

Debriefing sheet for the study “Give me a break”

This experiment is an example of research in the area of psycholinguistics, or the psychology of language. Psycholinguistics includes research in areas such as language acquisition, speech perception and the relation of language to learning, memory and thought. Another central concern of psycholinguistics is sentence comprehension. How is it that we can understand sentences that we have never seen or heard before? Understanding usually occurs instantaneously, seemingly without effort. But in fact, even as you read this sentence, a number of processes are occurring in your mind. Words are recognized and retrieved from memory, the structure of the sentence is analyzed as it develops, and the meaning of the sentence is set in relation to the context of the preceding sentences.

In this production study, we are looking at possible effects of prosody when we understand sentences that we read aloud. The prosody of a sentence is sometimes called ‘intonation’, and it can be loosely described as the melody in speech. The effects of prosody when we understand spoken sentences have been investigated in a number of studies. Our concern for this experiment was to investigate whether the way people read ambiguous sentences aloud affects the way they understand them.

Have a look at the following four sentences which are written without any commas. All sentences are ambiguous because the brother or the bridegroom in (1) and (2) or the second cousin or the bridegroom in (3) and (4) can be the one who swims or swims like a fish.

- (1) The brother of the bridegroom who swims like a fish was last seen on Friday night.
- (2) The brother of the bridegroom who swims was last seen on Friday night.
- (3) The second cousin of the bridegroom who swims like a fish was last seen on Friday night.
- (4) The second cousin of the bridegroom who swims was last seen on Friday night.

When people read these sentences aloud, they pause at different positions in the sentence. Some researchers have claimed that if people pause after the word *bridegroom*, but not after *brother* or *second cousin*, they will interpret the sentence to mean that the brother or second cousin swims or swims like a fish. If people pause after *brother* or *second cousin*, but not after *bridegroom*, they will interpret the sentence to mean that the bridegroom swims or swims like a fish. Furthermore, some researchers have claimed that a longer first noun (*second cousin* as opposed to *brother*) makes people more likely to pause after the first noun, which in turn makes people more likely to say that the bridegroom swims. Finally, some researchers have claimed that a longer relative clause (*who swims like a fish* as opposed to *who swims*) makes people more likely to pause after *bridegroom*, which in turn makes them more likely to say that the brother or the second cousin swims (like a fish).

Ironically, many of the studies investigating these claims deal with silently read sentences, and researchers assume that people hear a voice in their head when reading silently. This voice “pauses” in certain sentence positions and contributes to how people understand the sentences they read silently. Our previous experiment did indeed find evidence for the existence of a voice in people’s heads when they read silently. However, we cannot directly measure where in a sentence the voice in people’s heads “pauses”. Therefore, our experiment has people read sentences *aloud* so that we can directly measure pauses and directly investigate the claims made in the above paragraph.

Thank you for your participation. If you wish to inquire about the results of the experiment later, please feel free to contact us at the phone number or e-mail addresses given on the instructions sheet.