The use of perspective information in language comprehension: What eye-movements tell us about real time processing

While the linguistic signal itself encodes information, some of the information required for a complete linguistic message is not directly encoded in speech and has to be filled in by the listener based on the context. This talk argues that non-linguistic information about the context, and, in particular, information concerning the knowledge state of the speaker, is integrated by the listener in real time.

I present two studies that use the visual world eye-tracking paradigm, in which participants' eye-movements are monitored as they follow spoken instructions pertaining to real objects or pictures on a computer screen. This method allows studying the comprehension of spoken language in real time while manipulating real world contexts in a controlled way.

The first experiment manipulates shared vs. privileged information by controlling which objects are visible to both interlocutors vs. those that are visible to the listener alone, affecting the status of the objects as potential referents. The second experiment manipulates shared vs. privileged information by controlling what interlocutors know about the potential referents. In both cases, the status of information as being shared vs. privileged is shown to be incorporated into reference resolution in real time.