Human/animal contrast in patient independently motivates passive production across Japanese dialects

A sentence production study with a picture description task

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Introduction

Target languages

- Japanese dialects
  - Tohoku (Northeast Japan)
  - Tokyo (The Capital)
  - Kansai (Southern-central Japan)

Target phenomenon

Passive production

- Animacy contrast (Human/animal)
- Difference between Japanese dialects reported by previous research

Main claim

Human/animal contrast in patient independently and uniformly motivates passive production across Japanese dialects

The condition of passive use in Japanese

Passives describe an event where a lower entity in the hierarchy acts on a higer one

(Kuno 1979; Shibatani 2006)

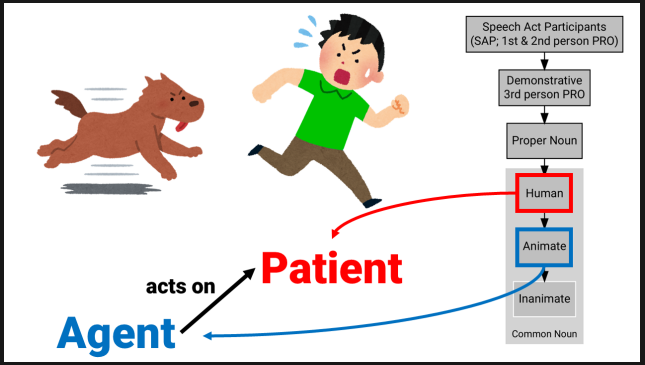


Figure 1: Schematic diagram of Relevance Hierarchy [Mainly from Dixon (1994), pp.84–85; cf. DeLancey (1981) for the treatment of SAP; TOP: Typically Agentive Entities / BOTTOM: Typically Patientive Entities] and a *chasing* event where a lower entity in the hierarchy acts on a higer one

Q: Can the animacy of either agent or patient individually contribute to passive production?

Animacy manipulation in Japanese sentence production studies

The following studies manipulated the animacy of agent and patient to elicit active or passive sentences:

Animate versus Inanimate

Montag et al. (2017), Tanaka et al. (2011)

Human beings versus Animals (both *animate*)

Hidaka (2002, 2016a,b)

- not well evaluated since only one pair of items was used
- **Q: Does human versus animal contrast have a reliable effect on passive production?**

Regional difference in Japanese passive production

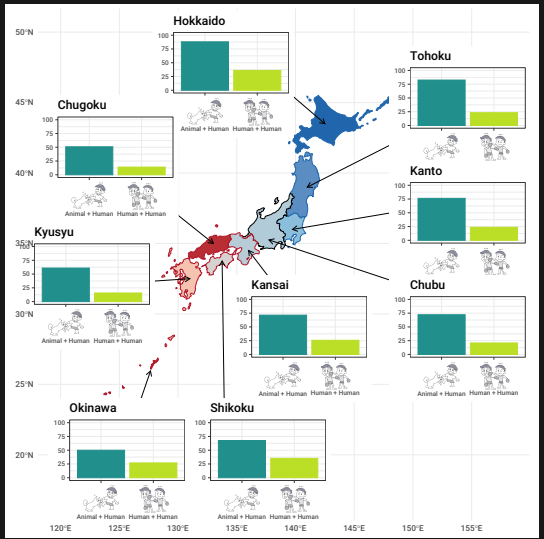


Figure 2: Proportion of passives in each region reported by Hidaka (2016,a,b)

Eastern dialects speakers produced more passives than Western dialects speakers (Fig. 2, Hidaka, 2002, 2016a,b)

- Animacy and structural preference may be unevenly linked across Japanese dialects
- However, only one item pair is used
- **Q: Is such cross-dialectal difference replicable when more items are used in an experiment?**

Methods

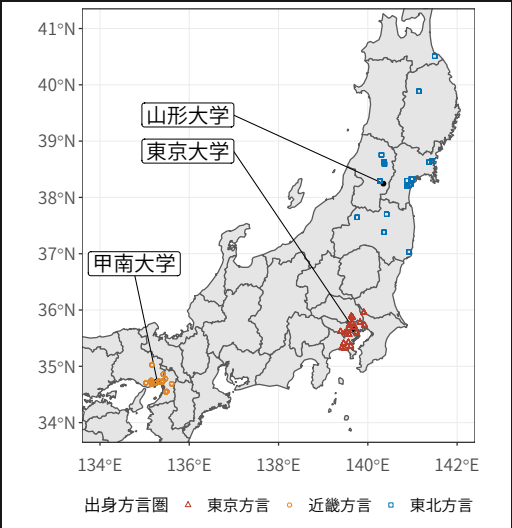
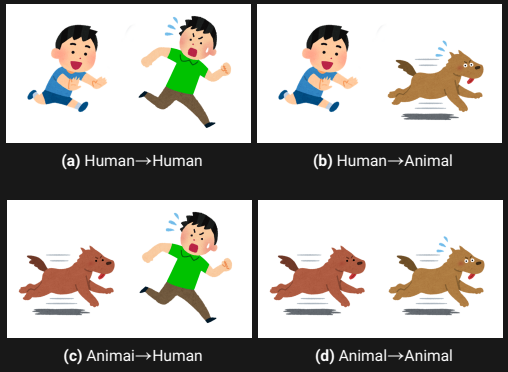


Figure 3: Dialect/birth region where the participants have lived for the longest time up to 18 y.o. and the experimental hosts

Picture description task in the three regions

1. Tohoku
   - one of Eastern dialects
   - the same dialect as Hidaka (2002)
2. Tokyo (≈ Standard Japanese)
3. Kansai
   - one of Western dialects
   - the same dialect as Hidaka (2002)

Settings of the Experiment



(a) Human→Human **(b)** Human→Animal

(c) Animai→Human **(d)** Animal→Animal

Figure 4: A sample set of the experimantal items (“chase”)

Animacy Manipulation

Human v. Animal (Fig. 4)

(a) Human→Human
(b) Human→Animal
(c) Animal→Human
(d) Animal→Animal

Items (Verbs; transitive events)

- *chase*, *hit*, *kick*, *pat*, *pull*, *push*, *rescue*, *scratch*, *tickle*, *wake*

Overall results

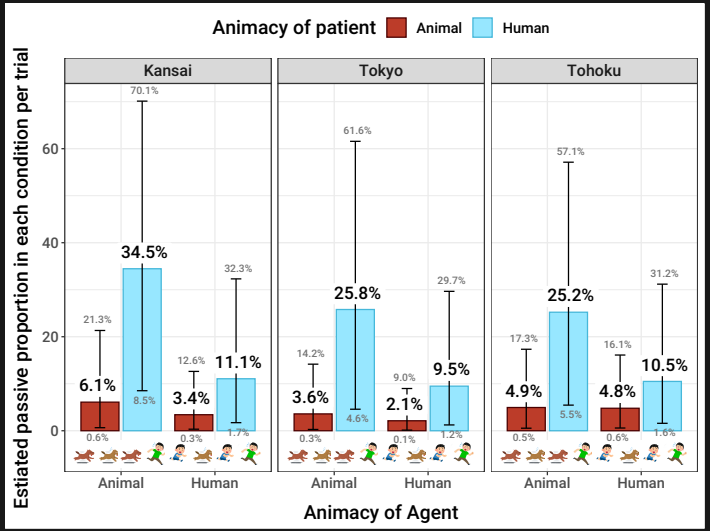


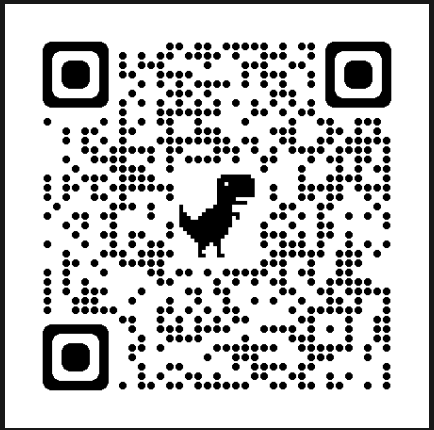
Figure 5: Passive proportion in each condition per trial of the picture description task estimated by the Bayesian mixed effects logistic regression model with a maximally specified random structure (Error bar: 95% ***Credible*** Interval)

- When the patient was a human being, more passive were produced
- Human → human condition elicited more passives than animal → animal condition.
- ∴ The patient's animacy alone can motivate passive production
- No difference between dialects

Conclusion

- Human/animal distinction affects the voice choice
- The patient's animacy independently influences voice selection
- The current results were consistent across Japanese dialects we examined

For more details of my research...



Visit
https://github.com/CLRafaelR/IWoLP2021
for the slides or supplementary documents

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