Sentences, Centers, and Sets:
Set Selection and the Meanings of *More* and *Most*

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Given some blue and yellow dots, (1) and (2) are true in all the same situations.

(1) Most of the dots are blue

(2) More of the dots are blue

Nonetheless, they differ in meaning: (1) is proportional, so the number of yellow dots is only indirectly relevant; (2) is comparative, so the number of yellow dots is essential. We show that from a young age, these different meanings have distinct consequences for encoding and storing visual information.

Participants (n=137; ages=3;11-8;3) were shown a blue/yellow dot display on an iPad and asked whether e.g. "the blue team painted more/most of the dots". Upon responding, the dots disappeared and they were asked to "touch where the middle of the blue/yellow dots was". If participants attended to a particular set during evaluation, they should provide a better estimate of its center (despite it being incidental to the task). We expect participants to know the center of the focused set (blue) following both *more*- and *most*- judgments, but to know the center of the non-focused set (yellow) only after evaluating a *more*-statement.

As predicted, we observed a main effect of quantifier ($F_{1,130} = 6.9, p < .01$) and an interaction between quantifier and set ($F_{1,130} = 6.0, p < .02$), with participants being more accurate to touch the center of the non-focused set following *more*-statements than following most-statements. These results suggest that from an early age the meanings of *more* and *most* are distinct, even when applied to identical displays.