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The Effect of Document Structure on Non-Native Readers in Web Document Reading for Information Acquisition

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Abstract

While it is known that document design affects the reading process (Schriver, 1997), there are few studies on how design elements influence non-native readers' reading. We conducted a study to examine how native and non-native (NN) readers read Japanese web documents with different structures (networked, hierarchical, and relational) using eye-tracking and how differences in reading affect information lookup and comprehension evaluated by performance and comprehension tests. We used municipal documents currently made available on the Web by local governments in Japan. Seven native and eight NN Japanese readers took part in the study. The results show that native readers are not influenced by differences in document structure. NN readers, on the other hand, showed different patterns of reading depending on the document structure, and better information look up performance when they read documents with a relational structure. This seems to be related to the amount of information available.