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Asymmetric switch costs as sequential difficulty effects.

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Source

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Abstract

When switching between tasks of unequal difficulty, there is often a larger switch cost for the easy task than for the difficult task. The authors propose a new account of these asymmetric switch costs based on sequential difficulty effects. They argue that the asymmetry arises from impaired performance after a difficult trial regardless of whether the task switches or repeats. Empirical support for this idea is provided in two experiments on arithmetic task switching in which asymmetries are observed for secondary difficulty manipulations, even in the context of arithmetic task repetitions. The authors discuss how their sequential difficulty account might explain asymmetric restart costs in addition to asymmetric switch costs and how sequential difficulty effects might be explained by resource depletion involving executive control or working memory.

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