Eye-tracking & Visualization Evaluation

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My position

Eye-tracking can help us evaluate visualization tools and techniques.
Why evaluate: make better

• Are our tools usable?
• Are they understandable?
Why evaluate: understand

• Are they better then state-of-the-art?
  - faster/less errors
  - more insights/completely new things
• How do people process & work with data?
Eval & ET: make better
Eval & ET: understand
Eval & ET: understand

• open the cognitive black box
  - A is faster than B —> Why is A faster?
  - how are multiple-coordinated views used?
  - are visualizations really perceived in the way we design them?

• understand individual differences:
  - different ways of going about tasks
  - different reasoning strategies

• from usability, to utility, to reliable statistical approaches (generalize)

More on Eval & ET tomorrow