

REPETITION EFFECTS IN OBJECT SWITCH COSTS: AGAINST A SWITCH COST  
MEASURE OF A DISCRETE FOCUS OF ATTENTION

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ABSTRACT

Object switch costs have been taken to index items in the focus of attention (e.g., Oberauer, 2005). They refer to savings in reaction time (RT) when a target object to which a response must be made is the same as the target object in the previous trial, compared to trials in which there is a switch to a different target object. It has been presumed that switch costs occur because each target object remains in the focus until there is a need to switch to a different target. Here we show, however, that object switch costs can increase as the number of repetitions of a target object increase from 1 to 3 before a possible switch. If switch costs solely reflect presence of an object in the focus of attention, then presence in that focus would appear to be graded rather than all-or-none. Additional interpretation of the data comes from a separate examination of switch and no-switch trials across different numbers of repetitions. These data are inconsistent with a single-item focus of attention because of two specific patterns of data: a shorter RT for non-switching trials when going from 1 to 2 repetitions, and a longer RT for switching trials going from 2 to 3 repetitions.