

Identifying the role of expletive negation in Spanish *hasta*-clauses

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What is expletive negation (EN)?

- (1) *Olga no se irá [hasta que Daniela cante el himno nacional]*
Olga NEG CL will.go until that Daniela sings.SUBJ the anthem national
'Olga won't leave until Daniela sings the national anthem.'



- (2) *Olga no se irá [hasta que Daniela **no** cante el himno nacional]*
Olga NEG CL will.go until that Daniela **NEG** sings.SUBJ the anthem national
'Olga won't leave until Daniela sings the national anthem.'
(Literally: 'Olga won't leave until Daniela doesn't sing the national anthem.')

What is expletive negation (EN)?

- The occurrence of EN in Spanish punctual *hasta*-clauses 'until' has been accounted for in terms of **optional emphasis** (Bosque 1980) or **meaning absorption** (Espinal 1992).
- That EN bears no negative meaning is, however, an **impressionistic claim**.
- No experimental studies have been designed to differentiate the meaning of EN sentences and EN-less sentences, or to determine the semantics of EN in general.

Goal of this presentation

- My goal is to identify the semantic contribution of EN in temporal clauses with *hasta* 'until'.
- My claim is that **EN does contribute to the sentence meaning**. As argued I argued in previous work (Cépeda 2017, forthcoming), the role of EN becomes visible when analyzing the aspectuality of the eventualities in the *hasta*-clause.
- The results of an acceptability task administered to Spanish native speakers confirm the active semantics of EN.

Roadmap

- Proposal to interpret the negative marker in Spanish *hasta*-clauses from a non-expletive perspective
- Report on an experimental study on the occurrence of EN in Spanish *hasta*-clauses
- Discussion on the role of EN and its implications for the theory of negation

Interpreting *hasta*-clauses with accomplishments

- (1) *Olga no se irá [hasta que Daniela cante el himno nacional]*
Olga NEG CL will.go until that Daniela sings.SUBJ the anthem national
'Olga won't leave until Daniela sings the national anthem.'

Sentence (1) contains an accomplishment in the *hasta*-clause and is compatible with:

- An ongoing reading: Olga will leave while Daniela is singing the national anthem.
- A finished reading: Olga will leave once Daniela has finished (i.e. is no longer) singing the national anthem.

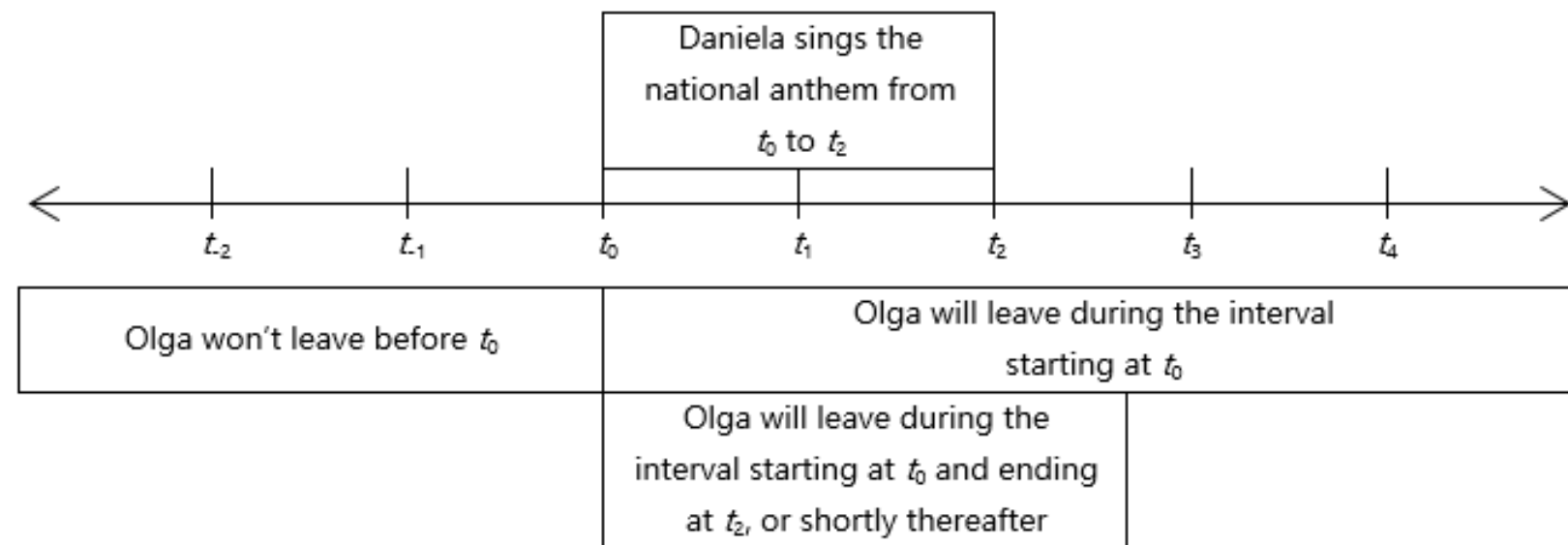
Interpreting *hasta*-clauses with accomplishments

- (2) *Olga no se irá [hasta que Daniela **no** cante el himno nacional]*
Olga NEG CL will.go until that Daniela **NEG** sings.SUBJ the anthem national
'Olga won't leave until Daniela sings the national anthem.'
(Literally: 'Olga won't leave until Daniela doesn't sing the national anthem.')

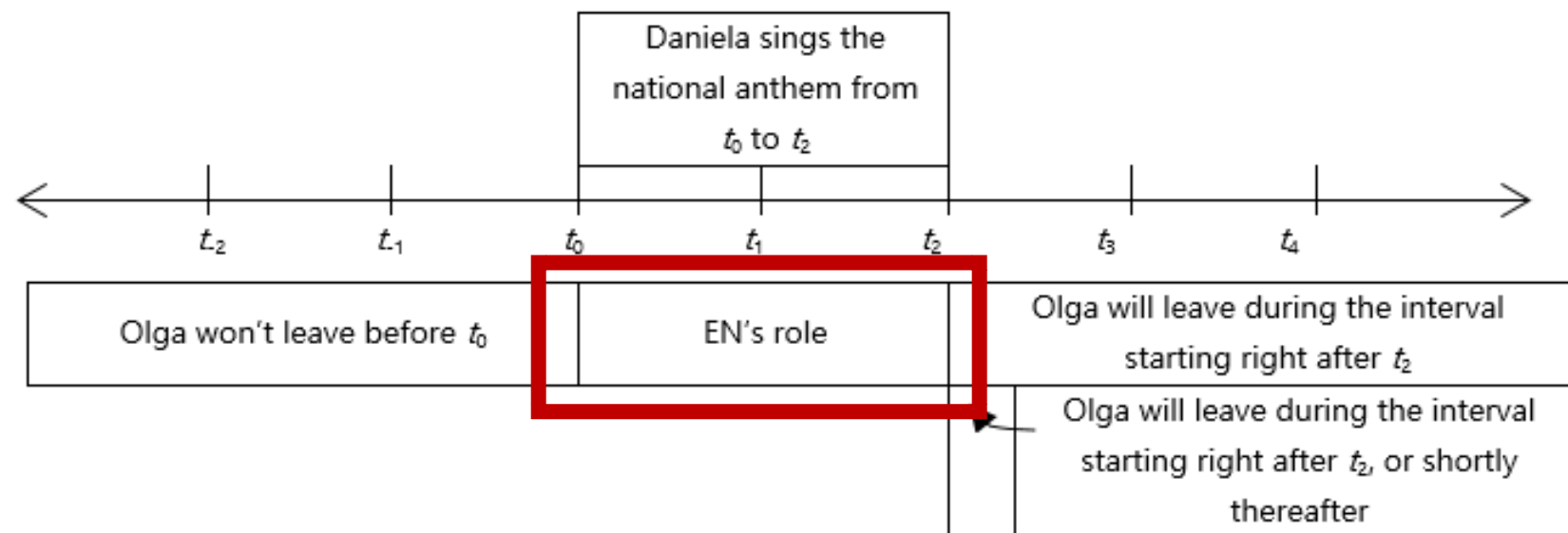
Sentence (2) contains an accomplishment and EN in the *hasta*-clause and is compatible with a finished reading **only**: Olga will leave once Daniela has finished (i.e. is no longer) singing the national anthem.

It is also compatible with a conditional reading (not present in (1)): Olga will make sure that Daniela has finished (i.e. is no longer) singing the national anthem for her to leave.

EN-less sentence



EN sentence



Interpreting *hasta*-clauses with achievements

- (3) *Olga no se irá [hasta que Daniela llegue a casa]*
Olga NEG CL will.go until that Daniela arrives.SUBJ to house
'Olga won't leave until Daniela arrives home.'

Sentence (3) contains an achievement in the *hasta*-clause. It is compatible with:

- An ongoing reading: Olga will leave when Daniela arrives home.
- A finished reading: Olga will leave once Daniela has arrived home.

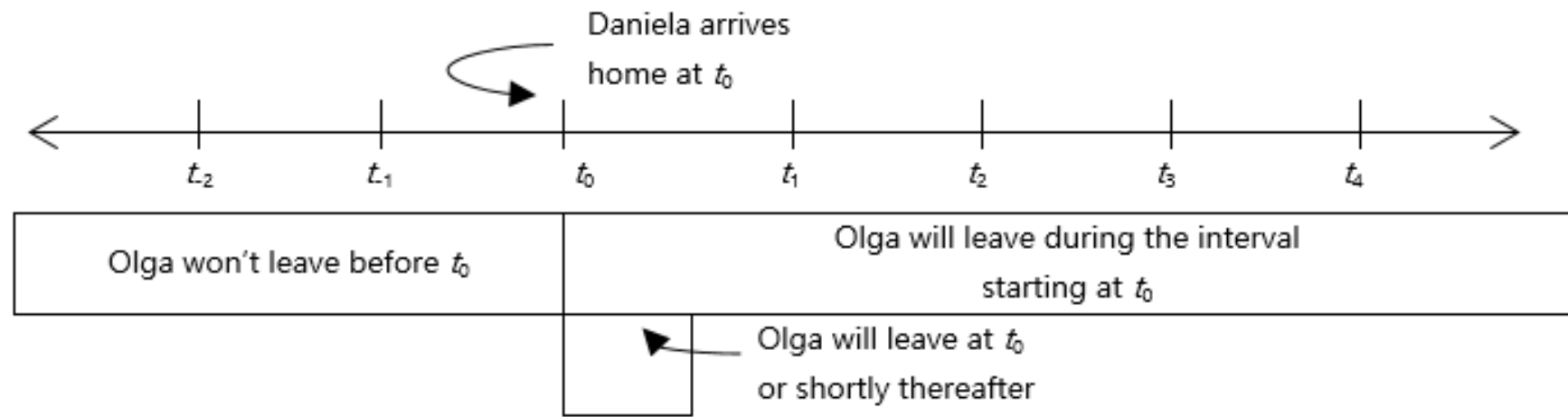
Interpreting *hasta*-clauses with achievements

- (4) *Olga no se irá [hasta que Daniela **no** llegue a casa]*
Olga NEG CL will.go until that Daniela **NEG** arrives.SUBJ to house
'Olga won't leave until Daniela arrives home.'
(Literally: 'Olga won't leave until Daniela doesn't arrive home.')

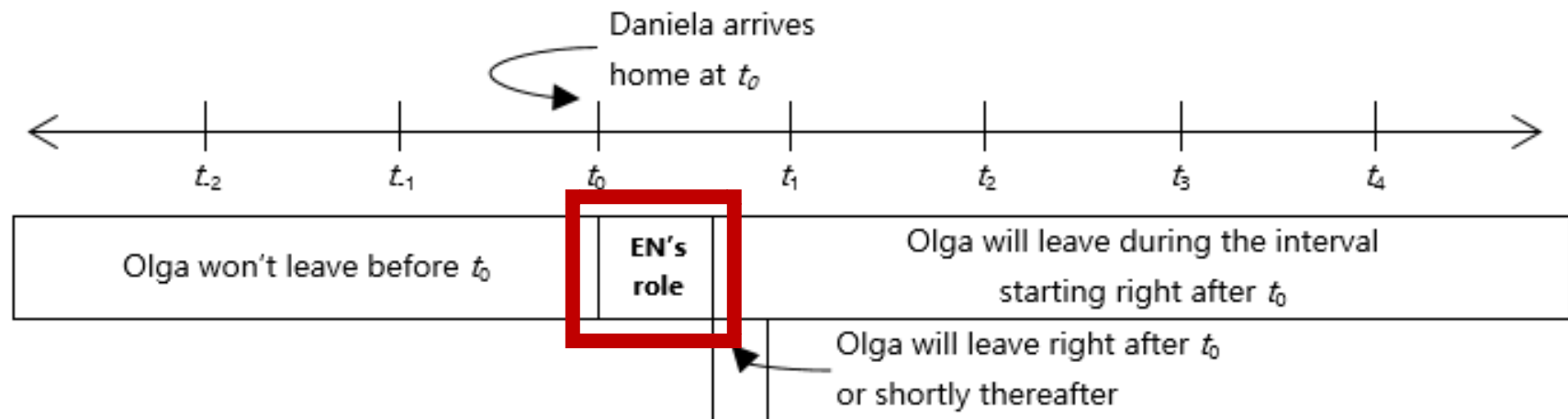
Sentence (4) contains an achievement and EN in the *hasta*-clause. As predicted for EN, it is compatible with a finished reading **only**: *Olga will leave once Daniela has arrived home.*

It is also compatible with a conditional reading (not present in (3)): *Olga will make sure that Daniela has (properly) arrived for her to leave.*

EN-less sentence



EN sentence



Experimental study: Hypotheses

I conducted an experimental study to test the predictions in Cépeda (2017, forthcoming). Based on the properties of *hasta*-clauses just reviewed, this study examines two main hypotheses:

- **Hypothesis 1.** For the ongoing reading, EN sentences are less likely to be acceptable than their EN-less counterparts.
- **Hypothesis 2.** For accomplishments, the different acceptability of EN and EN-less sentences in the ongoing reading is more likely to be higher than in the finished reading.

Methodology

- 24 statement-interpretation pairs:
 - Statements contained either an accomplishment or an achievement in the *hasta*-clause, and were either EN or EN-less.
 - Interpretations for accomplishments had either an ongoing or a finished reading.
- Achievements do not have duration, so they were only tested for the finished condition.

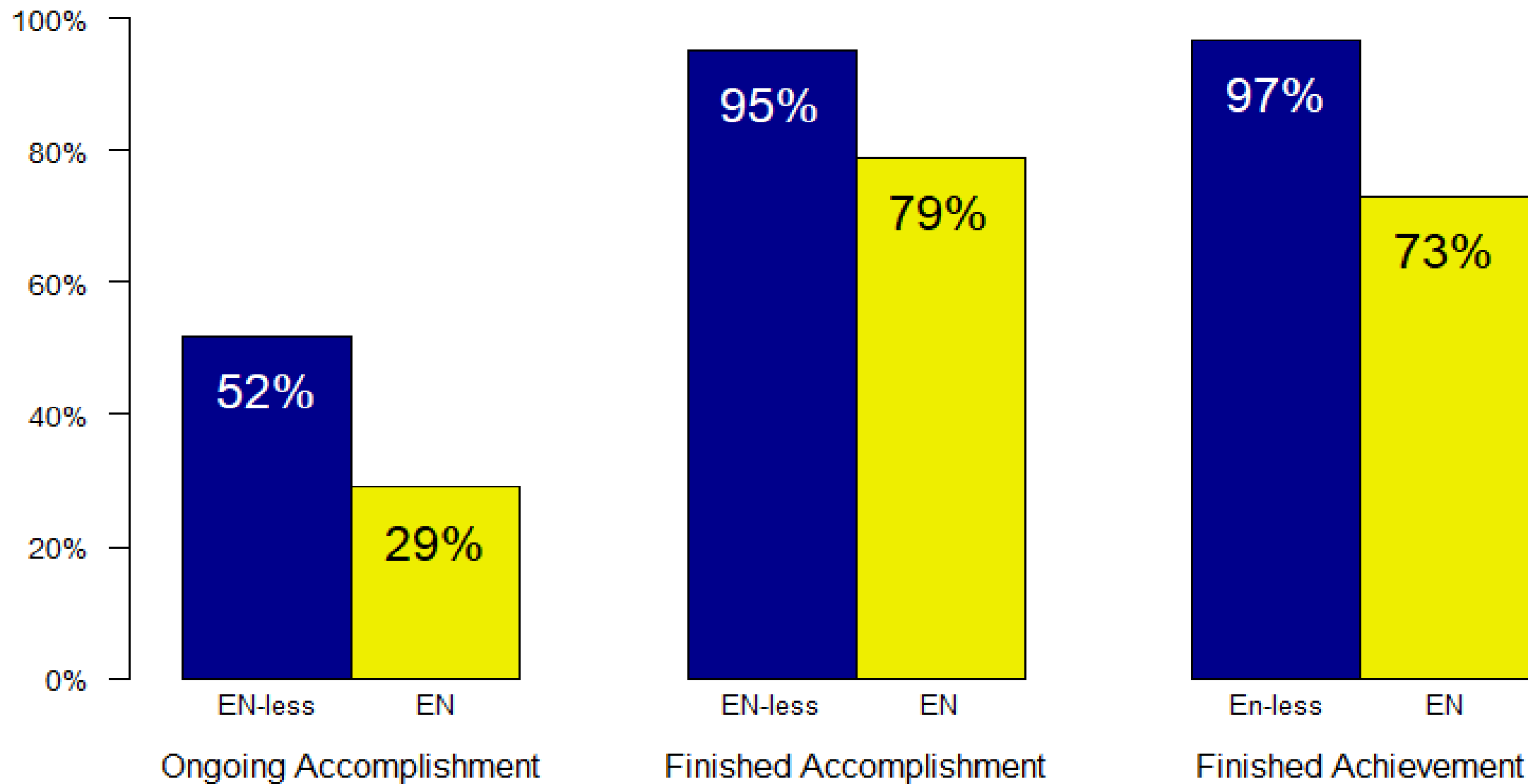
Methodology

■ Examples of the statement-interpretation pairs:

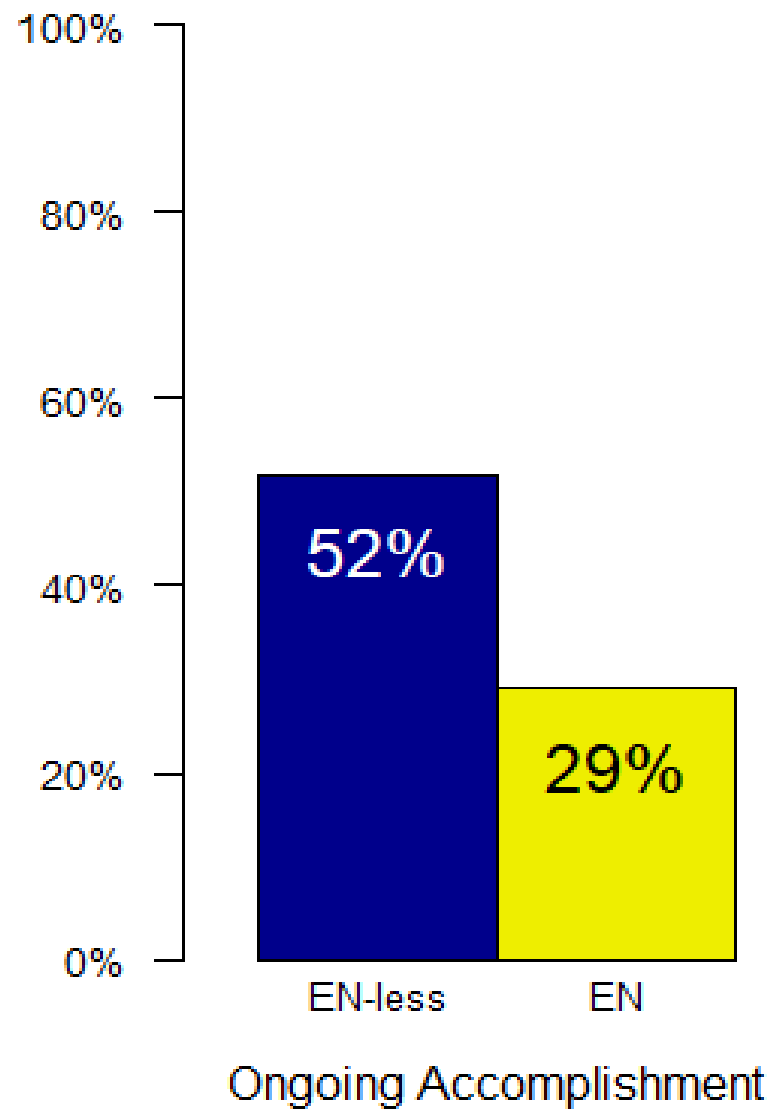
	Accomplishment	Achievement
Ongoing	Olga won't leave until Daniela (NEG) sings the national anthem. When Olga leaves, Daniela will be singing the national anthem.	
Finished	Olga won't leave until Daniela (NEG) sings the national anthem. When Olga leaves, Daniela will have already sung the national anthem.	Olga won't leave until Daniela (NEG) arrives home. When Olga leaves, Daniela will have already arrived home.

Methodology

- Using Experigen (Becker & Levine 2012), participants were asked to express their agreement or disagreement with the statement-interpretation pairs in an online task.
- I use data from 51 speakers who completed the survey, self-reported as native speakers of Spanish and being 18 y/o or older.
- I developed a generalized linear mixed model to report on the "Agree" answers.



Percentage of "Agree" responses



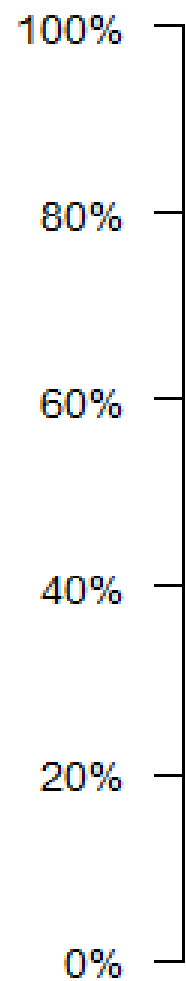
Hypothesis 1:

For the ongoing reading, EN sentences are less likely to be acceptable than their EN-less counterparts.

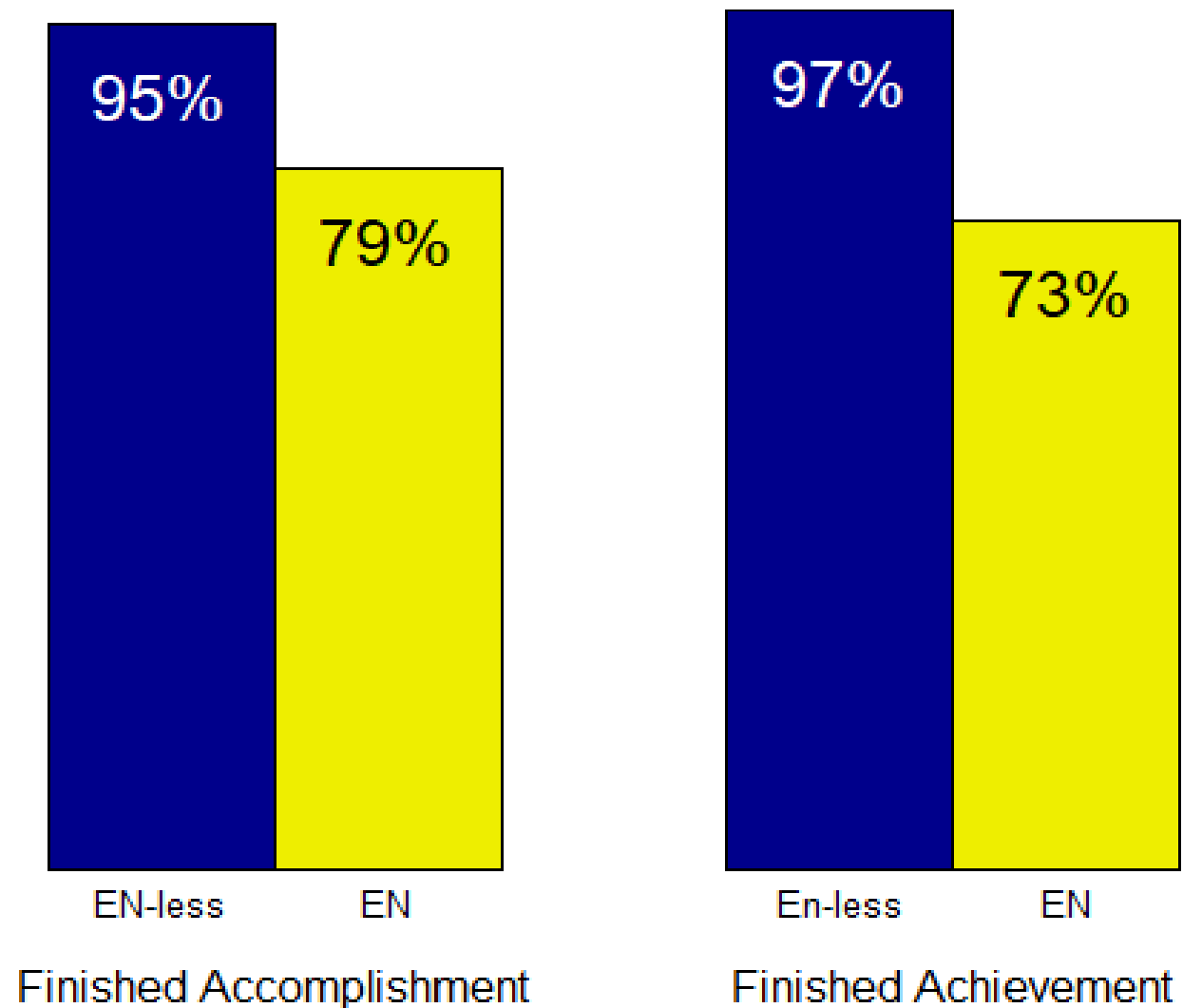
Results:

For the ongoing reading, the presence of EN significantly reduces the acceptability of the sentences ($p < .03$).

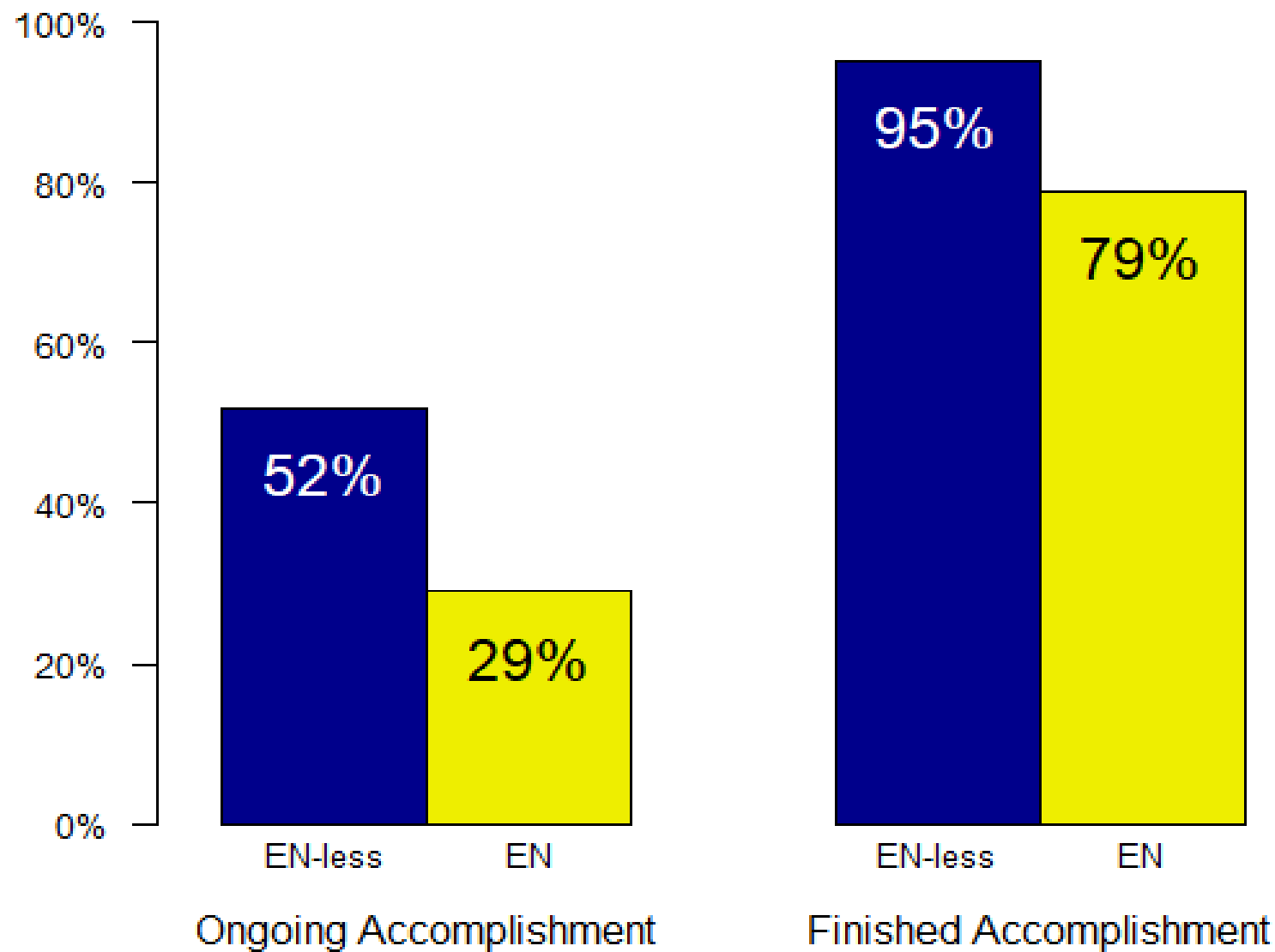
Results for Hypothesis 1



In contrast,
For the finished reading, the presence of EN does not generate any significant difference in acceptability for accomplishments ($p > .2$) or achievements ($p > .9$).



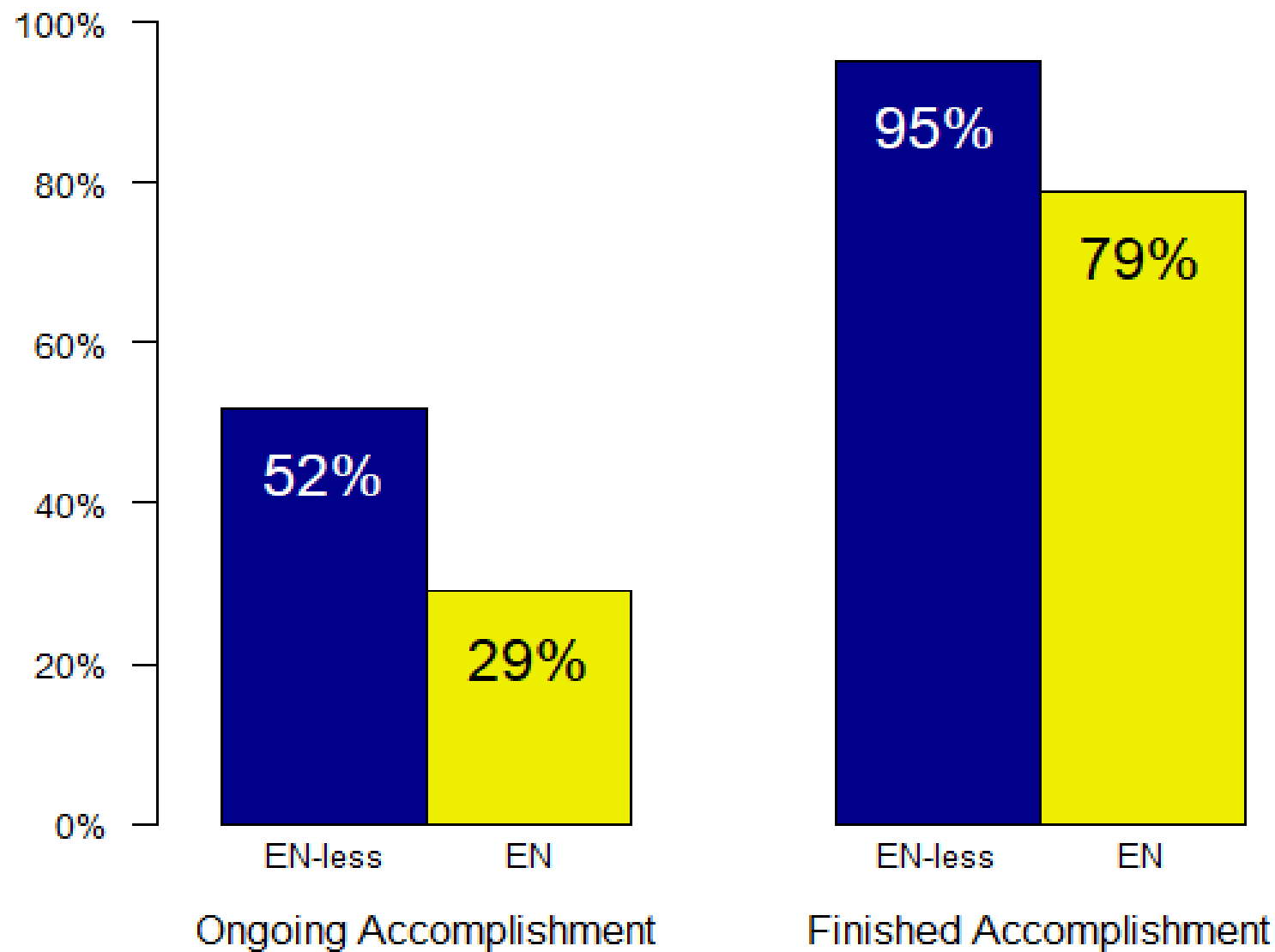
Results for Hypothesis 1



Hypothesis 2:

For accomplishments, the different acceptability of EN and EN-less sentences in the ongoing reading is more likely to be higher than in the finished reading.

Results for Hypothesis 2



Results:

For accomplishments, the ongoing reading of EN statements was significantly dispreferred in contrast to the finished reading (29% vs. 79%, Negation: $p < .001$, Reading: $p < .0001$).

Results for Hypothesis 2

The role of EN

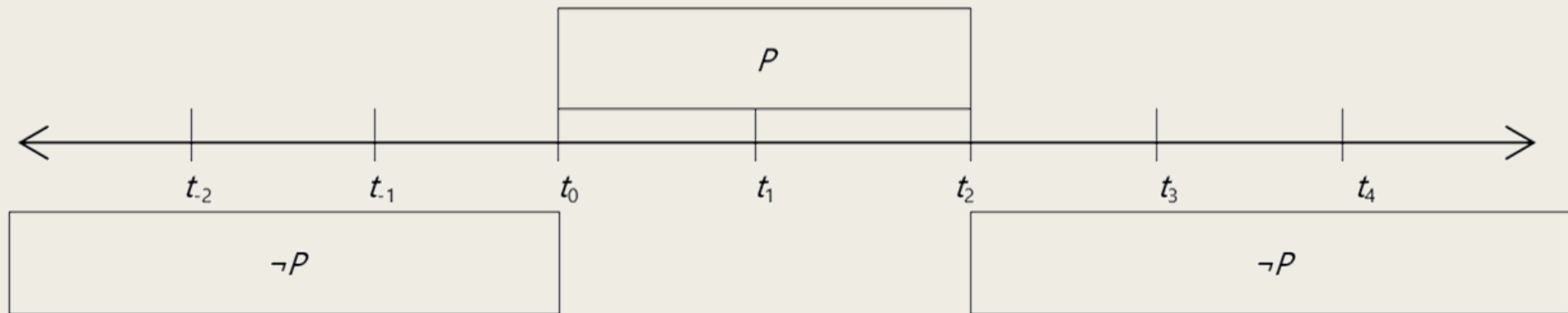
- These results support Cépeda's (2017, forthcoming) proposal that EN has an **active negative semantics**.
- EN **negates** the possibility that the eventuality in the main clause holds during the interval expressed in the *hasta*-clause.
- As an effect, the time of actualization of the eventuality in the main clause is restricted to the complement of the interval expressed in the *hasta*-clause.

The role of EN

- **EN-less sentence:** Olga won't leave [until P]
= *Olga won't leave [until P starts or later on]*
- **EN sentences:** Olga won't leave [until $\neg P$]
= *Olga won't leave [until $\neg P$ starts (=P finishes) or later on]*

Negation after all

- I interpret the findings in this study as supporting Postal's (2005) claim that negation expresses the complement function.
- In simple terms, the presence of EN means that there is no temporal cooccurrence between the main eventuality and the *hasta*-interval (= no overlapping).



Licensing EN crosslinguistically

- Assuming a complement-functional role for EN explains why EN occurs in certain temporal clauses but not in others.
- *Until-, before-* and *since*-clauses allow overlapping in their interpretations. EN is licensed to express no overlapping.
 - I am currently working with Viviane Déprez (Rutgers University) on a experimental study to determine the interpretation of EN in French *avant*-clauses 'before' (in progress)
 - I have a joint work with Jiwon Yun (Stony Brook University) on the interpretation of EN in Korean *-nci*-clauses 'since' (Cépeda & Yun 2018)

Licensing EN crosslinguistically

- In contrast, a culmination point is relevant for interpreting *after*-clauses (Heinämäki 1978, Beaver & Condoravdi 2003). EN never occurs in *after*-clauses crosslinguistically due to the impossibility of temporal overlapping between the eventuality in the main clause and the interval in the *after*-clause.

On illusions and conditions

- The illusion of expletiveness can be explained by a coarse level of granularity applied to the semantics of achievements.
- The conditional reading can be explained by a fine level of granularity, which makes the finished reading the only one available.

Conclusions

- The findings reported in this study are inconsistent with previous reports on the emptiness of EN.
- I have shown that EN has indeed a negative active semantics, which is made evident when examining aspectual differences in Spanish *hasta*-clauses.
- My current research program focuses on whether this proposal can be extended to other semantic domains where EN is also licensed (e.g. degrees, possible worlds).

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Thank you!

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