Title: Selective process integration: A cinematic lens for visual awareness during event perception

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Abstract:

Previous research has explored visual awareness during naturalistic event perception, but it is often unclear whether the observed patterns of awareness reflect idiosyncratic, and/or unnatural task demands. In this talk, I will propose that the art of cinema is rooted in a set of ecologically grounded cues that can provide a useful functional framework for visual awareness. I will discuss recent empirical demonstrations that in addition to failures to detect changes, cinema viewers are also sometimes unaware of disruptions to the dynamics of events. These disruptions include deletions, misorderings, ellipses, and repetitions during events. However, awareness of these disruptions increases both when viewers scrutinize the dynamics of events, and, as discovered by filmmakers, when a limited subset of spatial and conceptual cues induce integrative visual processing. I therefore propose that visual event perception can be characterized by a selective integration of processes that efficiently deploys limited capacity resources. On this view, failures of visual awareness occur because processes such as visual attention, visual representation, tokenization, identification, and memory search often remain unlinked. One consequence of this selective integration approach is that awareness of the moment-to-moment dynamics of visual events often reflects forms of visual process integration that are only sometimes worth their associated costs.