

## Causative nominalizations from psych verbs

**1. Introduction.** The study of deverbal nominalizations has long been a fruitful ground for theories of the linguistic interfaces. In this paper, we investigate *causative nominalizations* from *object experiencer (OE) verbs* that have *subject experiencer counterparts (SE)* (Belletti & Rizzi 1988, Grimshaw 1990, Pesetsky 1995, Landau 2010) in Greek and Romanian. Causative psych nominalizations (CPNs) have been argued not to be available in English (and Hebrew) which led to the idea of a possible cross-linguistic ban on CPNs (see Landau 2010). We will show that Greek and Romanian do have a kind of CPNs that are derived from the SE verb form which we analyze as an anticausative, following Alexiadou, Anagnostopoulou & Schäfer (AAS 2006). By contrast, passive psych nominalizations (e.g. Romanian supine, English nominalizations) require a Voice projection (like the OE form) and their external argument is by default interpreted as an agent like in Greek (and Hebrew) passives (see Doron 2003). Our results suggest a structural difference between Romanian/Greek and English psych nominalizations: the former can nominalize either the SE anticausative or the OE passive form of the verb (Anagnostopoulou 1999), while the latter only nominalize the OE passive, as the base verbs lack the anticausative structure (see Pesetsky 1995).

**2. Agents/Causers.** OE verbs are ambiguous between 2 eventive readings: agentive and causative:

(1) **Ion/vestea** le-a enervat pe fete. (Romanian)

John/news.the them-has annoyed Acc girls

'John (*agent*)/The news (*causer*) annoyed the girls.'

(2) **O Janis/Ta nea** tin enohlise/an ti Maria (Greek)

the John/the news her.Acc bothered.3sg/3pl the Mary.Acc

'John (*agent*)/The news (*causer*) bothered Mary.'

In English, nominalizations derived from OE verbs lack the causative reading and tolerate only agents (Lakoff 1970, Pesetsky 1995, Grimshaw 1990: *\*the movie's amusement of the children* vs. *the clown's amusement of the children*). Landau (2010) and Sichel (2010) show that this holds in Hebrew as well, arguing that there is a universal ban on CPNs. Sichel (contra Pesetsky 1995) explains the agent-exclusivity by proposing that English/(Hebrew) psych nominals are simple events, so the external argument must be a direct participant, i.e. an agent, not a cause. However, Romanian and Greek *allow* causative psych nominalizations, in addition to the agentive ones. This is shown by the compatibility with the prepositions *de la* 'from' (3), and *me* 'with' (4) that introduce causers (Markantonatou 1992, AAS 2008, Iordachioaia 2008), besides the agentive *de catre/apo* 'by':

(3) enervarea Mariei **de catre** Ion/**de la** vestea primita (Romanian)

annoy.Inf.the Mary.Gen by John/ from news.the received

'Mary's annoyance by John/Mary's becoming annoyed because of the news she received'

(4) i enohlisi tis Marias **apo** to Jani/**me** ta nea (Greek)

the bothering the Mary.Gen by the John/with the news

'Mary's becoming bothered by John/the news'

In Greek nominalizations, *me* 'with' introduces causers and *apo* 'by' agents, while *apo* introduces both agents and causers in the verbal domain. Similarly, in Romanian *de catre* 'by' may introduce causers in the passive (5a), but not in the nominalization (5b), where only *de la* 'from' is allowed.

(5) a. Usa a fost deschisa **de catre vant/Ion**. vs. b. enervarea Mariei **de catre Ion/\*vestea primita**.

The door was opened by the wind/John Mary's annoyance by John/\*the news received

Importantly, OE verbs that lack a SE counterpart don't form causative nominalizations:

(6) dezamagirea/incurajarea Mariei **de catre** Ion/**\*de la** vestea primita

disappointment/encouragement Mary.Gen by John/from news-the received

The SE cognates are analyzed in the literature as anticausative. The OE-SE alternation is morphologically marked, just like the general pattern of the (anti)causative alternation: the intransitive variant bears non-active morphology in Greek (7b), and a reflexive in Romanian (8b).

(7) a. Ta nea **enohlisan** ti Maria

the news annoyed the Mary-acc

'The news annoyed Mary'

b. I Maria **enohlithike** me ta nea

The Mary annoyed.non-active with the news

'Mary got annoyed with the news'

- (8) a. Stirile **au enervat-o** pe Maria. b. Maria **s-a enervat** de la stiri.  
 News.the have annoyed-her Acc Mary Mary Rf-has annoyed from news  
 'The news annoyed Mary.' 'Mary got annoyed with the news.'

(3) and (4) point to a structural difference between Romanian/Greek, and English nominalizations that cannot be reduced to the presence of abstract causative morphology (contra Pesetsky 1995), given that: 1) CPNs are out in Hebrew (see Landau 2010: 146), but OK in Greek in the presence of overt causative morphology and 2) they are allowed in Romanian, although the corresponding verb has abstract causative morphology. We will also show that Greek/Romanian CPNs do not differ from their English counterparts in terms of event complexity, contra Sichel.

**3. Analysis.** We analyze (3)/(4) as nominalizations of the anticausative variant of psych verbs (7b/8b) which we take to have the same structure as other verbs that undergo the causative alternation. We adopt AAS's (2006) structures in (9): (a) corresponds to the transitive and (b) to the anticausative variant. Voice introduces external arguments, and hosts agentive *de catre/apo* 'by' PPs, while *v* introduces causation and hosts the causative-only PPs *de la* 'from' and *me* 'with'.

- (9) a. [VoiceP [vPcause [RootP]]] b. [vPcause [RootP]]

OE verbs instantiate (9a) and their SE cognates (9b). In Greek/Romanian, both structures feed nominalizations. In CPNs, (9b) is the input, hence they license causer PPs via *vPcause*, but not 'by'-PPs (6), which need Voice. In agentive nominalizations, (9a) is the input, so 'by' PPs are in.

The agent-exclusivity in English can be explained as follows: in English OE predicates lack anticausative variants (Pesetsky 1995), i.e. they only have structure (9a): the nominative (agent/causer) is always the external argument (see Bouchard 1995 for an account of the incongruous binding facts observed for OE verbs). In Greek/Romanian both structures are available. Assuming that nominalization (in English) is akin to passivization (Grimshaw 1990), the ban on causative nominalizations is a ban on interpreting the external argument as a causer, as the default interpretation of the external argument in passivization is that of the agent (Doron 2003). Following Doron, in (9a) the external argument is not required by the root, so it is interpreted as a default agent and causers are ruled out. The same has been observed for Hebrew and Greek verbal passives which only license agents, although the active voice licenses both agents and causers. This operation may apply to Romanian infinitival nominalizations and Greek nominalizations, but doesn't have to, since the presence of Voice is not obligatory (AAS 2009). The difference is then that in English a passive of (9a) is the only source for nominalizations, while both a passive of (9a) and the anticausative (9b) are available in Romanian/Greek. Note here that the Romanian supine nominalization patterns with Hebrew/Greek passive and English nominalizations from psych verbs in only accepting agents. This is compatible with our analysis, given that the supine has been argued to obligatorily project Voice, so it can only nominalize (9a) (Iordachioaia 2008).

- (10) *enervatul Mariei de catre Ion/\*stirile TV/\*de la stirile TV*  
 annoy.Sup.the Mary.Gen by John/news.the TV/from news.the TV  
 'John's/\*the TV news' annoying Mary/\*Mary's getting annoyed from the TV news'

**References:** Alexiadou, A., E. Anagnostopoulou & F. Schäfer. 2006. The properties of anticausatives cross-linguistically. M. Frascarelli (ed.), *Phases of Interpretation*, 187-212. Berlin: Mouton. Alexiadou, A., E. Anagnostopoulou & F. Schäfer. 2009. PP licensing in nominalizations. *Proceedings of NELS 38*. Anagnostopoulou, E. 1999. On experiencers. In A. Alexiadou, G. Horrocks & M. Stavrou (eds), *Studies in Greek syntax*, 67-93. Dordrecht: Kluwer. Belletti A. & L. Rizzi. 1988. Psych-verbs and theta-theory. *NLLT* 6: 291-352. Bouchard, D. 1995. *The semantics of syntax: A minimalist approach to grammar*. Chicago: UCP. Doron, E. 2003. Agency and voice: the semantics of the semitic templates. *NLS* 11: 1-67. Grimshaw, J. 1990. *Argument Structure*. Cambridge: MIT Press. Iordachioaia, G. 2008. External argument PPs in Romanian nominalizations. In F. Schäfer (ed.) *Working Papers of the SFB 732* (1), 71-84. Lakoff, G. 1970. *Irregularity in Syntax*. New York: Holt, Reinhart and Winston. Landau, I. 2010. *The Locative Syntax of Experiencers*. Cambridge: MIT Press. Markantonatou, S. 1992. *The Syntax of Modern Greek Noun Phrases with a Derived Nominal Head*. University of Essex dissertation. Pesetsky, D. 1995. *Zero Syntax: Experiencers and Cascades*. Cambridge: MIT Press. Sichel, I. 2010. Event Structure Constraints in Nominalization. In A. Alexiadou & M. Rathert (eds), *The Syntax of Nominalizations across Languages and Frameworks*, 151-190. Berlin: Mouton.