Do Time Constraints Re-Prioritize Attention to Shapes During Visual Photo Inspection?

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Abstract

People's visual experiences are easy to examine along natural language boundaries, e.g., by categories or attributes. However, it is more difficult to elicit detailed visuospatial information about what a person attends to, e.g., the specific shape of a tree. Paying attention to the shapes of things not only feeds into tasks like visual category learning, but also enables us to differentiate similarly named objects and to take on creative visual pursuits, like poetically describing the shape of a thing, or finding shapes in the clouds or stars. We use a new data collection method that elicits people's prioritized attention to shapes during visual photo inspection by asking them to trace important parts of the image under varying time constraints. Using data collected via crowdsourcing over a set of 187 photographs, we examine changes in patterns of visual attention across individuals, across image types, and across time constraints.