# Deverbal Nominalization, Object versus Event Denoting Nominals, Implications for Argument & Event Structure

Or: On the tenability of the hypothesis that argument structure is not a lexical primitive, but, instead, derived from event structure  $\overset{\star}{\sim}$ 

This paper will place some more, some less well-known facts about deverbal nominalization in a different light by considering them in relation to the effects of nominalization on argument and event structure (henceforth, a- and e-structure). The following issues will be discussed: (i) the optional presence of the arguments with a nominal, as opposed to the obligatoriness with a verb; (ii) the dichotomy event versus object denoting nominals (cf. process vs. result nominals, Anderson 1983-4, Zubizarreta 1987, Grimshaw 1990); (iii) the selection of the preposition introducing the agentive argument.

It will be argued that the operation of nominalizing a verb affects the original e-structure. It adds a delimiting aspect to it. Consequently, this change affects a-structure. It is argued that the logical necessity of the latter change results from assuming a specific relation between a- and e-structure. In recent literature on a- and e-structure (e.g. Grimshaw 1990), it is assumed that a- and e-structure are both lexical primitives, listed alongside each other in the lexicon. In this paper I will defend as a null hypothesis that a-structure is *not* a primitive, but that it is derived from e-structure on a lexical level via some general rules.

Under this analysis of nominalization, the facts discussed under the issues (i)-(iii) follow naturally, without further stipulation (unlike for example Grimshaw 1990 or Zubizarreta 1987). Furthermore, this view on the relation between a- and e-structure leads to a generalization for the lexicon that drastically reduces the basic information listed for every lexical item. Finally, a different conception of arguments and adjuncts emerges if all the consequences of the hypothesis are considered.

### 1. The view of a- and e-structure

One of the basic assumptions of GB-theory today (since Williams 1980, Chomsky 1981) is that a lexical item is listed in the lexicon with information on the number and type of arguments it takes: its  $\theta$ -grid or, to use a more recent term, its *a*-structure<sup>1</sup>. Recent theories on the lexicon argue for the need of another dimension in the lexicon: *aspectual* information (cf. Jackendoff 1983, 1990, Zubizarreta 1987, Pustejovsky 1988, Grimshaw 1990, Grimshaw & Vikner 1989, 1990, van Hout 1990). These theories differ, not only in the terms they use for this aspectual information (cf. Jackendoff's lcs, *lexical conceptual structure*, Zubizarreta's S-R, *lexico-semantic structure*, Pustejovsky's *e*-structure), but also, and sometimes quite substantially, in their conception of how this aspectual information can be formalized and what its relation to a-structure is. Nevertheless, they agree in extending the traditional predicate-argument structure with some aspectual structure<sup>2</sup>.

The addition of basic premises to a theory, however, calls for reconsideration of the old ideas, in order to avoid losing generalizations. Without going into the details (but see van Hout in prep.), the latter is what I think has happened. As the theories now stand, there is overlap in the lexical information formalized in the two dimensions. Therefore, I propose the following minimal hypothesis, which is a generalization over lexical information. (Note that, as a general framework, I follow the theory on aand e-structures of Grimshaw (1990).)

 Event structure is primitive; Argument structure is derived from event structure.

In other words, aspectual information is basic; predicate-argument structure is not. Now, how does this derivation come about? I suggest it may be triggered in the following way:

(2) Event structure must be fully identified; generating argument structure gives one way for this identification.

The participants of an event are generated by e-structure. That is, the presence of certain arguments may identify (certain parts of) the e-structure. Stated differently, e-structure gives a clue as to how many and which arguments are to be expected in order for it to be fully identified. In that sense, a-structure is no longer a primitive. The idea of the need of identifying e-structure comes from Grimshaw & Vikner (1989). However, they do not go so far as to discard a-structure as a primitive.

Continuing this line of thought, some generalizations can be stated for each of the basic event types. A *State* needs a participant which occurs in a certain state of affairs; this may be a *theme* or an *experiencer*. But it must not be an *agent*, because agents are active and only participate in actions, and a state is by definition not active. A *Process* needs an *agent* participant, which expresses the acting character of the process<sup>3</sup>. A *Transition* needs an *agent* participant, which is the participant who brings about the transition between two subevents. A complex event, in order to have all of its subevents identified, triggers the set of all the participants which each subevent separately needs. These generalizations are informal, but at least they show in what sense there is overlap in information between e- and a-structures. They suggest what direction the formalization of lexical metarules could take in order to avoid this overlap. Furthermore, the generalizations are minimal in the sense that they trigger a minimal number of participants<sup>4</sup>.

The generation of arguments by e-structure is just one way of identification; there are other ways as well. I follow Grimshaw & Vikner (1989) who argue that adjuncts too can identify e-structure. This explains why certain passives obligatorily take an adjunct: otherwise, part of the e-structure would remain unidentified.

If pursued to their utmost consequences, the above assumptions have important implications for the conception of *arguments* and *adjuncts*. The standard view, derived from  $\theta$ -theory, defines arguments as  $\theta$ -role bearers, and adjuncts as bearing no  $\theta$ -role. If a-structure is no longer a theoretical primitive, in other words, if the notion of  $\theta$ -role is a derived notion, it must be reconsidered whether the definitions of argument and adjunct can still be upheld, and more importantly, whether the dichotomy is still real.

The traditional dichotomy argument-adjunct has turned out to be problematic even without the above reconsiderations of a- and e-structure. One of the implications of the  $\theta$ -criterion is a correlation between argumenthood and obligatoriness on the one hand, and adjuncthood and optionality on the other. Take verbs subcategorized for an obligatory adjunct, such as *live* for a locative PP, and word and behave for a manner adjunct. This case spoils the correlation. And it is spoiled in the opposite direction too; take the case of optional arguments with verbs like *think*, *drink* and *eat*. Apparently, adjuncts can be obligatory and arguments can be optional. If these examples show that the correlation implied by the  $\theta$ -criterion cannot be sustained, the role of the  $\theta$ -criterion itself (its implications, its all-or-nothing character) must be reconsidered. It must be questioned whether the function of  $\theta$ -roles is indeed to distinguish between arguments and adjuncts, if this can no longer be related to their obligatory vs. optional character.

Relating this conceptual problem with  $\theta$ -theory to the hypothesis proposed here, and more specifically, to the idea that arguments as well as adjuncts may license e-structure, the following tentative conclusion naturally emerges:

(3) There is no principled distinction between arguments and adjuncts, at least not from a lexical-semantic point of view

If a-structure (i.e. the concept of  $\theta$ -roles) is not primary, and if both arguments and adjuncts function similarly as identifiers of e-structure, the dichotomy argument-adjunct (as defined in terms of a-structure) disappears.

Of course, the ideas presented above do not present a complete picture of the derivation of a-structure from e-structure (see also note 5). Thus, for example, there must be some principled reason why it is the 'arguments' that are up first for the role of identifiers of e-structure. Apparently, 'adjuncts' are just stand-ins if there are not enough arguments around to do the job, as is the case with Grimshaw & Vikner's passives. If this reason is discovered, it would also explain why adjuncts are usually optional (e-structure is already sufficiently identified by the arguments, so the adjuncts are not 'needed'), and why arguments usually obligatory (they are the first to have to identify e-structure).

Although these proposals may seem a bit shocking at first, and although they may have drastic consequences for the conception of  $\theta$ -theory, the basic idea is by no means new. The idea of not making a sharp distinction between arguments and adjuncts has been around since Davidson (1966). He adds a number of new  $\theta$ -roles (but of course, they are not called that way yet) like *Place*, *Time* and *Manner*, which are assigned to adjuncts. McConnell-Ginet's analysis (1982) of adverbs treats them as 'extra arguments'. Higginbotham (1985) and Zubizarreta (1987) assume an extra *event*-role in the  $\theta$ -grid of verbs, which is assigned to adjuncts. And, in their analyses of nominalization, Zubizarreta (1987) and Grimshaw (1990) come up with a new concept, *adjunctargument* and *argument-adjunct* respectively, in order to explain the double character of the external argument in a nominalization.

### 2. Some facts and theories of nominalization

Probably the most remarkable thing about nominalizations is the fact that verbs and nominals differ fundamentally in the selection of their arguments: verbs take them obligatorily; nominals take them optionally.

(4) a The doctors examined the patient
b \*There / It examined the patient
c \*The doctors examined
d The examination (of the patient) (by the doctors)

Leaving everything else, and especially the  $\theta$ -criterion, equal, this suggests that in the course of nominalizing, some change in the a-structure has taken place. Minimally, the originally obligatory arguments have turned into optional ones.

Zubizarreta (1985, 1987) and Grimshaw (1990) show that this observation must be refined. Actually, the optionality is only apparent. It is caused by

systematic ambiguity of certain deverbal nominals: they are either event- or object-denoting (cf. process vs. result nominals, Anderson 1983-84). Their analyses are similar: both correlate the distinction process vs. result to [+]- vs. [-]-argument-taking. The  $\theta$ -criterion applies, therefore, process nominals are obligatorily argument-taking. Result nominals are object-denoting, which 'means' that they do not have a-structure. They may take satellites, but these are not arguments in the sense that they receive a  $\theta$ -role, and thus, they do not have to obey the  $\theta$ -criterion. Therefore, result nominals take satellites just optionally. Grimshaw illustrates this with some tests which desambiguate the context, in order to show that the optionality of the satellites is only apparent: there is no optionality with process nominals.

However, the prediction that event nominals take all their arguments obligatorily, is not borne out. In fact, it is contradicted in two ways. First, the external argument is never obligatory with nominals. Both Zubizarreta and Grimshaw note this, and adjust their analyses. In Zubizarreta's theory the internal and external  $\theta$ -roles are assigned to the arguments in essentially different ways<sup>5</sup>. Internal  $\theta$ -role assignment proceeds via *Projection*; external  $\theta$ -role assignment via *Predication*. She assumes that predication applies only to verbs (this is the null-hypothesis throughout her whole book). One of the consequences is that the external argument of a nominal cannot be  $\theta$ -assigned in that way. The only way left over to license it is via Modification. Since modification is an optional operation in her system, the external argument in a nominal is optional. This way of licensing is typically the one for an adjunct-argument. Zubizarreta is extending here the traditional possibilities for  $\theta$ -assignment. Argument slots get filled not only via internal  $\theta$ -assignment and predication, but also via modification. However, when the latter way is used, the  $\theta$ -criterion apparently must be relaxed: the argument slots do not always have to be filled.

Grimshaw analyzes the by-phrase in nominals (and passives for that matter) as a phrase with an intermediate status too. It is licensed by a-structure in the way arguments are, but it does not satisfy an a-position, just as adjuncts do not. She calls this status argument-adjunct, and develops a theory on the licensing of such argument-adjuncts. By coming up with this new concept Grimshaw does not much more than restating the intuition that the byphrase plays the same role as the external argument of the original verb, but that it functions like a regular adjunct. There is nothing in the basic outline of her theory that leads one to expect this new type. It is in this sense that Grimshaw's analysis of the optionality of the external argument in a nominal is stipulative.

Furthermore, Grimshaw argues strongly that event nominals take the internal argument obligatorily. This, however, constitutes a second point that is contradicted by the facts. There is a subset of the complex event nominals that does not take the internal argument obligatorily. Zubizarreta (1987:73) notes this fact already: (5) vs. (6).

- (5) a <sup>\*</sup>The destruction took place yesterday b <sup>\*</sup>The entire destruction was filmed
- (6) a The assassination happened yesterdayb The execution was filmed by the TV-stations

Both nominals in (6) must be interpreted as 'the event of assassinating ... happened yesterday' or 'the event of executing ... was filmed'. And both have e-structure: they either denote an accomplishment or an achievement (there is a lack of independant criteria to decide on this). Their e-structure is either a transition between a process and a resulting state, or between a state before and a state after. The ones in (6) don't take the internal argument obligatorily though. Apparently, event nominals do not constitute a coherent set.

There is another characteristic Grimshaw notes about the set of event nominals, but which asks for a more fine-grained analysis. She claims that they would only appear as singular nominals. But this does not hold water either:  $^6$ 

- (7) a <sup>\*</sup>De terugtrekkingen van de verschillende divisies ... the withdrawals of the several divisions ...
  - b \*De vernietigingen van de drie belangrijkste Iraakse steden ... the destructions of the three most important Iraqi cities ...
  - c \*De verdedigingen van de drie belangrijkste Iraakse steden ... the defences of the three most important Iraqi cities ...
- (8) a Tijdens de martelingen van de politieke gevangenen door de zwarte brigades moesten alle journalisten het gebouw uit during the tortures of the political prisoners by the black brigades had-to all journalists the building out
  - b Wij hebben de laatste twee ontruimingen van dit kraakpand niet meer meegemaakt we have the last two clearings of this squatting-building not anymore experienced
  - c De *besprekingen* van Gorbatchov met Tareq Aziz over het vredesvoorstel duurden telkens enige uren the discussions of G. with T.A. on the peace-proposal took everytime several hours

Zubizarreta mentions that there seems to be a correlation between noncountable event nominals selecting their arguments obligatorily, and countable ones selecting them optionally.

Actually, there is another correlation to be drawn, making the same subdivision within the set of event nominals. The preposition heading the PP that contains the external argument, may take two different forms in Dutch: van 'of' or door 'by' (this is similar in English and the Romance languages). Compare the difference in interpretation in (9)a vs. b:

Mary and John have each individually been selecting abstracts:

- (9) a De selektie van Marie was identiek aan de selektie van Jan the selection of Mary was identical to the selection of John
  - b De selektie door Marie was identiek aan de selektie door Jan

In (9a) selection can only denote an object, it has the resultinterpretation. In (9b) it can only denote an event, it has the processinterpretation. Apparently, the choice of the preposition triggers one or the other interpretation. In other words, this choice is dependent on the interpretation of the nominal. Compare also the minimal pair in (10):

An internal and an external committee have been judging exam papers:

- (10) a De beoordeling van de externe kommissie was veel positiever dan die van de interne kommissie
  - the judgement of the external committee was much more-positive than that of the internal committee
  - b De beoordeling *door* de externe kommissie was veel positiever dan die *door* de interne kommissie

The most natural interpretation for (10) is an object reading: *beoordeling* denotes the report the committe has written on its work. The most natural interpretation for (10b) on the other hand is the event reading: *beoordeling* denotes the event of this committee's  $iudging^7$ . The generalization emerging

from (9)-(10) is that an agentive by-phrase can only occur with event nominals, not with object nominals. Note furthermore that an agent cán occur in an *of*-phrase: (11). However, this is only possible with countable event nominals: (12). Compare (11) and (12) for relative grammaticality judgements<sup>8</sup>:

- (11) a Ik heb alle uitvoeringen van Jouri Egorov van het Schumann programma bijgewoond
  - I have all performances of J.E. of the S. program attended
  - b Ik was getuige van de plunderingen van de soldaten van huizen I was witness of the pillagings of the soldiers of residences
    c De beoordeling van de externe kommissie van de examenwerken duurde maar een half uur the judging of the external committee of the exam papers lasted only a half hour
- (12) a <sup>??</sup> De vernietiging *van* de geallieerden van Iraakse steden ... the destruction of the allied forces of Iraqi cities ...
  - b ?? De verdediging van de elite troepen van Iraakse steden ... the defence of the elite troups of Iraqi cities ...
  - c <sup>??</sup> De verwaarlozing *van* dat stel van hun eerste kind ... the neglect of that couple of their first child ...

In this section some facts and theories about nominalizations have been discussed. It has been noted that recent theories (Zubizarreta 1987 and Grimshaw 1990), although they take a-structure into account, fail to explain the optionality of the arguments of a nominal (without adding stipulations to their general framework). Furthermore, it has been shown that the distinction between event- vs. object-denoting nominals is not fine-grained enough. Optionality of the internal argument, countability of the nominal, and selection of the preposition introducing the agentive argument suggest that the set of event nominals is not a coherent set, and that a subdivision should be made. Table (13) summarizes the facts discussed above; (14) gives some examples of each type, English and Dutch mixed:

(13)	denotation	countable	obl.int.arg.	door-PP	van-PP	
1 process	event	-	+	+	-	
2 process	event	+	-	+	+	
3 result	object	+	-	-	+	
4 result	object	-	-	n.a.	n.a.	

(14)

- 1 destruction, recognition, realization, memorization; terugtrekking, vernietiging, verdediging, verwaarlozing;
- 2 assassination, execution, capture, condemnation, coronation; marteling, ontruiming, bespreking, selektie, uitvoering, beoordeling;
- 3 description, translation, interpretation, proof, proposal,
- accusation; selektie, beoordeling, uitvoering;
- 4 love, hatred, fear, knowledge.

(English examples from Zubizarreta 1987:80; Dutch examples from above)

Zubizarreta (1987:80), noting some of these and other facts, suggests that the different types of derived nominals could be placed on a spectrum. Type 1 nominals are on one end of the spectrum; type 4 ones on the other. However, she does not give a further analysis or explanation of what this spectrum would constitute. 3. The analysis of nominalization: adding a delimiting aspect to e-structure

The analysis of deverbal nominalization I will propose here is an attempt to explain the properties of event and object nominals, as discussed above, within a framework of a- and e-structures, as laid out in section 1. The basic line of reasoning is very simple. The different argument-taking properties of verbs vs. nouns, of event vs. object denoting nominals, and of the two classes within the set of event nominals, all suggest that the operation of nominalizing a verb has an effect on a-structure. Since I am assuming that a-structure is derived from e-structure, I will have to come up with an analysis of nominalization as an operation on e-structure. A proper change of e-structure will trigger a change of a-structure. Furthermore, nominalization cannot be one single operation, since it gives rise to at least four types of deverbal nominals. To capture this fact in my framework, I will have to come up with a formalization of nominalization, so that a series of related effects on e-structure can be instantiated, instead of just one single effect.

Before I spell out my proposal in detail, I want to draw attention to the interpretation of the event nominal as opposed to the verb it is derived from. There seems to be a difference in the aspectual properties of the verb vs. those of the nominal. Whereas the event type of the verb is unmarked for delimitedness, the deverbal nominal denotes a similar event, bút this one seems to be delimited (=perfective). Compare the minimal pair:

- (15) a Ik was bezig mijn artikel in het Engels te vertalen, toen ik werd onderbroken door de telefoon I was busy my article into the english to translate, when I was interrupted by the phone
  - b Ik was bezig met de vertaling van mijn artikel in het Engels, toen ik werd onderbroken door de telefoon I was busy with the translation of my article into the english,

In (15a) it is unclear whether the process of translating was ever finished after the interruption: it may, but it may just as well not have been. In (15b) the implication, or at least the suggestion, is that the process has indeed been carried to an end and produced a result: a *translation*. For a different instance of delimitedness, compare another minimal pair:

- (16) a Ik maak het vernederen van mijn kamergenoot dagelijks mee I make the humiliate of my roommate daily with b Ik meek de vernedering van mijn kamergenoet degelijke mee
  - b Ik maak de vernedering van mijn kamergenoot dagelijks mee I make the humiliation of my roommate daily with

In (16a) there can be several distinct events of humiliations during a day, by each of my colleagues on their turn. It can imply iterativity. In (16b) the humiliation is one delimited event; it cannot occur iteratively, however.

The analysis I want to propose for expressing this delimitedness or perfectivity is formulated in (17a). An example of nominalizing an accomplishment predicate is shown in  $(17b)^9$ :

(17) a Nominalization highlights the *state* node of the original e-structure, thereby turning it into an event nominal.

b	TRAN	ISITION	=>	tra	nsition
	/ \	<b>\</b>		1	\
	process	state		process	STATE

This change of the e-structure suffices to explain the properties of event nominals (type 1 & 2), as opposed to those of object nominals (type 3 & 4), if we assume that object nominals do not have an e-structure at all. Following the line of thought argued for in section 1, this operation on e-structure must have implications for a-structure. Recall that a state needs only a *theme* to be properly licensed. This explains the optional character of the external argument of type 1 & 2 right away: the internal argument alone, a theme, which has ended up in a resulting state, suffices to license the e-structure.

Furthermore, the event nominal in a formalization like (17) has 'access' to the original e-structure: it has not disappeared all together yet. This explains why types 1 & 2 may take a door-PP. That is, I assume that selection restrictions on PP-modification can be viewed as conditions on the 'matching' of e-structures. If door 'by' has a process e-structure, it must match with a verb that has a process e-structure as well (N.B. van Hout 1990 argues that prepositions too have a- and e-structure). Therefore, a door-PP can only modify a predicate that also has a process (part in its) e-structure. The process-part in (17) is sufficiently accessible to license modification by a door-PP. Since object nominals do not have e-structure, there is no way at all to license door-PP modification for types 3 & 4: there is nothing it can be matched with. Note that actually this point is not relevant for type 4 nominals at all. They are derived from stative verbs, so the verb itself does not have a process e-structure in the first place.

But the nominalization operation (17) alone will not do; a more fine-grained analysis is needed to distinguish the four types. Therefore, I propose that the delimitation effected by nominalization, is a gradual operation: the highlighting of the state node is only a first step (type 1). The transformation of the denotation from an event into an object is a second step (type 2), which has to occur at one point anyway. And the deletion of the e-structure all together is the final step (types 3 & 4).

A type 1 nominal results when only the first step is taken, with the effects noted just above. Type 2 nominals undergo the second step as well. Thus, they denote an object, in a sense that the state is considered as a (countable) atomic entity. This accounts for their double character. On the one hand, they have the same characteristics as type 1 nominals, because of their e-structure. On the other hand, they have some characteristics of an object. It is as if they balance continuously between both sets of properties.

As an object, a type 3 or 4, but, also a type 2 nominal does not take any arguments obligatorily, not even the internal one, because objects do not have a-structure. Furthermore, as an object (again, viewing the state as an atom), it is countable. Thirdly, its modifiers, that occur in van-PPs, must be licensed by the matching mechanism. If, following standard assumptions, van is ambiguous between a possessive reading and a neutral (or empty) reading, modification by a van-PP as a possessive is licensed if the thing modified 'can be possessed'. That is, an event cannot, but an object cán be possessed. Zubizarreta formalizes this intuition by assuming that an objectdenoting nominal has a Poss  $\theta$ -role, comparable to the event  $\theta$ -role of verbs (cf. Higginbotham 1985), that licenses modification by a possessive PP or prenominal NP. Her semantics behind this Poss-role is that it designates a possessor or a creator. Casting this in my terms, I would say that the possessive  $\theta$ -role of the preposition van matches all right with the Poss-role of the nominal. So the NP in a possessive van-PP can identify the possessor or the creator. Note that in this way there is no need for some relation with the process part of the former e-structure to license an agent-reading for this NP. With respect to modification by the other van, if neutral van does not have to obey selection restrictions (simply because its neutral), modification by a neutral van-PP asks can never be filtered out by the matching

principle. In conclusion, the view on modification as a matching mechanism explains the distribution of the different PPs with the different types of nominals.

Finally, to give the complete picture, the difference between type 2 nominals on the one hand, and type 3 & 4 nominals on the other, is that the latter two have also undergone the final step of nominalization: the deletion of e-structure. As explained above, that is why they cannot be modified by a *door*-PP.

By now, the answer to what the 'meaning' of the spectrum in (13) is, must have become clear. Nominalization is a gradual, delimiting operation. The nominals are on a scale of increasing delimitedness, type 1 is least, types 3 & 4 are most delimited. Delimitation proceeds in three steps. The different types of nominals that result, can be viewed as more and more 'nouny'. Starting the delimitation process first gives the event a sense of completion. Final delimitation deletes the last part of the 'event-origin' of the nominal (its e-structure). This then gives the most 'nouny' nominal.

#### 4 Conclusion

The view on a- and e-structure and their relation (a-structure is derived from e-structure), as developed in this paper, has some interesting consequences for nominalization. One of the advantages is the natural optionality of the external argument in nominals. This follows in the general framework without further stipulations or operations (such as the suppression of the external argument or the invention of argument-adjuncts). Another advantage is that the changed conception of arguments and adjuncts does not bring up the issue which role PP-satellites play in nominals (argument or adjunct?). This issue is not relevant any more. Finally, the view on nominalization proposed above gives an analysis of the derivations of four types of nominals, each with their individual properties.

## Notes

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- 1. I will use the term a-structure in this paper, taking it as a general term that captures both the old notion  $\theta$ -grid as well as the new notion a-structure (or whatever other terms that are around), which, in my opinion, are similar in their basic sense. By using this term I do not want to confine myself to any of the actual theories. Rather, I intend to discuss a-structure (and, for that matter, e-structure) in more or less pre-theoretical terms.
- 2. Jackendoff uses operators like BECOME and BE in his lcs's. Zubizarreta uses operators like CAUSE and STATE, which are added to the S-R by lexical operations. This type of operators involves aspectual concepts.
- 3. This rule is too general, because it would also trigger an agent with ergative processes. Probably, the aspectual class 'process' is too broad.
- 4. For example, a process may be expressed by an intransitive or a transitive verb. The generalization, as formulated in the text, only triggers one (agent) argument; in the case of a transitive verb the second argument is not triggered on the basis of e-structure alone. Perhaps more factors involve the triggering of the complete set of participants, or the e-structures of transitive and intransitive processes are different in

some relevant respect. Or perhaps, our null hypothesis will appear to be too strong.

- 5. To make my point here, I have 'translated' the exposition of her theory in more familiar terms. I do not think the simplifications that may result, will destroy its spirit.
- 6. The division between countable and non-countable event nominals is not very clear, however. A relevant context may permit certain 'singular-only' nominals to appear as a plural:
  - (i) a Tijdens de laatste vernietigingen van Rome ...
    - during the last destructions of Rome ...
    - b \* Tijdens de laatste vernietigingen van het bos ...
    - during the last destructions of the wood
  - (ii) De vertalingen van haar debuut in zes verschillende talen ... the translations of her debut into 6 different languages ...
- 7. (10b) does have a grammatical reading, with an object interpretation of *beoordeling*. The *by*-phrase is then interpreted as authorship *by*, not as agentive *by*.
- 8. Zubizarreta (p.c.) notes that there is a parallel for (11) vs. (12) in Romance, e.g. *descripción* vs. *destrucción*.
- 9. The resulting e-structure is more or less similar to the one Grimshaw & Vikner (1989) propose to express the perfective aspect of a verb.

References

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