

What lies at the bottom of morphological oceans?

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Introduction

This talk deals with a subset of complex words called nominalizations.

A nominalization (NZN) is a noun

- that is morphologically constructed from a verbal predicate,
- that allows one to refer in discourse to what this predicate denotes,
- that shares typical distributional and semantic properties of nouns in the language in question.

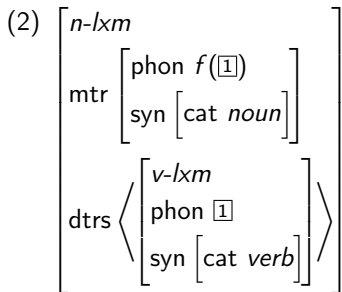
According to this definition, *remplacement* in (1) must be considered a nominalization.

- (1) *Sibelga **remplace** généralement les anciens compteurs sans vous avertir (...)* Le **remplacement** d'un compteur est rapide. (Web)
 'Sibelga generally replaces old meters without informing you (...)' The replacement of a meter is quick.'

Introduction

Expected properties of nominalizations

- Their aspectual properties are generally inherited from their base-verb (bse-V) (Fábregas & Marín, 2012), but not always (Haas *et al.*, 2008, Huyghe, 2011)
- Their meaning is constructed on the basis of meaning of their bse-V
- Nominalizations share structure (2) with other deverbal nouns such as agent or instrument nouns e.g. fra *chass-eur* 'hunter', *batt-oir* 'beetle'



Introduction

Properties of nominalizations : **semantic repartition**

The semantic representation of a V (or predicate more generally) includes variables of object x, y, z, \dots and a variable of event e : **$V(x_i, \dots, e)$**

- By default, a NZN denoting a situation is formed by selecting the e variable and its aspectual type reflects the aspectual type of its bse-V (with the above mentioned caveat)
 - *fra remplace-ment* = $\lambda e. \mathbf{replace}(e) \wedge \mathbf{AGT}(e, x) \wedge \mathbf{PAT}(e, y)$ (= accomplishment)
 - *disappoint-ment* = $\lambda e. \mathbf{disappointed}(e) \wedge \mathbf{EXP}(e, x)$ (= state)
- Deverbal nouns on the other hand, are formed selecting an x_i variable :
 - *driv-er* = $\lambda x. \mathbf{drive}(e) \wedge \mathbf{AGT}(e, x)$ (= agent)
 - *purchase* = $\lambda y. \mathbf{purchase}(e) \wedge \mathbf{PAT}(e, y)$ (= patient)
 - *dépot-oir* 'dump' = $\lambda z. \mathbf{deposit}(e) \wedge \mathbf{PAT}(e, y) \wedge \mathbf{garbage}(y) \wedge \mathbf{LOC}(y, \mathbf{INESS}(z))$ (= location)

Introduction

- As a rule, and leaving aside creation verbs, NZNs select the event variable and therefore do not denote an object (object proper or animate) but a situation / eventuality
- Whenever they do, it is because a mechanism of metonymy took place and changed the referent's type (Apresjan, 1974) :
 - *administration* :event \rightsquigarrow human agent
 - *fra passage* 'passage' :event \rightsquigarrow location
- Creation and representation verbs are special to the extent that their culmination implies the existence of an object (product)(more on this below).

Introduction

Properties of nominalizations : **specificity of exponence**

- Nominalizations have dedicated exponents, even though less specific exponents may also be used to form nominalizations
 - Exponents reliably used for eventive NZNs in French : *-age*, *-ment*, *-ion*
 - Exponents with other uses : *-ure*, *-is*
- These exponents are distinct from those appearing in other deverbal nouns, a property observed in other languages as well
 - Agent nouns fra *-eur*, eng *-er*
 - Instrument nouns fra *-oir*
 - Patient nouns eng *-ee* (Barker, 1998)
- *N-age* never denotes an agent ; *N-eur*, *N-oir* never denote an event

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Properties of nominalizations : **cognitive saliency**

- In languages where they exist, deverbal nominals and nominalizations, above all denote entities whose role is cognitively salient, such as agent, instrument, manner, location (Mel'čuk, 1994), and occasionally others
- Derived deverbal nouns with these properties are also the more widespread from a typological point of view (Creissels, 2006, Croft, 2012).

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- The nominalizations investigated here have three distinctive properties :
 - The base-verb they are correlated with heads a stative construction
 - The variable distinguished in their semantic representation is the first argument of the base-V
 - They usually denote an object or an entity which is not involved as an acting entity in a force dynamic scenario (Talmy, 2000, Croft, 2012). Semantically, this entity is such that its very existence allows the eventuality (event or state) described by the base verb (or predicate) to occur.
- Hence paraphrase (3b) for the NZN in example (3a) :

- (3) a. *Irma n'a pas eu l'autorisation de venir.*
 'Irma did not get the authorization to come'
- b. *autorisation* = 'ce qui autorise Y (= Irma) (à venir)'
 'what authorizes Y (= Irma)(to come)'

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- The NZNs in question have been observed under four varieties, which correspond to distinct properties of the base-verb
 - Stative spatial verbs e.g. *entour-age* 'surroundings' ← *entourer* 'to surround'
 - Eventive verbs implying a causal relation e.g. *éclair-age* 'lighting' ← *éclairer* 'to light up'
 - Verbs of depiction and reproduction e.g. *reproduct-ion* 'reproduction' ← *reproduire* 'to reproduct'
 - Speech act verbs e.g. *autorisat-ion* 'authorization' ← *autoriser* 'to authorize'
- But what justifies studying these various NZNs as an independent topic?
- The fact that they raise similar issues, both empirical and theoretical

Introduction

Semantic repartition

- These NZNs violate the semantic repartition since they usually denote an object instead of an event, contrarily to what their exponent indicates.
- For the subpart of them which is based on V of change, this situation could result from a metonymic process of the type 'event \rightsquigarrow <role>'
 - fra *chauff-age* 'heating' : event \rightsquigarrow means
 - rus *oxrana* 'guarding' : event \rightsquigarrow agent (Mel'čuk, 1994, p. 395)
- However, this possibility is not available for many of the NZNs in question. In the following French examples, no source event exists.
 - ? \rightsquigarrow *renseigne-ment* 'piece of advice'
 - ? \rightsquigarrow *entour-age* 'sourroundings'
- To that extent they constitute a genuine violation of the semantic repartition condition

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Semantic role

- What semantic must we associate with these NZNs?
 $autorisation = \lambda x. \mathbf{authorize}(e) \wedge \mathbf{PAT}(e, y) \wedge ?(e, x)$
- These NZNs violate the semantic repartition since they usually denote an object instead of an event, as their exponent indicates.
 - For the subpart of the NZNs based on an dynamic V, this can result from a metonymic process e.g. fra *chauff-age* 'heating' : event \rightsquigarrow means, rus *pereprava* 'river crossing' : event \rightsquigarrow location (Mel'čuk, 1994).
 - But for the majority of them, this possibility is not available and to that extent they constitute a genuine violation of the semantic repartition
- The individuals denoted by these NZNs do not constitute a category which is cognitively salient

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