

### 3. Towards an account

Up to now, we have seen that the temporal interpretation of Romanian Supine Relatives arises from the interplay of two factors: the temporal interpretation of the head nominals, as well as that of the non-finite verbs. To account for these facts, we propose a Cognitive Pragmatic approach along the lines of Sperber and Wilson (1986) and Carston (1997 and 2004). With this proposal, we are trying to do justice to both lexically-encoded and context-provided elements which have been shown to play equally important roles in the comprehension of nominal temporal interpretations. In a nutshell, we consider that (simple and complex) nominals are temporally interpreted in three steps: (i) by decoding the literal meaning of the utterance they appear in; (ii) by decoding conversational implicatures, and (iii) by decoding conversational explicatures.

In detail, the first step presupposes the processing of the linguistic elements present in the utterance (be they lexical or morpho-syntactic elements). At this stage, the *Lexical Conceptual Structure* of the head nominals, Supine Relatives and/or temporal adjectives are – let us say – activated.

The second step consists in decoding conversational implicatures which arise in the context of utterance, along the lines of Grice (1975). The latter's theory may be used to account for examples (5a', b' and c'), repeated below for ease of reference. Remember that such contexts may be considered acceptable only if conversational implicatures "save" them. For instance, (5b') containing the adjective *fost* 'former' is about an individual who used to be somebody's husband at some past moment and has probably re-married with the same person; furthermore, in the context of current marital problems he is likely to be left or divorced from.

- (5) a'. ??**fostul președinte de demis** datorită corupției  
       'the former president to fire for corruption'  
       b'. ??**fostul soț de lăsat**  
       'the former husband to leave/divorce'  
       c. ??**foști șomeri de angajat** la Primărie  
       'the former unemployed people to be hired by the Municipality'

The third step presupposes the decoding of conversational explicatures. The difference between explicatures and implicatures is highlighted by Sperber and Wilson (1986) as follows:

An 'explicature' is a propositional form communicated by an utterance which is pragmatically constructed on the basis of the propositional schema or template (logical form) that the utterance encodes; its content is an amalgam of linguistically decoded material and pragmatically inferred material [emphasis mine, VD]. An 'implicature' is any other propositional form communicated by an utterance; its content consists of wholly pragmatically inferred matter (Sperber and Wilson 1986: 182).



How do explicatures affect the temporal interpretation of nominals? This is mostly evident in connection with a long debated example in the literature, provided in (13) below:

- (13) a. All **lizards** will die. (Enç 1981: 68, ex. 19)  
 b. All **lizards** will die **at the same time in the future**. (simultaneous reading)  
 b'.  $\exists (t) \text{ future time } (t) [\forall (x) \text{ lizard } (x) \rightarrow \text{die } (x) \text{ at } t]$   
 c. All **lizards** will die **at a certain time in the future**, not necessarily at the same time (non-simultaneous or, accidentally simultaneous reading)  
 d. All **lizards** will die **at different times in the future**. (non-simultaneous reading)  
 d'.  $\forall (x) [\text{lizard } (x) \rightarrow \exists (t) \text{ future time } (t) [\text{die } (x) \text{ at } t]]$

As evident from the paraphrases given in (13b, c and d) above, the example in (13a) may receive three interpretations: (i) a simultaneous interpretation, under which all lizards will die at the same time in the future, (ii) an accidentally simultaneous reading, under which all lizards will die at a certain time in the future, not necessarily the same one, and (iii) a non-simultaneous reading, under which all lizards will die at different times in the future. As highlighted in (13b') and (13d') above, the simultaneous and non-simultaneous readings can be explained within a quantificational theory of tense. More explicitly, the simultaneous reading obtains with the universal quantifier *all* under the scope of the future morpheme, whereas the non-simultaneous reading obtains with the universal quantifier outside the scope of the future morpheme.

However, a quantificational theory of tense cannot account for the accidentally simultaneous reading in (13c). We propose that this reading may be accounted for in the Cognitive Pragmatic approach of Sperber and Wilson (1986) and Carston (1997 and 2004). In detail, we propose that the utterance in (13a) comes with a guarantee of relevance. But what is the relevance of a speaker uttering (13a)? We believe that the speaker intends to make salient a certain time of the lizards' dying. Depending on further contextual clues, the (non-) simultaneous readings will be arrived at. For instance, the accidentally simultaneous reading highlighted in (13c) – which logical scope cannot account for – might arise from a context in which the survival chances of endangered species are debated. The speaker of (13a) might want to imply that the death of the members of such endangered species (e.g. Saint Croix Ground Lizard, the Spineless Forest Lizard or the Leaf-nosed Lizard) is a sure thing, given the current habitat conditions. Once arriving at this implication, the hearer of (13a) will stop the decoding process. In other words, for the latter to continue so as to derive (13b) or (13d), further contextual clues are needed – hence, more effort is needed. This effort would be worth making only if the expected level of relevance is not achieved from (13c), i.e. only if – let us say – the context of utterance further provides information regarding the actual time of death for each of the member of the endangered species under debate.

As for the temporal interpretation of Supine Relatives, we believe that Sperber and Wilson's theory is more adequate than Grice's theory. The latter's theory highlights the importance of contextual/conversational clues for decoding linguistic utterances, without clearly acknowledging the contribution of linguistic elements (i.e. lexical, morphological and syntactic elements). On the other hand, Sperber and Wilson (1986: 182) highlight the importance of both "linguistically decoded material and pragmatically inferred material".

#### 4. Conclusions

The aim of the current paper has been to analyse the temporal readings obtained by Romanian Supine Relatives and their head nominals. In section 2 we presented data which pointed to the fact that there are two key factors that contribute to the temporal interpretation of Supine Relatives: (i) the temporal interpretation of the head nominal; (ii) the *Lexical Conceptual Structure* of the supine modifiers.

Firstly, we have seen that (head) nominals may be interpreted relative three times: (i) the time of the nominal predicate, (ii) the time of the possessive relation and (iii) the time of existence of the entity denoted by the respective nominal. Secondly, our examples pointed to the fact that the *Lexical Conceptual Structure* of supine modifiers may locate any of the three times associated with the head nominal. Thirdly, out of the three aforementioned times only the time of existence of the entity denoted by the head nominal affects the temporal interpretation of modifying Supine Relatives. More explicitly, a past time of existence of the entity triggers a past temporal location for the event denoted by the verb used in the supine form.

Moreover, we have also discussed the interaction between Supine Relatives and adjectival modifiers of the same head nominal. We have seen that the deontic readings associated with supine forms triggers a future-time orientation of the latter. Hence, past temporal adjectives are perceived as odd in the absence of contextual reinterpretation, as discussed in section 2.1 above.

To account for the mutual influence of the head nominal and the modifying Supine Relatives, we proposed a Cognitive Pragmatic account, along the lines of Sperber and Wilson (1986) and Carston (1997 and 2004). In a nutshell, we argued that the complex nominals containing Supine Relatives are temporally interpreted in a three-stage process, which acknowledges the importance of both linguistic factors (lexical, morphological and syntactic) and contextual ones (implicatures and explicatures).

Viorela-Valentina Dima

The Academy of Economic Studies, Bucharest

University of Bucharest, Doctoral school “Languages and Cultural Identities”

viorelaval@yahoo.co.uk

#### References

- Bianchi, V. 2002a. Headed relative clauses in generative syntax. Part I. *Glott International* 6 (7): 197-204.  
 Bianchi, V. 2002b. Headed relative clauses in generative syntax. Part II. *Glott International* 6 (8): 235-247.  
 Carston, R. 1997. Enrichment and loosening: Complementary processes in deriving the proposition expressed?. *Linguistische Berichte* 8, *Special Issue on Pragmatics*: 103-27.  
 Carston, R. 2004. Explicature and semantics. In S. Davis and B. Gillon (eds.), *Semantics: A Reader*. Oxford: Oxford University Press.  
 Cornilescu, A. 2004. Romanian relative adjectives as intersective NP-modifiers. *Bucharest Working Papers in Linguistics* VI (1): 50-72.  
 Cornilescu, A. 2005. Romanian adjectives and the stage level – individual level contrast. In M. Coene and L. Tasmowski (eds.), *On Space and Time in Language*, 75-92. Cluj-Napoca: Clusium.  
 Cornilescu, A. 2006. Modes of semantic combinations: NP/DP. Adjectives and the structure of the Romanian DP. In J. Doetjes and P. González (eds.), *Romance Languages and Linguistic Theory 2004*, 43-69. Amsterdam/Philadelphia: John Benjamins.  
 Enç, M. 1981. Tense without Scope: An Analysis of Nouns as Indexicals. PhD Dissertation, University of Wisconsin, Madison.



- Grice, H. P. 1975. Logic and conversation. In P. Cole, J. L. Morgan (eds), *Syntax and Semantics*, vol. 3, *Speech Acts*, 41-58. New York: Academic Press.
- Kayne, R. 1994. *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.
- Kratzer, A. 1988. Stage-level and individual-level predicates. In E. Bach, A. Kratzer and B. Partee (eds.), *Papers on Quantification*, 147-222. Amherst, MA: University of Massachusetts.
- Lecarme, J. 2005. Tense and modality in nominals. Handout of talk at *Time and Modality*, 8-10 December, 2005, University of Paris 3 and University of Paris 7.
- Musan, R. 1995. On the Temporal Interpretation of Noun Phrases. PhD Dissertation, MIT.
- Nordlinger, R. and Sadler, L. 2003a. Finite noun phrases. <<http://privatewww.essex.ac.uk/~louisa/newpapers/finitefinal.pdf>>.
- Nordlinger, R. and Sadler, L. 2003b. Tense beyond the verb: Encoding clausal tense/aspect/mood on nominal dependents. *Natural Language and Linguistic Theory* 22: 597-641.
- Pustejovsky, J. 1995. *The Generative Lexicon*. Cambridge, MA: MIT Press.
- Pustejovsky, J. 1998. The semantics of lexical underspecification. *Folia Linguistica* XXXII (3-4): 323-347.
- Pustejovsky, J. 2000. Events and the semantics of opposition. In C. Tenny and J. Pustejovsky (eds.), *Events as Grammatical Objects*, 445-482. Stanford, CA: CSLI Publications.
- Sadler, L. and Nordlinger, R. 2001. Nominal tense with nominal scope: A preliminary sketch. <<http://csli-publications.stanford.edu/LFG/6/lfg01nordlingersadler.pdf>>.
- Sapir, E. 1921. *Language: An Introduction to the Study of Speech*. New York: Harcourt.
- Sleeman, P. 2008. Prenominal and postnominal reduced relative clauses: Arguments against unitary analyses. *Bucharest Working Papers in Linguistics* IX (1): 5-16.
- Soare, E. and Zafiu, R. 2006. Adnominal non-finite sentential constituents. In C. Dobrovie-Sorin, G. Pană-Dindelegan (eds.), *The Essential Grammar of the Romanian Language*, vol. 1, *Nominal Projections*. <[http://www.linguist.jussieu.fr/~mardale/SOARE\\_NONFINITE\\_CONSTITUENTS\\_AVR2006.doc](http://www.linguist.jussieu.fr/~mardale/SOARE_NONFINITE_CONSTITUENTS_AVR2006.doc)>.
- Sperber, Dan and Wilson, D. 1986. *Relevance. Communication and Cognition*. Cambridge, MA: Harvard University Press.
- de Vries, M. 2002. The Syntax of Relativization. PhD Dissertation, University of Amsterdam.
- Tonhauser, J. 2006. The Temporal Semantics of Noun Phrases: Evidence from Guaraní. PhD Dissertation, Stanford University.

