

# The discourse status of verbal gerunds

Presentation at the workshop  
“Word Formation and Discourse Structure”

Zi Huang

Universitat Pompeu Fabra

Leipzig, 5–6 May 2022



**Universitat  
Pompeu Fabra**  
*Barcelona*

# Introduction

- |     |                                    |                        |
|-----|------------------------------------|------------------------|
| (1) | that Clay won the game             | <i>that</i> -clause    |
| (2) | <b>Clay's/his winning the game</b> | <b>POSS-<i>ing</i></b> |
| (3) | <b>Clay/him winning the game</b>   | <b>ACC-<i>ing</i></b>  |
| (4) | Clay's/his/the winning of the game | Nominal gerund         |
| (5) | Clay's victory                     | Event noun             |

- ▶ **Question:** How do verbal gerunds (POSS-*ing* and ACC-*ing*) differ in their semantics?
- ▶ **Hypothesis:** POSS-*ing* is a possessive structure, and ACC-*ing* is not. This affects the discourse contexts they appear in.
- ▶ **Methodology:** Annotation of contexts extracted from the BNC (2007).

## From the syntactic perspective

- ▶ Verbal gerunds are constructed by syntactic means. Subject of POSS-*ing* is assigned genitive case.
  - ▶ **Abney (1987)**: *-ing* converts a verbal category to a nominal category. VP to NP for POSS-*ing*, IP to DP in ACC-*ing*. Both end up as DPs.
  - ▶ **Alexiadou, Iordăchioaia & Schäfer (2011)**: Both have the structure [DP [AspectP [VoiceP [vP [Root]]]]].
  - ▶ **Iordăchioaia (2020)**: POSS-*ing* has a DP layer, ACC-*ing* lacks it.
- (6) There(\*'s) being a new winner makes everyone excited.  
 (7) It(\*'s) raining the whole day will ruin our trip.
- ▶ What is the implication of having a DP layer?

## From the semantic perspective

- ▶ **Portner (1992)**: POSS-*ing* is definite and therefore carries a familiarity presupposition. ACC-*ing* is indefinite.
- (8) George didn't imagine Clay winning the game. → Clay had won.
- (9) George didn't imagine Clay's winning the game. → Clay had won, or "Clay's winning the game" is under discussion.
- ▶ **Grimm & McNally (2015)**: Possessive Existential Import applies to POSS-*ing*: use of the possessive structure makes sure that the possessee exists.
    - ▶ POSS-*ing* facilitates the implication that there is an event token.
    - ▶ POSS-*ing* has reference, ACC-*ing* does not.
  - ▶ The subject of POSS-*ing* lacks freedom of interpretation and should not be treated as a possessor. (Peters & Westerståhl 2013)

## Literature on possessives

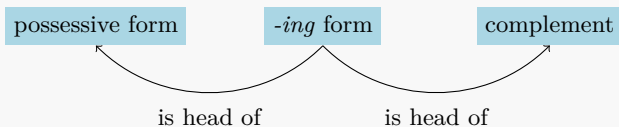
- ▶ On the one hand, possessive structures are definite and are predicted to be given; on the other hand, they are able to introduce new referents through the possessor.
  - ▶ In a corpus study about the discourse status of possessives, Willemse, Davidse & Heyvaert (2009) find that the givenness of possessives forms a continuum ranging from given to brand new. 28% of their sample involve brand new possessee referents and most cases in this category are event nominalizations.
- (10) [about the Turnable Emergency Non-capsizable Triangular System]  
It can survive punctures in two of its surfaces and still remain afloat. Hunter has produced two prototypes and is in talks with a lifeboat manufacturer that could lead to [the system's launch](#) in the spring of next year.

## Why annotate the context?

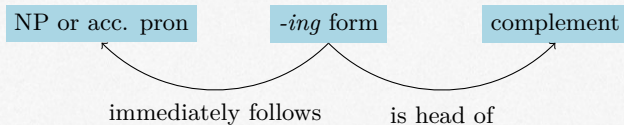
- ▶ The discourse status of *POSS-ing* and *ACC-ing* was not covered by Willemse et al. (2009).
- ▶ Test hypotheses from the literature:
  - ▶ Grimm & McNally: *POSS-ing* tends to imply an event token.
  - ▶ Portner: *POSS-ing* is definite and *ACC-ing* is indefinite. *POSS-ing* tends to be familiar in the context, while *ACC-ing* introduces new referents.
- ▶ A glimpse at the lexical components and the discourse structure.

## Data collection

- ▶ From a dependency-parsed copy of the BNC (2007), I extracted all the POSS-*ing* (818 in total) and the first 200 ACC-*ing* with a preceding context of up to 250 words.
- ▶ POSS-*ing*:



- ▶ ACC-*ing*:



# Data collection

The following cases are excluded:

- ▶ *her* as subject
- ▶ a plural ending in *s* as subject

In the collection of ACC-*ing*, the following are also excluded:

- ▶ absolutes
- ▶ NP modifiers
- ▶ complements of causative structures, such as *have*, *set* and *keep*, e.g. *The memoir sets us asking*
- ▶ sentence fragments, e.g. *and Harriet opening her mouth but then both of them giggling wildly.*

Problematic cases (more on them later):

- ▶ complements of perception verbs
- ▶ complements of sentential modifier *with*-PP, or augmented absolutes



# Annotation

- ▶ A sample of 205 POSS-*ing* through systematic sampling, representing the distribution of subjects of the population & a sample of 200 ACC-*ing* from the first 3% of the corpus.
- ▶ I am interested in:
  - ▶ whether the verbal gerund is used to talk about an event type or token
  - ▶ whether the event described by the verbal gerund is given, inferrable, or new in the discourse
- ▶ The annotation of discourse status for expressions with rich descriptive content is challenging.

## Annotation: type or token

Does the gerund refer to (in an intuitive sense) an event type or an event token?

- ▶ **Token:** a single occurrence of an event.
- ▶ **Type:** does not refer to a single occurrence.
- ▶ **Generic:** quantification etc., hard to decide what a single instance is.
- ▶ **Stative:** hard to decide what a single instance is.

## Annotation: true in context

Is there at least one occurrence of the event described by the gerund in the context, so that the propositional content of the gerund can be asserted?

- ▶ Yes.
- ▶ **Understood as yes:** Not in the context, but due to factors like the predicate selecting the gerund, it is understood that it has happened.
- ▶ No.
- ▶ Locally.

# Annotation: givenness

What is the discourse status of the gerund?

- ▶ Given as type/token in form of NP.
- ▶ Given as type/token in the text.
- ▶ **Implied:** It follows from the context that the relevant event either has happened or is under discussion.
- ▶ **Unused-known:** The event is generally known, or is assumed by the author that is known by the reader (e.g. plot of a book under discussion).
- ▶ **Hypernym:** A general event is mentioned, of which the event described by the gerund is an instance.
- ▶ **Unused-unknown:** New.

The traditional notion of **bridging** does not apply here because the subject is given in almost all the cases.

## Annotation example

[...] They arrived there with about twenty minutes to go before lunch, which was just time for general introductions and for Leith to be shown her room, wash her hands and rejoin Naylor, Cicely and Guthrie Hepwood, and Travis downstairs. And, contrary to her belief, she found she was enjoying the atmosphere at Parkwood. “Naylor tells me **you’re one of the best executives in your particular line,**” **Cicely Hepwood**, a neat and gentle woman, **remarked** at one point during the meal.

Leith shot a glance at Naylor, seated next to her, who wasn’t even a tinge pink around the ears at **his aunt’s revealing what, since there were others in her particular line who were far more senior, must surely be a lie.**

Type-or-token: Token

True-in-context: Yes

Givenness: token-text

## Bridging through subject

- ▶ The traditional notion of bridging requires the NP to be linked to some given expressions in the context through some relations.
- ▶ In what form is the subject?

	Pronoun	Proper name	Definite	Other	Total
POSS- <i>ing</i>	167	29	6	3	205
ACC- <i>ing</i>	40	81	36	43	200

- ▶ What is the discourse status of the subject?  
POSS-*ing* 196/205 given, ACC-*ing* 104/200 given.
- ▶ The fact that almost all the POSS-*ing* subjects are given supports the hypothesis that POSS-*ing* is a possessive structure. It relies on its possessor as an anchor to introduce new information.

# Presupposed content, but informative



## A glimpse at the discourse structure

- ▶ With a distribution similar to that of NPs, verbal gerunds usually cannot be segmented for the annotation of rhetorical relations (Reese et al. 2007). Adverbial PPs are segmented if they contain a nominalized event.
- ▶ With *the tension reaching boiling point*, *Background*  
it was finally announced that the French officials [...]
- ▶ Solo shows and mixed exhibitions are more common,  
with *the group show playing a less important role in the market*.  
*Elaboration-Contrast*
- ▶ She had been very ill and suddenly taken to hospital  
without *Darren's knowing why*. *Elaboration*  
\*with *Darren's knowing why*. ?
- ▶ *With* selects ACC-*ing* but not POSS-*ing* (Huang 2021) because  
POSS-*ing* cannot add new information? Or because POSS-*ing* has  
reference?



## Discourse referents?

- ▶ In Asher (1993), both POSS-*ing* and ACC-*ing* introduce discourse referents that are either facts or possibilities, represented by a subDRS. Both can be referred back to using words like *this*.
- ▶ Fonteyn, De Smet & Heyvaert (2015): “Referent manipulability”, the ability of the gerunds to be referred back to, decreases in verbal gerunds from Early Modern English to Late Modern English. There is no comparison between verbal gerunds.
- ▶ My dataset does not contain the context following the gerunds. How could I approach this problem?

# Conclusion



## Selected references

- ▶ Grimm, S., & McNally, L. (2015). The *-ing* dynasty: Rebuilding the semantics of nominalizations. In S. D'Antonio, M. Moroney, & C. R. Little (Eds.), *Proceedings of the 25th Semantics and Linguistic Theory Conference (SALT)* (Vol. 25, pp. 82–102). Ithaca, NY: LSA and CLC Publications.
- ▶ Portner, P. (1992). *Situation Theory and the semantics of propositional expressions* (Unpublished doctoral dissertation). University of Massachusetts at Amherst, Amherst, MA.
- ▶ Willemse, P., Davidse, K., & Heyvaert, L. (2009). English possessives as reference-point constructions and their function in the discourse. In W. B. McGregor (Ed.), *The expression of possession*. Berlin: De Gruyter Mouton.

# Thanks for your attention!

Thanks to the organizers of the WFDS workshop for helping to make it possible for me to come to Leipzig.

This study is supported by an FI-AGAUR grant (2019FI-B00397) and the grant FFI2016-76045-P (AEI/FEDER, EU).

Feel free to contact me at [zi.huang@upf.edu](mailto:zi.huang@upf.edu) if you are interested in hearing more about my work.