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The effect of repeated presentation and aptness of figurative comparisons on preference for metaphor forms

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Introduction

Figurative comparisons consisting of two nouns (a target and a base) can be expressed in two grammatical forms, i.e., in simile form (X is like Y), or in metaphor form (X is Y). Recently, many studies have shown that there are substantial differences between metaphors and similes. In particular, much evidence has been found for people’s grammatical preference for figurative comparisons (e.g., Chiappe & Kennedy, 1999). Among hypotheses proposed for explaining this grammatical form preference in relation to figurative comparisons, we focused mainly on the career of metaphor hypothesis, proposed by Bowdle & Gentner (1999). The career of metaphor hypothesis suggests that the repeated use of a particular base term, as intending a certain metaphorical sense, will result in lexicalization of the metaphoric sense as a secondary meaning to that of the base term, and that this conventionalization process causes the metaphor form preference. In contrast, Chiappe & Kennedy (1999, 2001) have claimed that the metaphor form might be preferred when a comparison is highly apt, because the metaphor form implies that the target will inherit almost all the features of the base term. In other words, the metaphor form implies the category assertion.

In this study, we conducted an experiment to test the career of metaphor hypothesis, based on Bowdle & Gentner’s (1999) “in vitro conventionalization”. In addition, we observed the interaction between the aptness of comparisons and the repeated presentation of the base terms.

Method

Design
Aptness of comparisons (High/Moderate) X The number of repetition of base terms in the study phase (0/5 times). Both were within subject variables.

Participants
Thirty-six undergraduates participated in the experiment. All were native Japanese speakers.

Materials and Procedures
The experiment consisted of two phases; the study and the test phase.

For the test phase, we prepared 16 comparisons as the test items in random order and required to write down their interpretation of the comparison in a few words; they were also required to rate which grammatical form (metaphor or simile) was more natural or reasonable for each target – base pair, on a 7-point scale.

Results and Discussion

The mean grammatical preference rating for the comparisons in the test phase are shown in Table 1, transformed so that higher numbers indicate a preference for the metaphor form over the simile form. Table 1 shows that previous repetition of the base term increased the participants’ preference for the metaphor form. Moreover, a tendency emerged, in that the effect of the repetition differs by the aptness of the comparisons. A 2 X 2 repeated measures analysis of variance on the subject means showed that the main effect of repetition was significant (F(1,35)=11.52, p<.01). The interaction between repetition and aptness was marginally significant (F(1, 35)=3.03, p<.10).

Table 1. Mean metaphor form preference ratings (and standard deviations) as a function of repetition

<table>
<thead>
<tr>
<th>Aptness of comparison</th>
<th>Repetition in Study Phase</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>None</td>
<td>3.13 (.86)</td>
</tr>
<tr>
<td></td>
<td>5 times</td>
<td>3.77 (1.41)</td>
</tr>
<tr>
<td>Moderate</td>
<td>None</td>
<td>3.17 (.82)</td>
</tr>
<tr>
<td></td>
<td>5 times</td>
<td>3.35 (1.03)</td>
</tr>
</tbody>
</table>

In summary, these results support the career of metaphor hypothesis. Furthermore, they suggest that the aptness of a comparison promotes the conventionalization of the base term. The implication of this interaction is that the newly created metaphoric meaning is more likely to be lexicalized when it is highly apt, that is, when it has more metaphoric implications.

References