

Title	日本語非母語話者を考慮した認知処理機能に優れる日本語サインの解析 母語ごとの認知機能の差異
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Analysis of Japanese Signboards with Superior Cognitive Processing Functions
Considering Non-Native Speakers of Japanese

Cognitive function differences by mother tongue.

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The main purpose of this study is to visualize the thinking of native speakers of Japanese and native speakers of other languages in reading Japanese signs. Specifically, the visualization of thinking is to compare the difference in recognition and processing speed between vertical and horizontal writing in Japanese sign reading.

The background of this study can be divided into cultural and environmental backgrounds. The cultural background is that Japanese has a special writing system compared to other languages. The environmental background includes the increasing number of foreign visitors to Japan and the difficulty of adopting universal design for Japanese signs.

The author believes that Japanese signs are complicated and difficult to read from the point of view of foreign visitors to Japan. Vertical Japanese signs actually posted in Japan are regarded as the same framework as horizontal signs. The author examined the reasons for the existence of vertically written signs.

The research method was determined after a discussion of the experimental method and a discussion of the participants' evaluation of their Japanese language proficiency and the mixture of objective and subjective indicators.

Before starting the experiment, a pre-experiment was conducted. At the same time, we also considered the location of the experiment and the text to be included in the overall experiment materials.

After all the preparations were made, the experiment was conducted. The participants were divided into three groups: native Japanese speakers, native Chinese speakers, and other native speakers. Three measurement experiments and two questionnaires were administered to each person.

The results of the experiments showed that the processing speed was faster for horizontal writing than for vertical writing, regardless of what the native language was. The percentage of different reading directions from the standard Japanese writing direction was found to be different among the different native speakers.

The results of the experiment were analyzed. The main software used for the analysis was EZR. The results of the analysis showed that the experimental results could be represented

visually and numerically. However, the accuracy of the results was not good enough due to the insufficient number of samples.