

# How do the SLA Learners Understand the Deictic Verb, *Come*? - A case study from the perspective of cognitive semantics.

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## 1. Purpose

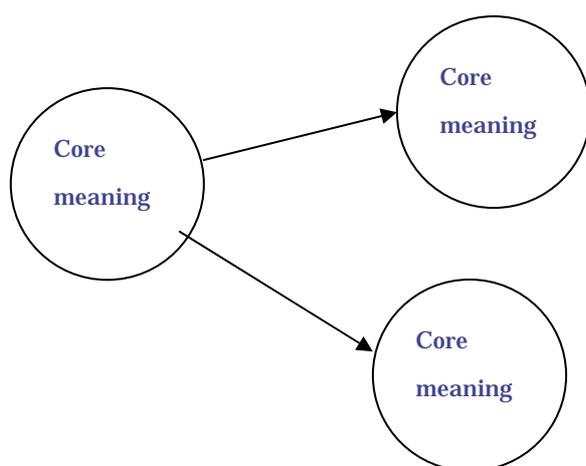
The purpose of this study is to examine :

1. how the SLA learners understand a deictic, polysemous verb, *Come*,
2. whether they will get effects from the image schema of come in understanding.

## 2. Previous Study

In Ueda (2001, 2002), the way of understanding polysemous words, *come* and *go*, by the second language Learners of English was examined by the multidimensional analysis. It was found that the core meaning, a prototype meaning is most familiar to the second language learners of English. And their mental representation shows that, in the network of the meaning of a polysemous word, the polysemous words radiate from the core to the peripheral usages (Figure1).

Figure 1



And also, even when the prototypes of *come* and *go* are presented to subjects (Ss), there can a little effect in understanding polysemous words. But it is difficult to find how prototypes give some effect to Ss.

### 3. Image Schema

Lakoff (1987) and Johnson (1987) define Image schemas as:

- (1) Image Schemas are not specific images but are abstract in another sense of that word.
- (2) Image Schemas represent schematic patterns arising from imagistic domains that recur in a variety of embodied domains and structure our bodily experience.

### 4. Study:

Two experiments were conducted to examine the hypothesis.

#### 4.1. Hypothesis

If Subjects (Ss) are shown the image schema of the core meaning(s) in polysemous, Ss would extend the meaning from the core meanings and understand them easily.

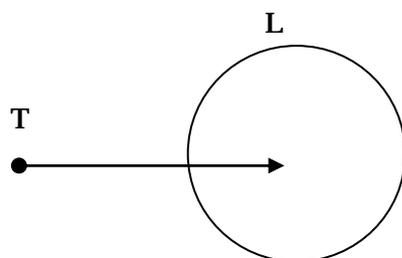
#### 4.2. Subjects and Materials

69 freshmen participated in this study. The subjects were divided into two groups: Group 1 is 39, and Group 2, 30. Ss in two groups were asked to translate 10 English sentences into Japanese. No differences can be found in the results produced by two groups.

In this study, we use a polysemous word, *come*, as a target verb, and examine how the subjects (Ss) will get effect from presented prototypes in judging similarity between core meaning and others. For the prototypes, two usages, representing (1) 'motion' and (2) 'change of state', are used in the experiments. Figure 2 and 3 show image schemas representing the two usages of (1) 'motion' and (2) 'change of state', respectively.

Figure 2

Image Schema of come(1)

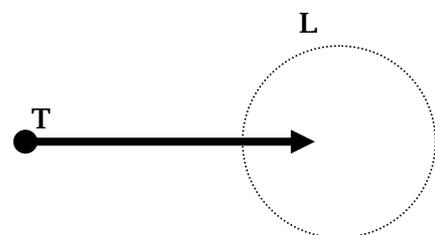


T: Trajector

L: Landmark

Figure 3

Image schema of come (2)



For the material, 10 sentences with different usages of *come* are used. These sentences are shown in Table 1.

Table 1: Sentences used in the Experiment 1 and 2

- S1: House like that don't come cheap.
- S2: Cats come in many shapes and sizes.
- S3: The summer came to an end.
- S4: My family always comes first.
- S5: I've come for my book.
- S6: Help has come at last.
- S7: When is Anton coming for you?
- S8: How do you come to be so late?
- S9: The new law will come into effect next month.
- S10: Nearly half the students come from abroad.

### 4.3. Experiment 1

#### 4.3.1. Procedure

Ss were asked to judge the similarities among 10 sentences by 7-point scaling. At that time, explanation and image schema were shown to Group 1, while not to Group 2. The results were analyzed by multidimensional scaling.

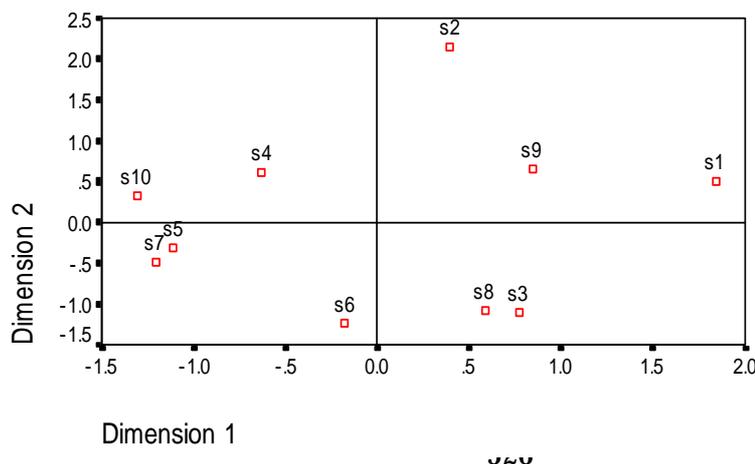
#### 4.3.2. Results

The results of multidimensional scaling were shown in Configuration 1 and 2.

### Configuration 1

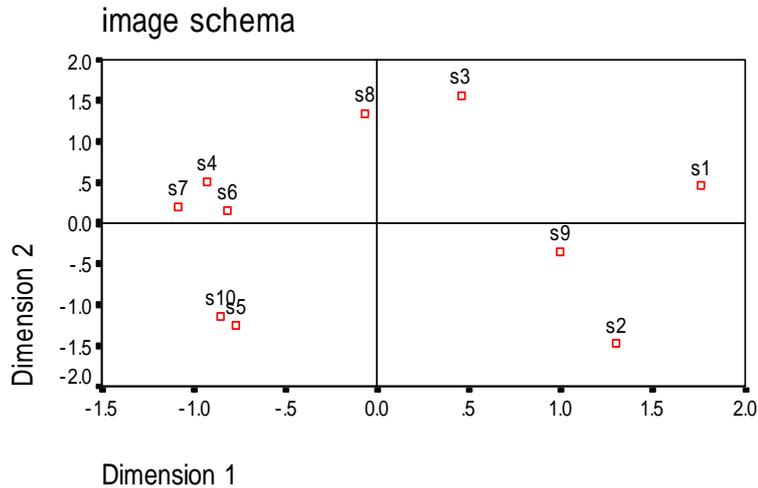
#### MDS (INDSCAL Model)

no image schema



## Configuration 2

### MDS (INDSCAL Model)



From the configurations, we translated each dimension as follows: Dimension 1 is 'change of state-movement' and Dimension 2, 'metaphoric-concrete'.

We calculated Spearman Rank Correlation Coefficient to find out the difference in the results of each group: Dimension 1=0.842 and Dimension 2 = 0.478. Hence, we found the difference in Dimension 2 between the judgments by Ss of Group 1 and Group 2. From the result, Ss in Group 2 would get some influence from the image schemas.

#### 4.4 Experiment 2

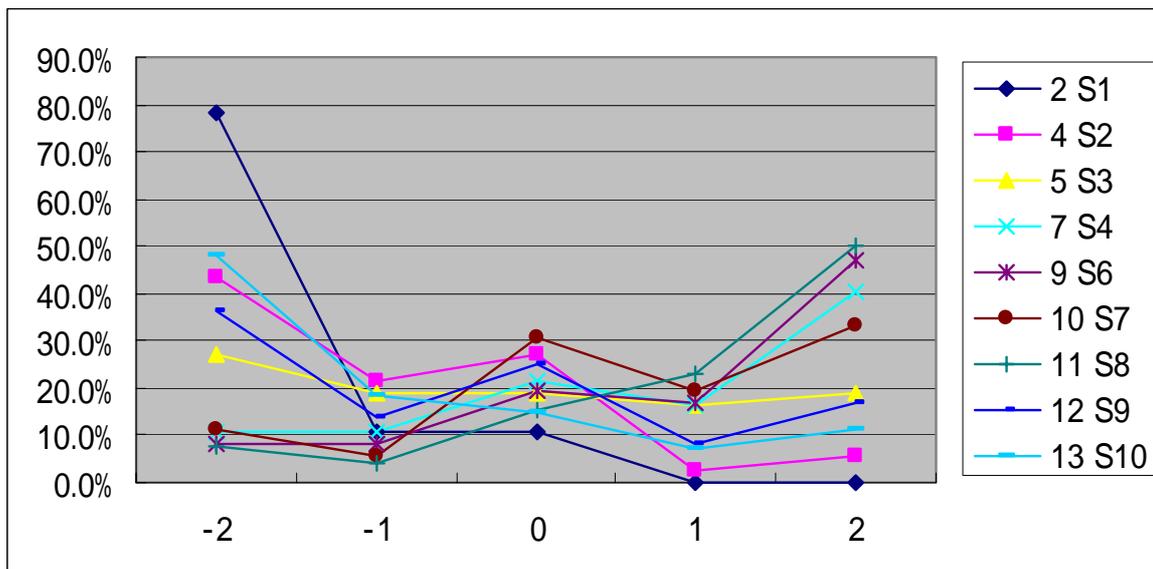
##### 4.4.1. Procedure

In order to know to what extent Ss would get influence from the image schemas in judging the meaning, Group 2 were asked to judge the tendency, change of state or movement, in each meaning in 16 sentences by using 5 point scaling: -2 represents to have strong tendency of change of state, and +2, to have that of movement.

##### 4.4.2. Results

Figure 4 shows the result of judgment by Ss. S1,S2, S9 and S10 were judged as having the tendency of 'the change of state': on the other hand, S4, S6 and S7 were judged as having the tendency of 'movement'. S3 was judged as neutral.

Figure 4: the tendency judged by Ss



## 5. Discussion and conclusion

From the results of Experiment 1 and 2, Ss got some effects in understanding various usages in a polysemous word, *come*. Especially, the meanings of ‘the change of the state’ and ‘movement’ are enforced when Ss judged each sentence meaning. This can mean that Ss understand the derivative usage by using some information of prototypical meanings. This result shows that we can claim that Langacker’s notion of referential point could work in understanding a polysemous word. In addition, this case study would show some possibility of exploring the nature of mental lexicon.

## References

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