On the pragmatics of numeral modifiers

The availability and time course of variation, ignorance and indifference inferences

Languages have a quite large inventory of expressions to refer to an imprecise quantity such as \( n \geq 4 \). In English, for instance, this quantity can be described by the expressions \( 4 \) or more, at least \( 4 \), more than \( 3 \), minimally \( 4 \), over \( 3 \), etc. Do all these expressions actually convey the exact same meaning? No. Some of them, i.e., at least \( 4 \), \( 4 \) or more, minimally \( 4 \) (vs. more than \( 3 \), over \( 3 \)), have been found to additionally convey speaker ignorance effects and these effects are pragmatic in nature. This dissertation probes experimentally speaker ignorance effects as well as two other types of meaning, i.e., variation effects and speaker indifference effects, by looking at the off-line and the real-time comprehension of utterances with two distinct kinds of numeral modifiers, represented by at least and more than. The aim is to find out where one should draw the dividing line between the core meaning and the pragmatic meaning of each kind of modifiers, and how different these two are, with a main focus on their pragmatics. Experimental data reveal that all three types of inference are available with both at least and more than, and are non-obligatory, context-dependent pragmatic inferences. It is further shown that more than triggers variation and speaker ignorance inferences less robustly compared to at least. These findings point to an account where the inferences of at least and more than come about through different routes. Those associated with more than are based on standard Quantity reasoning. The same holds partly for at least, but in addition suppositive modifiers trigger a Manner implicature based on a conventional signal of anti-specificity. As to speaker indifference inferences, the opposite pattern seems to arise between the two numeral modifiers. This could still be accommodated by the aforementioned account as long as we take conventionalization processes into consideration.