



One Brain-Two Grammars?  
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## What neurological disorders reveal about dual processing of language

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Formulaic language (FL) consists of a large number and variety of unitary expressions, stored in memory and processed as coherent, stereotyped forms (including word order and prosody) with conventionalized meanings and contingent conditions of use. Depending on the categories of formulaic expressions selected for analysis, incidence measures indicate that formulaic language constitutes from one fourth to one half of normal conversational interaction.

Clinical studies reveal that formulaic language behaviors are affected by neurological disturbance. Following left hemisphere (LH) damage, proportions of formulaic expressions (FEs) in spontaneous speech are significantly increased over those of healthy speakers. In contrast, a diminution of FEs occurs in right hemisphere or subcortical damage. An over-abundance of formulaic language in Alzheimer's disease, when subcortical nuclei remain functional, further supports the role of the basal ganglia in FE production. These convergent observations lead to a dual process model of language, proposing that novel language is represented in the LH and formulaic language is modulated by a right hemisphere-subcortical system.