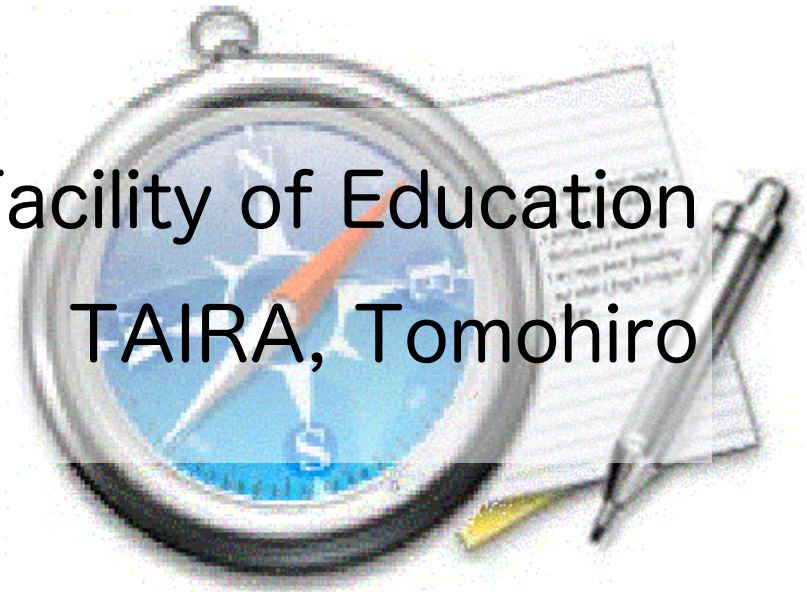


# The Effect of Metaphor on Reading Processing.

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- “Time is Money, you must not waste it.”
  - Time is very important...
- “Her smile was like a Mask, we couldn’t talk to her.”
  - Her smile was so frightening...



# Why do we use metaphors?

- Because metaphor can help us acquire information...
  - Many important concepts are abstract, and we need metaphors in order to grasp them (Lakoff & Johnson ,1980).
  - Metaphor gives benefits to those who need information.



# What is the Function of Metaphor ?

- Text Comprehension
  - Memorability for passages
  - Accessibility to memory



# Relationship of Metaphors to Text Comprehension

- How do we acquire information ?
  - The memorability of passages is increased when the concluding statement is metaphorical rather than literal (Reynolds and Schwartz, 1983).
- How do we access acquired information ?
  - Elements related to the same metaphor-based schema are more closely linked to each other (Allbritton, McKoon, and Gerrig, 1995).



# Predication

- How do we comprehend?
  - The **process** of acquiring information has not been studied enough (previous studies shows the **result**).
  - A reading task would help to reveal how this process works.



# Experiment



# Method

- Participants
  - 27 Kyoto University undergraduates.
- Materials
  - 8 familiar metaphors (ex. Time is Money) and 8 unfamiliar metaphors (ex. Smile is Mask).
  - The metaphors are embedded in 10- to 12 sentence passages.



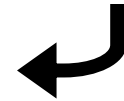


# Sample. Smile is Mask

I was in the laboratory. There were a few other people who were talking about their joint research results. It seemed that they were experiencing some difficulties. After a while, Nozomi, the research leader, smiled.

Target Metaphor

When I saw her, I thought her smile was like a mask.



Her smile was momentary. She and the others continued to talk as if nothing had happened. I felt that her smile did not express her real feelings. After she smiled, her co-workers seemed to be frightened, because her smile was unnatural. Since there were ongoing problems with the research, Nozomi said, “We must re-collect data now,” and the meeting was over.



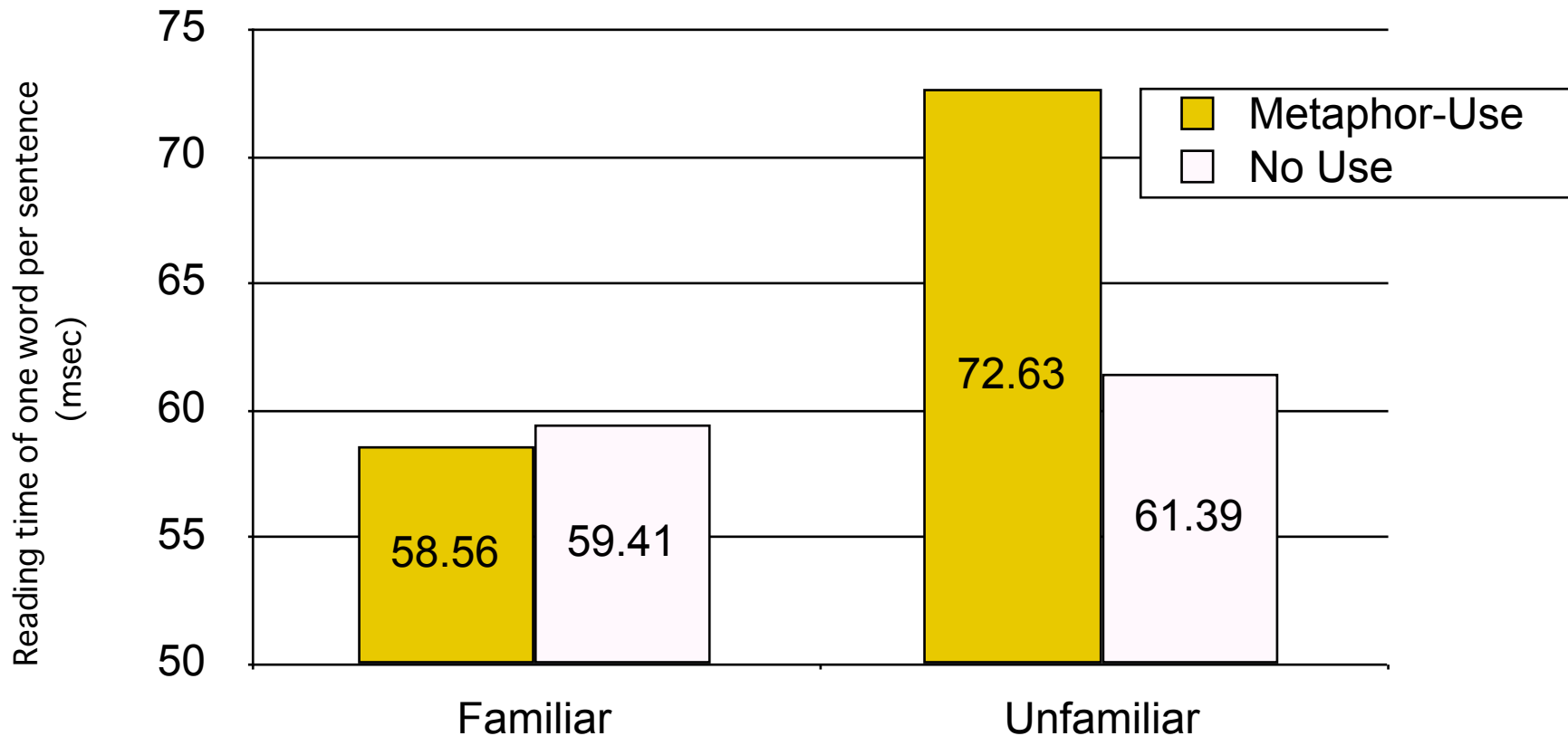
Relevant Sentence



# Result



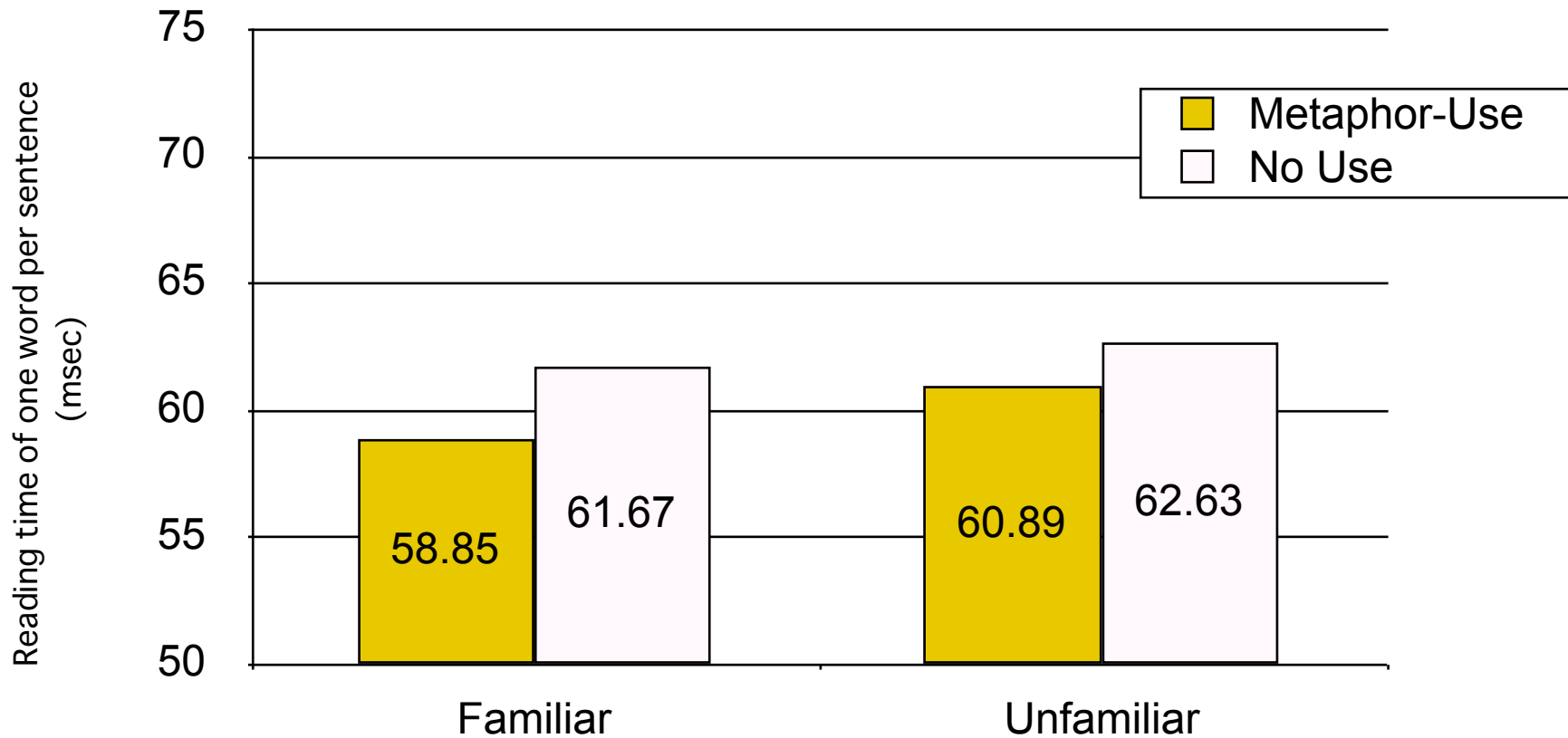
# The Effect on Relevant Sentences



Reading time in the condition of Unfamiliar Metaphor Use increased significantly more than the other conditions.



# The Effect on Irrelevant Sentences



There were no significant differences...



# Conclusion

- Familiar metaphor would...
  - access to the stored meaning.
- Unfamiliar metaphor would...
  - require finding related information.



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