Filling in the gaps: Event segmentation is robust to missing information

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Abstract: Fluent event processing involves segmenting streaming sensory information into discrete units. Adults and children selectively attend to these meaningful moments within event streams, which predicts later memory. In natural environments, however, uninterrupted attention is unlikely. Consequently, some information is missed, including event boundary information. To what extent does missing information alter the attentional dynamics of processing, specifically viewers' ability to target remaining boundaries with enhanced attention? Adults advanced at their own pace through slideshows of unfolding activity. Slides were systematically deleted to enable comparison of viewers' attentional dynamics when specific content was present versus absent. Average dwelling per slide increased with missing content. However, the attentional dynamics of processing were unaltered; attention to boundaries displayed comparable enhancement regardless of missing content. Attention modulation during processing of relatively familiar events appears to be highly robust to missing information. What occurs with more novel events is an interesting question for future research.