Image Schemas and Second Language Learning: A Case Study

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In this research, we examine whether the image schemas give effects to Subjects (Ss) when Ss translate English sentences, containing a polysemous verb, *come*, into Japanese.

1.Concepts of Image Schemas

1.1. Image Schemas

In cognitive semantics. the Image schemas are characterized as follows:

(1) Image schemas are not specific images but are abstract in another sense of that word.

(2) Image schemas represent schematic patterns arising form imagistic domains that recur in a variety of embodied domains and structure our bodily experience.

(Lakoff 1987, Johnson 1987)

1.2. Image Schemas of *come*

We use the concepts of Trajector, Landmark, and domain to characterize image schemas of *come.*

The concepts of trajector, and landmark are as follows:

Trajector is someone/something which moves from some domain to other.
Landmark is the domain from which someone/something moves.

The followings are the characteristics of image schemas of come:

(1) Someone/something moves from some domain into other, where focus is on the motion that trajector comes into landmark.

Image Schema of come(1)

Landmark
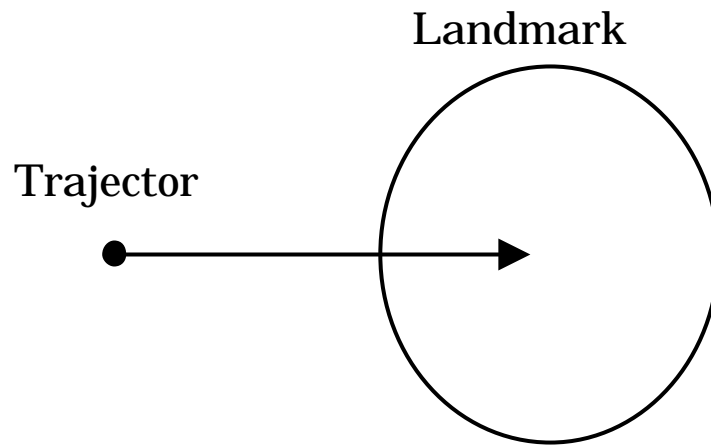
Trajector

(2) Someone/something moves from some domain to other, where focus is on the
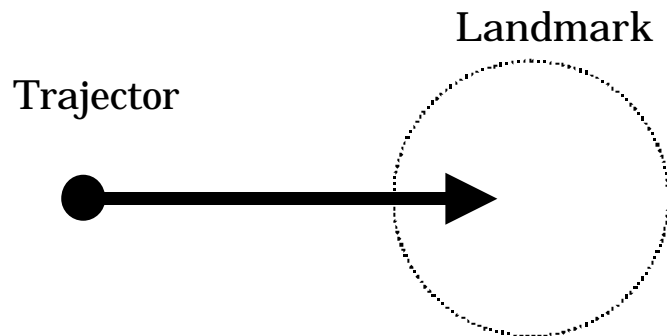process that trajector comes into landmark.

Image schema of come (2)

Landmark

Trajector

Image schema (1) shows the meaning of 'movement', and (2), that of 'change of
state'.

2. Study

In the previous study (Ueda 2001), we used just the image schemas of *come*, but we could not find any effects. This would be because the meaning of the verb could be specified by other factors such the influence of the first language, and prepositions used in the sentence. Especially prepositions can play some role in specifying the meaning of *come.* Thus, we conduct the experiments by using image schemas of *come* and prepositions.

2.1. Research Questions

In this research, we would like to examine the following questions:

(1) To what extent the image schemas can give effects to Ss in understanding the sentences including the polysemous verb, *come.*
(2) Do Japanese knowledge give any effects to Ss in understanding the sentences or not?
(3) What results can we get if Ss are given other information than the image schema of the verb?

We conducted 2 experiments in this research.

2.2.1. Experiment 1

The purpose of the Experiment1 is to examine which usage of *come* is the prototype to the Ss. The Ss are 26 first year university students. In the Experiment 1, the Ss were asked to write with the verb, *come*, as many sentences as possible in two minutes. The collected data is analyzed according to the frequency.

2.2.2. Results of Experiment 1

The Ss produced 90 sentences in total, and just 99% produced meaning of come is 'to move'. This means 'to move' is prototypical meaning of *come.*

2.3.1. Experiment 2

The purpose of Experiment 2 is to examine how image schemas of *come* and prepositions, mainly related with motion and change of state, give effects to the Ss in the results of translating English sentences into Japanese.

Subjects: 30 freshmen in a university participated in this experiment.

Material: 10 sentences with different meanings of come. The sentences are as

follows:

1. Houses like that don't come cheap.

2. Cats come in many shapes and sizes.

3. The summer came to an end.

4. My family always comes first.

5. I've come for my book.

6. Help has come at last.

7. When is Anton coming for you?

8. How do you come to be so late?

9. The new law comes into effect next month.

10. Nearly half the students come form abroad.

And the image schemas of come and prepositions such as in, into, to, from, at, on , over and through.

In   Into   To

On   At

Over   Through
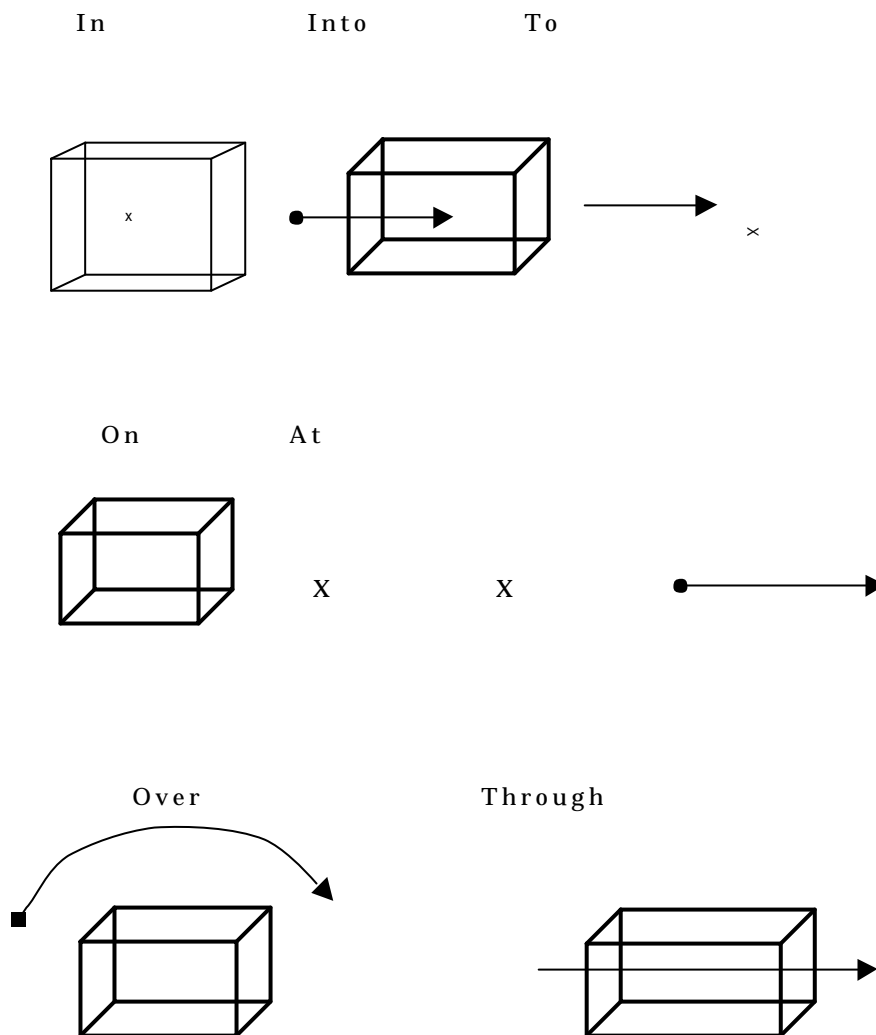
Method: We conducted Pretest and Posttest. In Pretest, the Ss were asked to translate 10 English sentences into Japanese. In posttest, the Ss were shown image schemas of *come*, and some prepositions, then asked the Ss to translate 10 English sentences into Japanese. The results were examined in how the results of the translations the Ss produced could change.

2.3.2. The Results of Experiment 2

The positive and negative effects in translating the sentences are shown in Table 1.

Table 1: The positive and negative effects in translating the sentences.

Sentence No.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
Positive Effect	20%	20%	10%	20%	10%	13%	20%	10%	20%	17%
Negative Effect	10%	20%	10%	10%	40%	3%	10%	30%	20%	3%

3. Analysis

From the results, we can say the followings:

(1) The Ss can make a translation correctly in the sentence including prototypical meaning in S6.

(2) In the case of S1, the percentage of the meaning to change the state (*naru*) is higher in Pretest than Posttest (Pretest 40%, and Posttest 70%). The Ss can use image schemas effectively in translation:

(3) In the results of Posttest in S9, the Ss tended to translate come into Japanese by the meaning 'change of state' (Pretest 43 % and Posttest 57%).

4. Discussion and conclusion

From the results, we can say that image schemas of the prepositions gave little effect to the Ss. It would be because prepositions such as *to*, *in*, and *from* would correspond to *ni*, *nakani*, and *kara* in Japanese uniquely. And also, Image schemas of come can give some effect to the Ss because, in the posttest, the Ss tend to use the meaning '*to move*' in the sentences such as S4, S5, and S7.

The Ss can make a translation correctly in the sentence including prototypical meaning (S6). And also, in the case of S1 and S9, the Ss can use image schemas effectively in translation. In the case of S9, the image schemas of *come* and *into* could give some effect to the Ss in translation.

In conclusion, we can say that image schemas would give a good effect to the translations.

References:

Clausner, T. C. and Croft, W. (1999): "Domains and image schemas" PP. 1-31, *Cognitive Linguistics 10-1*n

Johnson, M. (1987): *The Body in the Mind*: University of Chicago Press.

Lakoff, G. (1987): *Women, Fire, and Dangerous Thing*: University of Chicago Press.

Langacker, R. W. 1987: *Foundations of cognitive Grammar. Vol. 1*: Stanford University Press.

_____ (1991a): *Concept, Image, and Symbol: The Cognitive Basis of Grammar*: Mouton De Gruyter.

Taylor, J. R. (1989a). *Linguistic Categorization*: Clarendon Press.

Ueda, N (2001) 'Image Schemas and Second Language Learning: A Case Study' poster presentation at the 5th PAAL Conference at Hawaii.