Design Study Contributions Come in Different Guises: Seven Guiding Scenarios

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Increasing number of design studies
Design Studies

-- domain expert --  -- vis researcher --
Design Study Contributions

-- domain expert --

-- vis researcher --
Design Study Contributions

-- domain expert --

-- vis researcher --

-- vis fellows --

Inspired by: Gleicher, BELIV 2012
7 Guiding Scenarios for DS Contributions

1. Propose novel technique
2. Reflect on methods
3. Illustrate design guidelines
4. Transfer to other problems
5. Improve understanding
6. Problem readers care about
7. Strong evaluation

For each:
characterization
examples
challenges

Inspired by: Lam et al., TVCG
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Kincaid, InfoVis 2010
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Lloyd and Dykes, InfoVis 2011

Sedlmair et al., InfoVis 2012
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Borkin et al., InfoVis 2011
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Gratzl et al., InfoVis 2013
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Sedlmair et al., InfoVis 2012
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Oelke et al. VAST 2010
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Long-term

Brehmer et al., InfoVis 2014

Many users

Baur et al., InfoVis 2010

In the Lab

Borkin et al., InfoVis 2011
Discussion

• Just a starting point
• Guide authors/reviewers
  - Share experiences, challenges, and opportunities
• Improve scientific value of design studies
  - e.g. problem abstraction is key

Thanks!