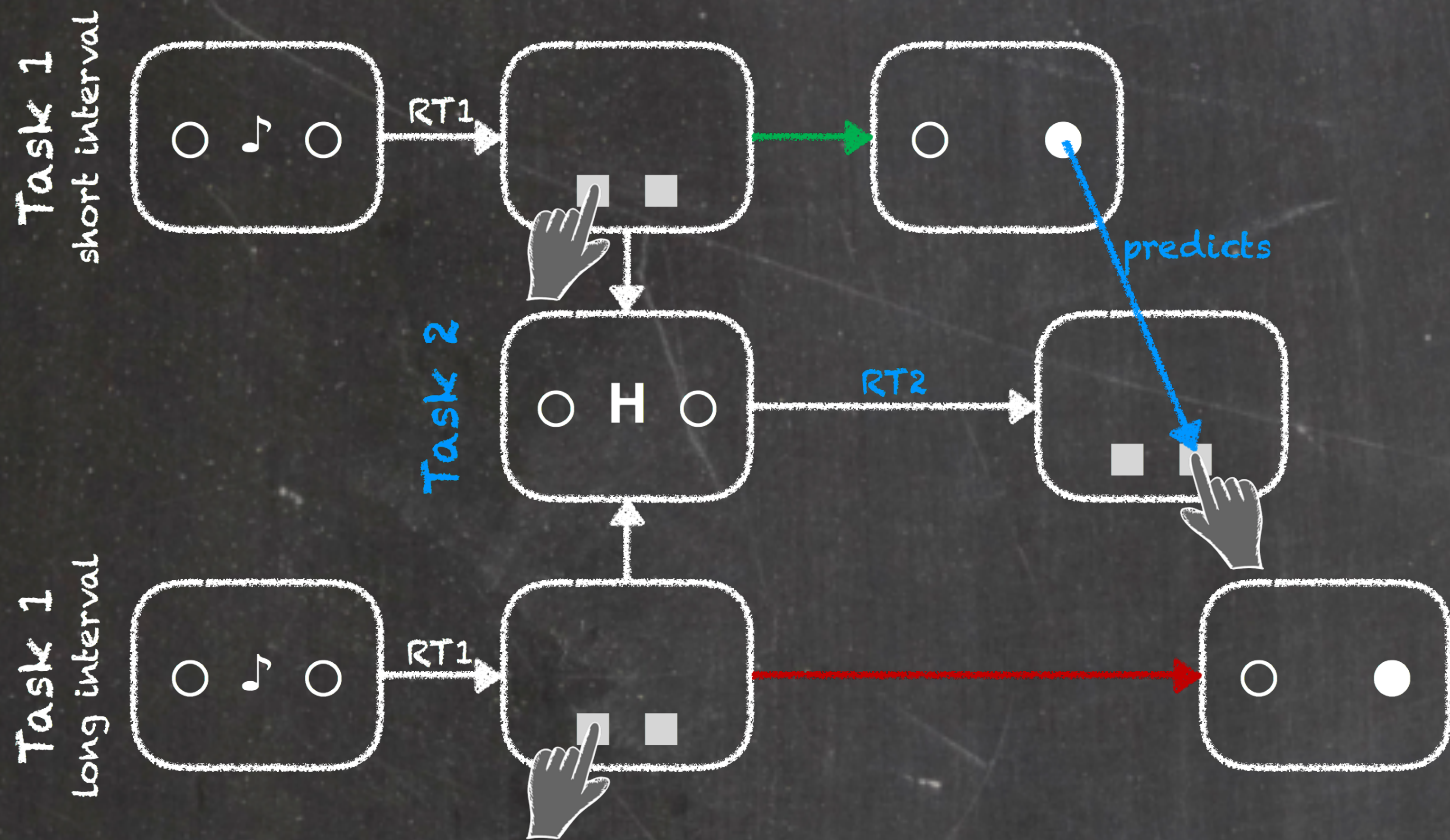


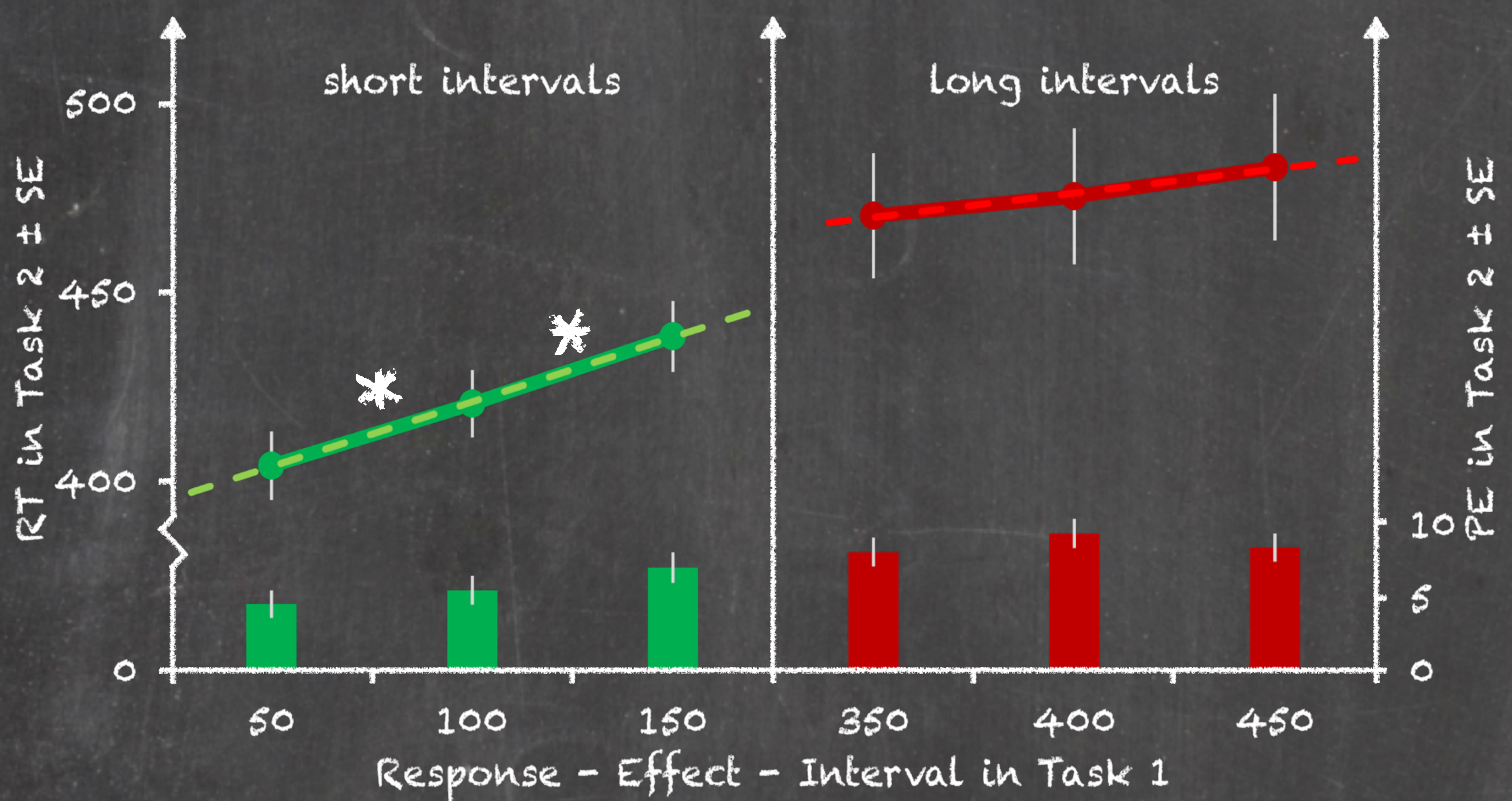
BENEFITS OF EFFECT MONITORING

Even task-irrelevant action effects tend to be monitored, and effect monitoring deteriorates the processing of an unrelated subsequent task (Wirth et al., submitted). However, effect monitoring might be beneficial if the effects allow to shortcut the processing of a secondary task. Consequently, action effects that predict subsequent responses should facilitate subsequent tasks: the earlier the effect, the greater the benefit.



In Task 1, participants responded to a tone, in Task 2, they categorized letters. Task 2 started when the response in Task 1 was given. These responses produced an action effect that reliably predicted the required response in Task 2. This effect appeared after **short** or **long** R-E intervals.

For the short intervals, a significant influence of the R-E delay-manipulation emerged, with faster responses in Task 2 for shorter compared to longer delays. For the long intervals, no such effect was found. PEs reflect that pattern.



Even though the effects of Task 1 were completely irrelevant, they were monitored in the short interval condition and provided a shortcut for Task 2. Response times and error rates diminish with earlier effects. However, if the delay is too long, it seems to be inefficient to monitor action effects, and Task 2 is completed without using a shortcut. Here, effect monitoring is characterized as a cognitive process that can be scheduled flexibly if it proves to be beneficial for subsequent actions.

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