The distance effect of head-complement dependency in sentence acceptability

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Abstract: In the linguistic literature, few researches have focused on the relation between dependency distance and acceptability on sentence comprehension. The aim of the current study was to clarify if the distance of dependency between head and complement influences sentence acceptability.

To investigate this issue, we asked online sentence acceptability judgment experiment of 19 right-handed healthy native speakers of Japanese. This experiment was approved by the ethical committee of Tohoku University. All stimuli were ungrammatical right node raised Japanese sentences. This experiment contained two conditions: a head verb and semantically incongruent complement are distant (DIST) and near (NEAR).

Since the result showed statistically higher acceptability in DIST than that in NEAR (p<.05, F(1, 19)=4.91). The implication of this result is that, in real-time sentence processing, due to the decay effect of temporally stored head-complement dependency information, the acceptability of the distant sentences is more acceptable than that of near ones.