

Information structure and animacy in processing sentences in text.

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Processing the sentences of a text is a complex process, that involves the integration of different types of information, such as the syntactic category and meaning of the words, the syntactic and thematic structure of the sentence, and the preceding discourse, including pragmatic context. According to one class of syntactic-first theories, readers will initially assign the simplest possible syntactic structure in building up the representation of the sentence. These theories state that the sentence is initially parsed with help of the information of the syntactic category of the words only. Only later in the process, semantic and pragmatic factors play a role that eventually force the reader to reanalyze the sentence and repair faulty assigned structures.

We will show for NP/S-coordinated ambiguous sentences and for SR/OR-clause ambiguous sentences that processing these sentences in isolation is in accordance with the syntactic preference that is predicted by syntax-first theories, as evidenced by differences in reading times for disambiguating regions. However, if the information structure of the sentence is manipulated by embedding it in a proper referential context or by using pronouns, or if semantic factors, such as animacy, are properly manipulated, no sign of difficulty is encountered in processing S-coordination or OR-clause. The NP-coordination preference, obtained in earlier experiments for the sentences in isolation, are explained by a topic continuity principle: Readers don't assume a second topic unless it is indicated explicitly. Similarly, the SR-preference in the experiments reported in the literature need not be a syntactic preference either, but can be explained by a pragmatic factor that determines which discourse entity is the most likely topic.