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Title	日中同形多義動詞「上がる(Agaru)」「上(Shàng)」の認知 対照研究:イメージスキーマ・ネットワークの分析
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Cognitive Contrastive Study of the Japanese and Chinese Homomorphic Polysemous Verbs '上がる (Agaru) ' and '上 (Shàng) ': An Analysis of Image Schema Networks

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Cognitive linguistics emphasizes how language users perceive the world through their physical experiences and supposes that these perceptions are reflected in language expressions. In recent years, an increasing of contrastive linguistics research has adopted cognitive linguistic approaches, forming a cross-disciplinary field called contrastive cognitive linguistics. Particularly in the study of semantic contrasts, certain concepts of cognitive semantics, such as metaphorical meaning expansion processes and schema construction, are employed to study various aspects of meaning expansion networks and the relevance of words among different languages. According to cognitive semantics, spatial experiences such as "up" and "down" play a significant role in world perception and language expressions including metaphors (Lakoff & Johnson, 1980). Image schemas, simple patterns associated with human bodily experiences, can potentially serve as experiential bases for metaphors (Nabeshima 2002: 79). Therefore, investigating image schema networks reflecting deeper levels of cognitive modes, such as image schema construction, in addition to analyzing language-level meaning expansion networks, is useful to explore the cognitive differences among speakers of different mother tongues.

This study aims to clarify the cognitive differences between native Japanese and Chinese speakers and the factors explaining these differences, focusing on the polysemous words with the same form, " $\pm \hbar^{3} \Im$ " in Japanese and " \pm (shàng)" in Chinese. It focuses not only on the analysis of languagelevel meaning expansion networks but also on comparing image schema networks reflecting deeper cognitive modes. Specifically, it comprehensively analyzes the semantic categories, image schemas, and their extension relationships of the same form polysemous verbs " $\pm \hbar^{3} \Im$ " in Japanese and " \pm (shàng)" in Chinese. A comparison of image schema networks and a consideration of the factors behind the differences will enable us to explain the differences in cognition and viewpoints between native Japanese and Chinese speakers.

Previous research conducting Japanese-Chinese contrastive studies from a cognitive linguistics standpoint primarily focused on the comparison of semantic extension networks (e.g., Zuo 2007; Lv 2009). A review of previous research on the polysemous word " \perp " in Japanese and Chinese revealed three main issues: 1) Although Chinese " \perp " serves as both an intransitive and a transitive verb, previous studies did not classify it by part of speech but tended to compare it directly with the Japanese intransitive verb " $\pm \hbar^{3} \Im$ ". 2) The classifications of meanings of " $\pm \hbar^{3} \Im/ \mp \hbar^{3} \Im$ " in Japanese and " \pm/\top " in Chinese were mainly based on dictionary examples, raising doubts about the extent to which they reflect real human life and experience. 3) Previous contrastive linguistic studies between Japanese and Chinese primarily analyzed language-level semantic extension networks, with insufficient consideration of the cognitive factors of native speakers.

In light of the research background and the deficiencies in previous studies, this research addressed the following research questions:

1. What differences exist in the image schema networks of " $\pm \hbar^{3} \delta$ " in Japanese and " \pm (shang)" in Chinese?

1-1. How are the semantic categories classified?

1-2. What are the processes of meaning extension (metaphor and metonymy) in each semantic category?

1-3. What are the characteristics of the image schemas in each semantic category?

1-4. How are the image schema networks?

2. What are the cognitive differences between native Japanese and Chinese speakers that account for the differences in image schema networks?

The methodology of this study involved the following steps: First, example sentences for " $\pm \hbar^{3} \Im$ " in Japanese and " \pm (shàng)" in Chinese were extracted from corpora in each language. Then, the semantic categories of " $\pm \hbar^{3} \Im$ " and " \pm (shàng)" were originally classified while referring to the those in Japanese-Chinese dictionaries. Subsequently, the process of semantic extension in each semantic category of " $\pm \hbar^{3} \Im$ " and " \pm (shàng)" was analyzed utilizing phenomenemes. Finally, their image schemas were analyzed to develop and compare image schema networks. The specific procedures were conducted in nine steps as follows:

- 1. Preparation of example sentences.
- 2. Classification of semantic categories.
- 3. Detailed analysis of meanings in each semantic category using phenomenemes.
- 4. Analysis of semantic extension through the comparison of phenomenemes.
- 5. Creation and comparison of meaning networks.
- 6. Creation of image schemas for each semantic category.
- 7. Analysis of the Schematic Network Models.
- 8. Creation and comparison of Japanese and Chinese image schema networks.

9. Analysis of cognitive differences between Japanese and Chinese native speakers that contribute to the differences in the image schema networks.

As a result of this analysis, it was revealed that there are 10 semantic categories for " $\pm \hbar^3 \Im$ " and 8 for " \pm (shàng)" (answer to RQ1-1). Both metaphorical and metonymic expansion processes were found to be more frequent in " $\pm \hbar^3 \Im$ " than " \pm (shàng)" (answer to RQ1-2). It was also found that the image schemas of " $\pm \hbar^3 \Im$ " (Agaru)" in Japanese and " \pm (Shàng)" in Chinese have schemas for "physical space," "physical/abstract space," and "abstract space" (answer to RQ1-3). Differences were observed in the "abstract space" schema, on the one hand, with "emotional space" and "temporal space" in Japanese and, on the other hand, "public space" and "unobstructed space" in Chinese (answer to RQ1).

Regarding the answers for RQ1, it was found that the extension to the image schema of "emotional space" is characteristic of "上がる" in Japanese, while that of "public space" is characteristic of "上 (shàng)" in Chinese. Concerning RQ2, it can be considered that this Japanese characteristics suggests a tendency among Japanese native speakers to perceive things from a subjective perspective, where they integrate themselves into their environment and place importance on their emotional states. This may align with the concept of "subjective construal" in cognitive linguistics. On the other hand, Chinese native speakers tend to perceive things from an objective perspective, such as "going out to a public space," similar to a third-person viewpoint, which may align with "objective construal" in cognitive linguistics. They tend to have a relatively more objective viewpoint compared to Japanese speakers. This is consistent with findings in contrastive studies of Japanese-Chinese translation in applied linguistics (Xu 2011; Wu 2018), which indicated a preference for subjective construal among Japanese speakers and objective construal among Chinese speakers. We claim that this research has created this new knowledge about cognition behind Japanese and Chinese language and, in addition, has methodologically contributed to proposing a systematic method from a linguistic perspective for investigating the cognitive differences underlying speakers of different mother tongues to compare scheme networks of related polysemous words.