Topichood Effects on Different Types of Referential Forms: Evidence from Mandarin

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Background

- **Topichood Hypothesis**: Pronouns signal the topicality of the referent (e.g., Givón, 1983)
  - ▶ Subjecthood bias: possibly because subject is more topical

    (1)　　Ada$_i$ chatted with Eva$_j$. She$_{i/j}$ laughed a lot in the chat.

- **Evidence from English:**
  Rohde & Kehler (2014): More pronouns referring to the more topical passive subjects *Brittany*

    (2)　　a.　Amanda amazed Brittany.
    　　　　b.　Brittany was amazed by Amanda. ⟸ More topical

Research question: The Universality

- **Research Question:** Is the topichood hypothesis also applicable in languages with different referential systems?

- Many languages allow more than one form, e.g., Mandarin.

  (3) Xiaoming$_i$ jinu-le   Xiaogang. Ta$_i$/∅$_i$ daoqian-le.
  Xiaoming$_i$ annoy-PFV Xiaogang. He$_i$/∅$_i$ apologize-PFV
  'Xiaoming$_i$ annoyed Xiaogang. He$_i$/∅$_i$ apologized.'

- Possibilities
  1. Language-specific: Topichood only affects English pronouns
  2. Form-specific: Topichood only facilitates the use of overt pronouns
  3. Most reduced form only: Topichood increases the use of the most reduced form
  4. All reduced form: Topichood increases the use of all reduced forms
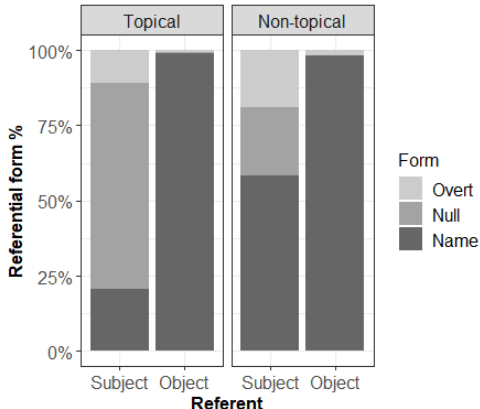
Current study - Experiment 1

- Aim: Is the use of pronouns more frequent for topical subjects?

- Mandarin provides a topical structure (Xu, 2003)

  - Canonical Structure:

    (4)   yinwei   Waner darao-le   Meina, suoyi...
          because Waner bothered Meina, so...
          'Waner bothered Meina, so...'

  - Topical structure: The subject *Waner* is more topical

    (5)   Waner yinwei   darao-le   Meina, suoyi ...
          Waner because bothered Meina, so   ...
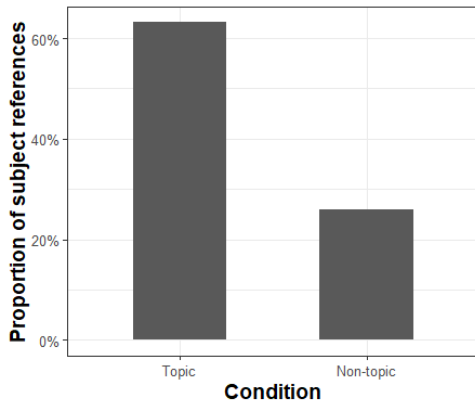   'Waner bothered Meina, so....'

- Sentence continuation task (N=76)

Experiment 1 - Result

- Topichood increases the use of the most reduced form only (95% Crl = [1.72, 6.36]). [1]

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[1] The choice of referential form was analyzed with mixed-effects Bayesian categorical regression

Experiment 1 - Discussion

- Topichood also increases subject mention.
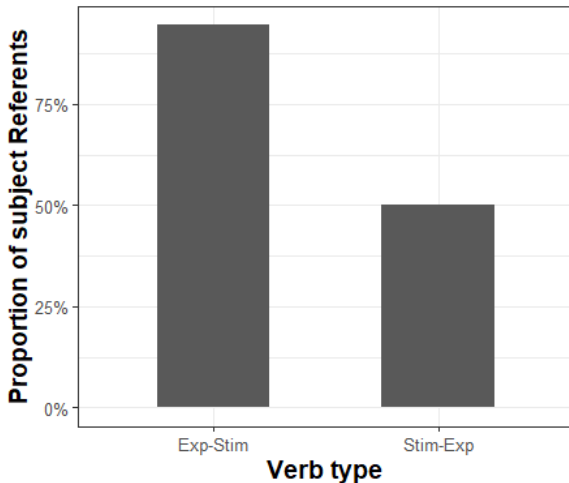- Is the topichood effect due to predictability?

Experiment 2

- Aim: Is predictability the underlying mechanism of the topichood effect? (N=40)
- Manipulation: Predictability of topical subjects with ES/SE verbs
- Experiencer topics (subject in 6) should be more predictable than stimulus topics (subject in 7)

    (6)   Jingyi yinwei   xihuan Minghui, suoyi. . . (ES verb)
            Jingyi because like   Minghui, so. . .
            'Jingyi liked Minghui, so. . .'

    (7)   Jingyi yinwei   fandao-le   Minghui, suoyi. . . (SE verb)
            Jingyi because bother-PFV Minghui, so. . .
            'Jingyi bothered Minghui, so. . .'

- If predictability is the cause of the topichood effect on pronoun production, there should be more null pronouns for experiencer
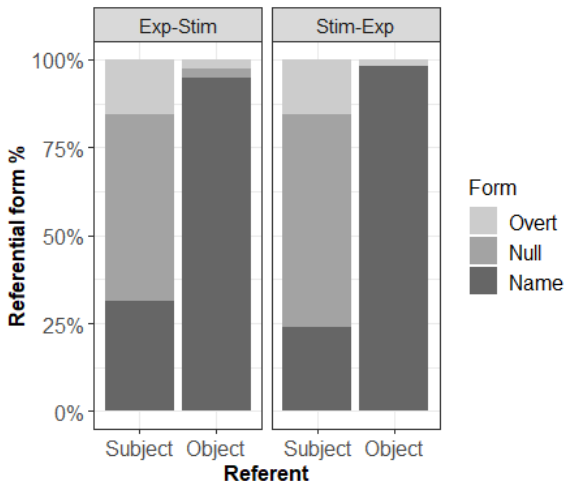
Experiment 2 - Result

- Manipulation of predictability using verbs is effective ($p < .001$)

Experiment 2 - Result

- Null pronouns are more used for the **LESS** predicatable stimulus topics (Estimated Mean = 2.02; 95% Crl = [0.10, 4.13]).

Conclusion

- When more than one reduced form is available in a language, topichood increases the use of the most reduced form only.
- The topichood effect on pronoun production is not linked to predictability.

Previous studies

Mixed evidence:

- Passivization: Topichood increased the production of null pronouns in Vietnamese (Ngo, 2019); but no effect on Mandarin overt pronouns (Zhan, Levy & Kehler, 2020)

- Topic/nominative marker: no effect on Korean pronoun production (Kim et al., 2013)

Potential methodological problems:

- Passives may have extra functions rather than topicalization (e.g., Shibatani, 1995)

- The topic marker do not necessarily mark the topic (e.g., Kuroda, 2005; Kim, 2015)

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