Individuals' Process of Metaphor Interpretations and Interestingness Cognition

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Research Aim

Our studies investigated our model of metaphor interpretation and interestingness cognition, which is predicted only by the correlations between some discrete questionnaires' data and cannot explain individual's mental process.

GFI = .937, *CFI* = .811, *RMSEA* = .000
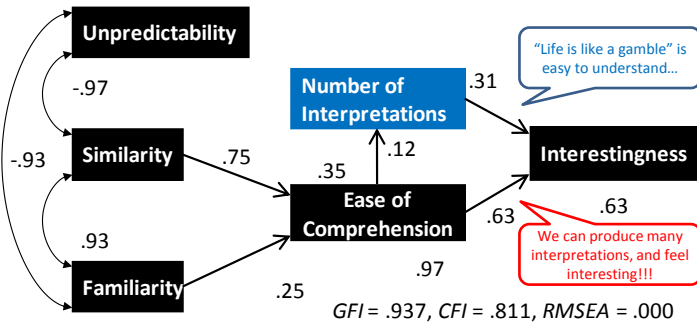
In this paper, we examine the individuals' psychological process of metaphor comprehension and interestingness:

- 🔹 Study 1 examine whether more comprehensive and interesting metaphor produce more interpretations or not.
- 🔹 Study 2 tried to reveal that the metaphor with more interpretations is evaluated as more comprehensive and interesting.

Method

Study 1: Interpretation Production Task

800 native Japanese speakers participated in Study 1 on the internet. 36 Japanese similes which were clustered within 3 types (LOW, MIDDLE, and HIGH) were used for the study (see APPENDIX).

The participants were presented with each type of simile and required to provide as many interpretations as possible. We clustered the interpretations, and examined how many interpretations are provided in each type of simile.
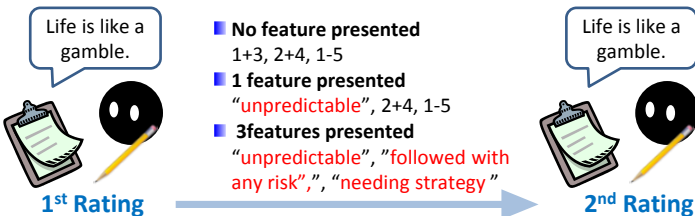
Study 2: Interpretation Presentation Task

54 native Japanese speakers took part in Study2. They had not participated in Study 1.

They were presented with 24 similes which was the same as the LOW and HIGH similes in Study 1, and required to judge their ease of interpretation, interestingness, and unpredictability. The judgment was conducted twice in Study2.
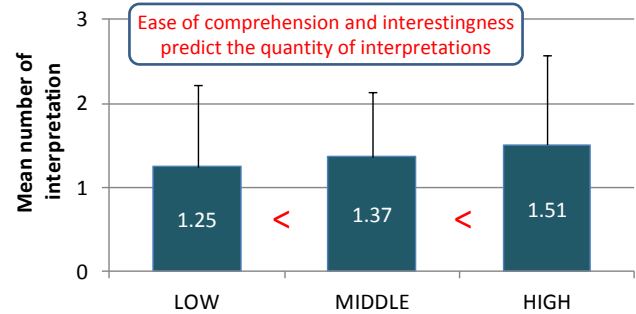
1st Rating: The participants were required to judge the similes firstly without no feature.

2nd Rating: The participants were required to judge secondly with some features which was simile-relevant.
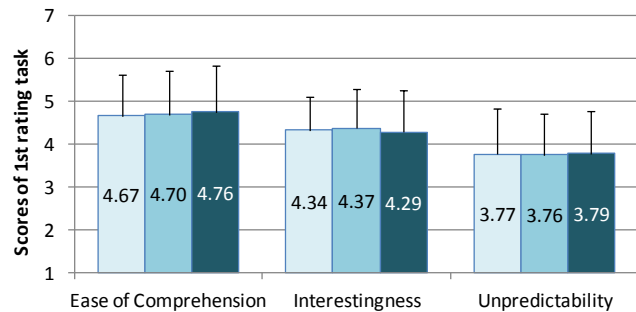

- 🔹 **No feature presented**
  1+3, 2+4, 1-5
- 🔹 **1 feature presented**
  "unpredictable", 2+4, 1-5
- 🔹 **3 features presented**
  "unpredictable", "followed with any risk",", "needing strategy"

1st Rating → **2nd Rating**

Results & Discussion

🔹 Result: Study 1: Produced Interpretation Unit

Ease of comprehension and interestingness predict the quantity of interpretations

🔹 Result: Study 2: 1st Rating vs. 2nd Rating

The features made metaphor…

more comprehensible | more interesting | equally unpredictable
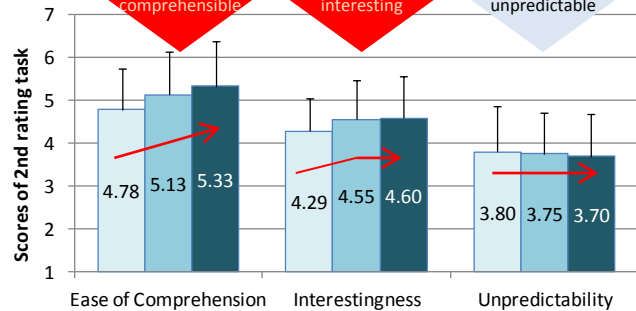
🔹 Discussion

- 🔹 Study 1 showed the correlations between the metaphor interpretation and metaphor evaluation.
- 🔹 Study 2 showed the metaphor interpretation, which is related to similarity cognition, affects the process of metaphor comprehension and evaluation.
  - 🔹 The results suggested the difference between LOW and HIGH type of simile (see APPENDIX). The former showed the effect of interpretation on the comprehension and evaluation of metaphor, but latter which may originally produce many interpretation did not show the effect of interpretation.

🔹 Conclusion

Our results suggest that metaphor evaluation is based on interpretative action. Moreover, our results indicate that metaphor comprehension is strongly affected by whether the connection between two different concepts is discovered.

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Study 1 & Study 2: Material Example

For all the materials, Taira and Kusumi (2009) examined interestingness and ease of comprehension using 5-point scales (1 = "not at all interesting or easy to understand" to 5 = "very interesting or easy to understand"). Based on the rating data, the materials were clustered within three simile types.

■ LOW (interestingness, M = 2.38, ease of comprehension, M = 2.36)
"*marriage is like a refrigerator*"
The features used in Study 2:
¥ filled with many things
¥ going colder and colder
¥ saving the relationship

■ MIDDLE (interestingness, M = 2.81, ease of comprehension, M = 3.38)
"*a husband is like jewelry*"
The interpretations produced in Study 1:
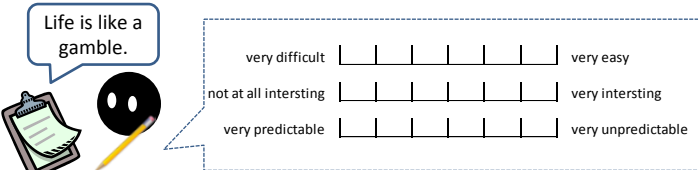¥ very important
¥ making their wife happy
¥ looking brilliant

■ HIGH (interestingness, M = 3.21, ease of comprehension, M = 4.04)
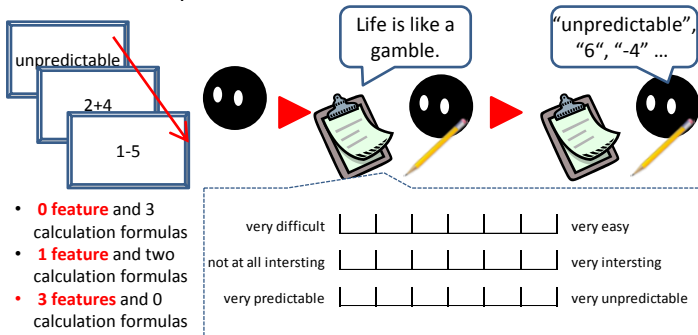"*life is like a gamble*"
The features used in Study 2:
¥ unpredictable
¥ followed with any risk
¥ needing strategy

Study 2: Procedure

Study 2 was composed of 1st rating task and 2nd rating task.


The 1st rating task was a simple rating task: The participants were required to rate the ease of comprehension, interestingness, and unpredictability of the similes. Each factor was rated on 7-point scales.

- **0 feature** and 3 calculation formulas
- **1 feature** and two calculation formulas
- **3 features** and 0 calculation formulas

The 2nd rating task was composed of three phases. The main point of this task is the second rating task. During the second phase, the participants were required to rate the ease of comprehension, interestingness, and unpredictability of the similes in the same manner as during the rating task.

Study 2: Detailed Results

■ Result: LOW Type of simile
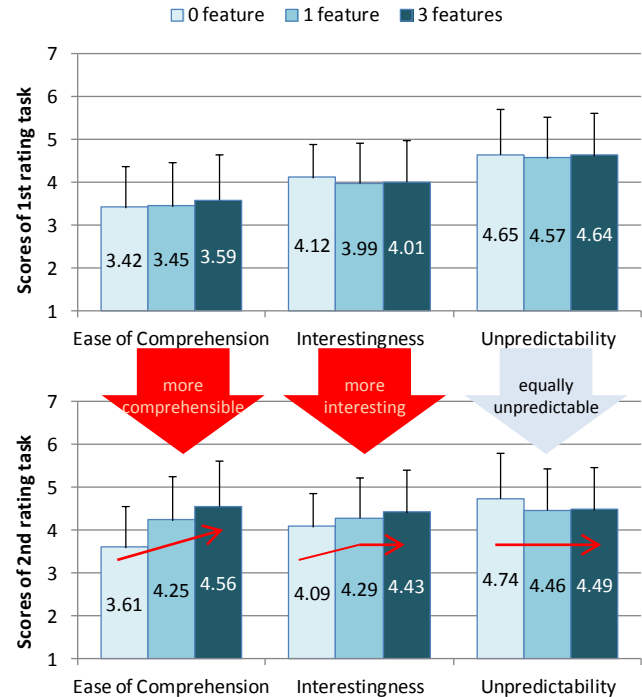
■ Result: HIGH Type of simile
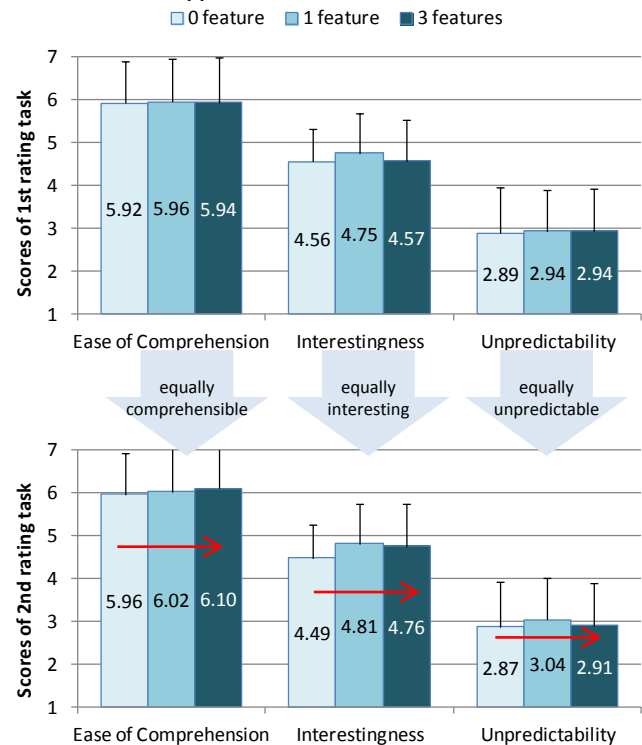
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Utsumi, A. (2005). The role of feature emergence in metaphor appreciation. Metaphor and Symbol, 20, 151-172.