Responsible NLP Checklist

Paper title: Uniform Information Density and Syntactic Reduction: Revisiting *that*-Mentioning in English Complement Clauses

Authors: Hailin Hao, Elsi Kaiser

How to read the checklist symbols:

the authors responded 'yes'

the authors responded 'yes'

the authors responded 'no'

the authors indicated that the question does not apply to their work

the authors did not respond to the checkbox question

For background on the checklist and guidance provided to the authors, see the Responsible NLP Checklist page at ACL Rolling Review.

✓ A. Questions mandatory for all submissions.

- ✓ A1. Did you describe the limitations of your work? *This paper has a Limitations section.*
- A2. Did you discuss any potential risks of your work?

 This work is a computational psycholinguistics and cognitive modeling study that analyzes syntactic variation in a conversational corpus. It does not involve the release of models, systems, or user-facing applications.

B. Did you use or create scientific artifacts? (e.g. code, datasets, models)

- ☑ B1. Did you cite the creators of artifacts you used?

 Citations for the CANDOR corpus and other relevant tools or resources are provided in Sections 3.3 and Section 4.1
- ☑ B2. Did you discuss the license or terms for use and/or distribution of any artifacts? *The terms of use for the CANDOR corpus are discussed in Section 3.3.*
- ☑ B3. Did you discuss if your use of existing artifact(s) was consistent with their intended use, provided that it was specified? For the artifacts you create, do you specify intended use and whether that is compatible with the original access conditions (in particular, derivatives of data accessed for research purposes should not be used outside of research contexts)?
 - Our use of the CANDOR corpus complies with its intended use for academic research, as specified in its access agreement. This is discussed in Section 3.3.
- ☑ B4. Did you discuss the steps taken to check whether the data that was collected/used contains any information that names or uniquely identifies individual people or offensive content, and the steps taken to protect/anonymize it?
 - We do not release any data as part of this work. The CANDOR corpus, which we use under a restricted-access agreement, has already been de-identified by its original authors. Any handling of potentially sensitive content is managed at the corpus level.
- ☑ B5. Did you provide documentation of the artifacts, e.g., coverage of domains, languages, and linguistic phenomena, demographic groups represented, etc.?

We provide documentation of the CANDOR corpus in Section 3.3, including details on the language (English), speaker demographics, and conversational contexts relevant to our analysis.

☑ B6. Did you report relevant statistics like the number of examples, details of train/test/dev splits, etc. for the data that you used/created?

We report relevant corpus-level statistics (e.g., number of conversations, tokens, syntactic constructions analyzed) in Section 3.3.

☑ C. Did vou run computational experiments?

- ✓ C1. Did you report the number of parameters in the models used, the total computational budget (e.g., GPU hours), and computing infrastructure used?

 The model parameters are reported in Section 3.4.
- ☑ C2. Did you discuss the experimental setup, including hyperparameter search and best-found hyperparameter values?

The experimental setup and hyperparameters are reported in Section 3.4.

✓ C3. Did you report descriptive statistics about your results (e.g., error bars around results, summary statistics from sets of experiments), and is it transparent whether you are reporting the max, mean, etc. or just a single run?

Yes, it is discussed in Sections 3.5, 4.4, and 4.5.

∠ C4. If you used existing packages (e.g., for preprocessing, for normalization, or for evaluation, such as NLTK, SpaCy, ROUGE, etc.), did you report the implementation, model, and parameter settings used?

While we used standard NLP packages (e.g., for tokenization and surprisal estimation), we did not report detailed implementation or parameter settings, as we relied on default configurations of widely used libraries.

D. Did you use human annotators (e.g., crowdworkers) or research with human subjects?

- D1. Did you report the full text of instructions given to participants, including e.g., screenshots, disclaimers of any risks to participants or annotators, etc.?
 - We did not recruit human participants or annotators for this project. Our analyses are based entirely on the existing CANDOR corpus, which was collected and de-identified by the original researchers. Therefore, questions about instructions (D1), recruitment and payment (D2), consent (D3), ethics approval (D4), and annotator demographics (D5) do not apply.
- D2. Did you report information about how you recruited (e.g., crowdsourcing platform, students) and paid participants, and discuss if such payment is adequate given the participants' demographic (e.g., country of residence)? (*left blank*)
- D3. Did you discuss whether and how consent was obtained from people whose data you're using/curating (e.g., did your instructions explain how the data would be used)? (*left blank*)
- D4. Was the data collection protocol approved (or determined exempt) by an ethics review board? (left blank)
- D5. Did you report the basic demographic and geographic characteristics of the annotator population that is the source of the data? (*left blank*)

lacktriangledown E. Did you use AI assistants (e.g., ChatGPT, Copilot) in your research, coding, or writing?

☑ E1. If you used AI assistants, did you include information about their use? *It's in the Section called Ethical Considerations.*