Evaluating Compositionality in Japanese Textual Entailment

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Research in formal semantics and computational semantics has been guided by the principle of compositionality, a principle which says that the meaning of a complex expression is determined by the meanings of its constituent parts and their structure. Meanwhile, recent natural language processing has made remarkable progress with large language models, which have been applied to a variety of language processing tasks. However, it is still unclear to what extent these current models achieve compositional generalization abilities as assumed in theoretical studies. In this talk, I will focus on textual entailment in Japanese and report on recent and ongoing research that tries to answer this question. I will give an overview of the current state of research on Japanese textual entailment, comparing different datasets and approaches. I will then report on our own recent results in this field and discuss the remaining issues and problems from a linguistic perspective. (This is partly joint work with Hitomi Yanaka.)