Design Study Contributions Come in Different Guises:
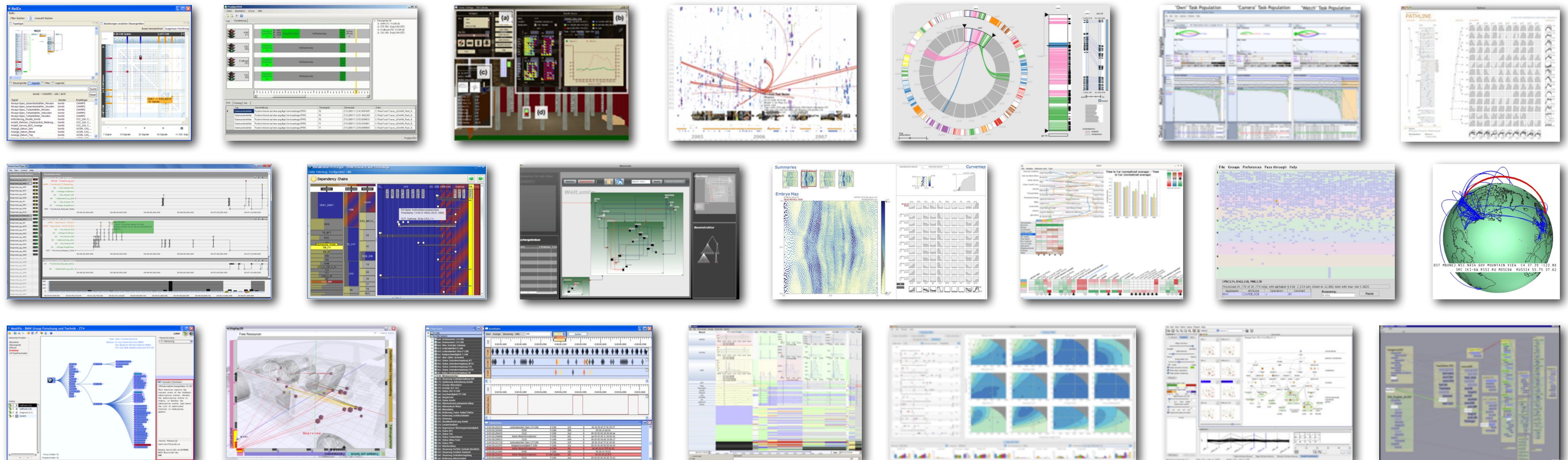# Seven Guiding Scenarios
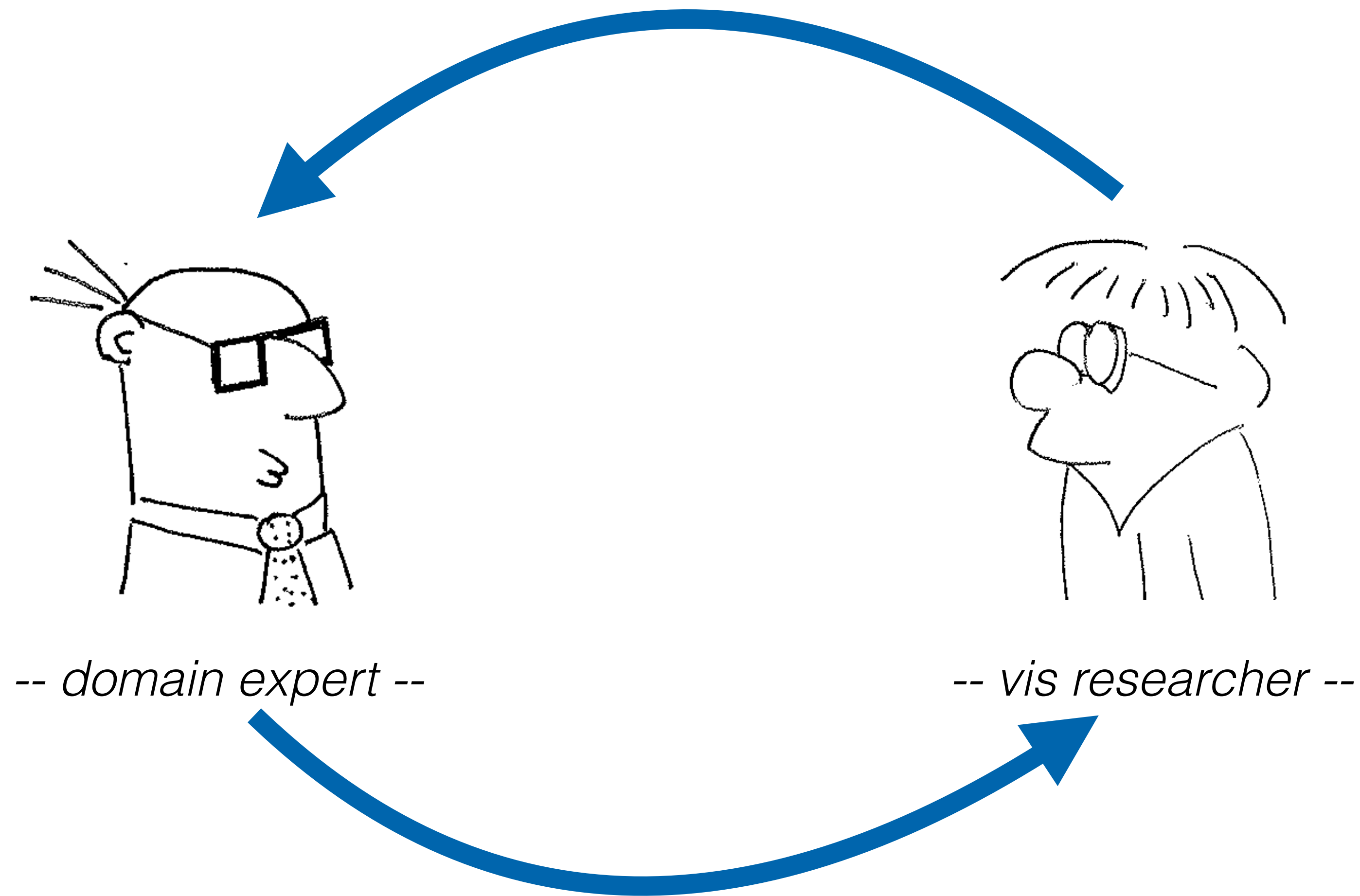
Michael Sedlmair
Visualization & Data Analysis Group

universität wien

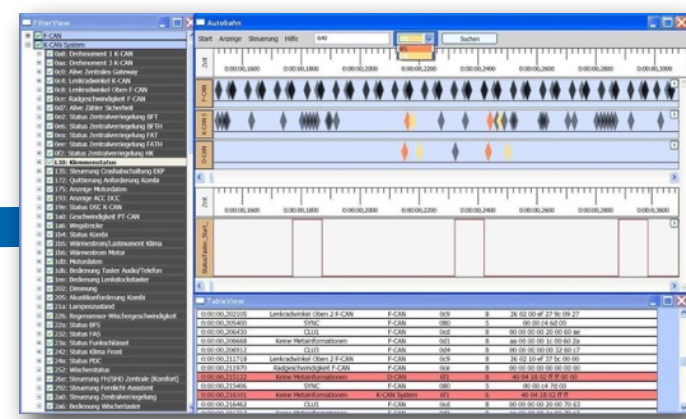# Increasing number of design studies

Design Studies

-- *domain expert* --   -- *vis researcher* --

Design Study Contributions

-- *domain expert* --

-- *vis researcher* --

Design Study Contributions
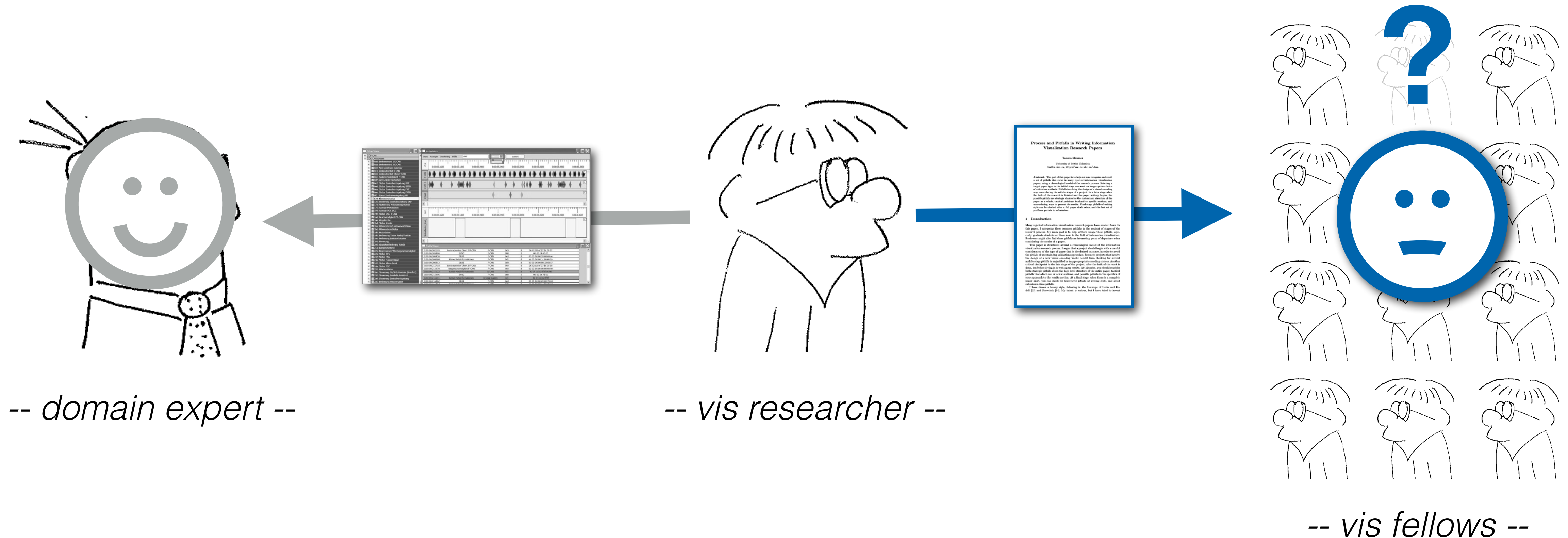

-- domain expert --

-- vis researcher --

-- vis fellows --

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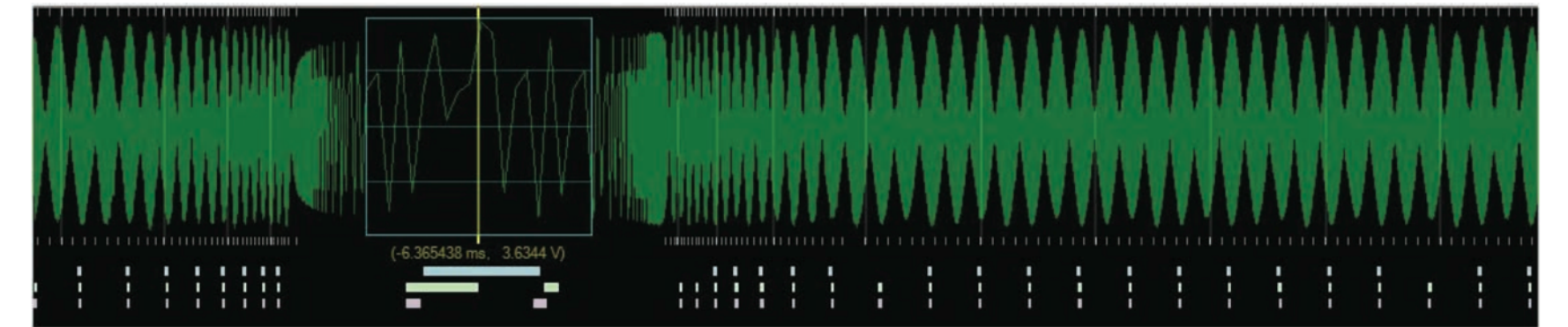
7 Guiding Scenarios for DS Contributions

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

7 Guiding Scenarios for DS Contributions

1. **Propose novel technique**

Kincaid, InfoVis 2010

2. Reflect on methods

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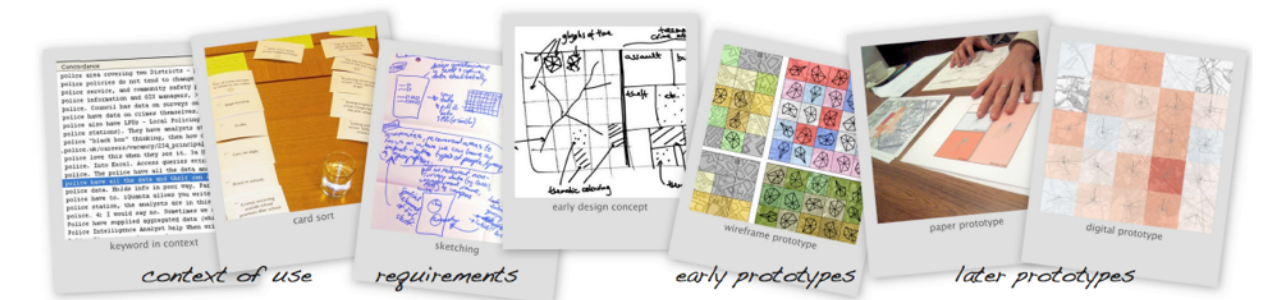
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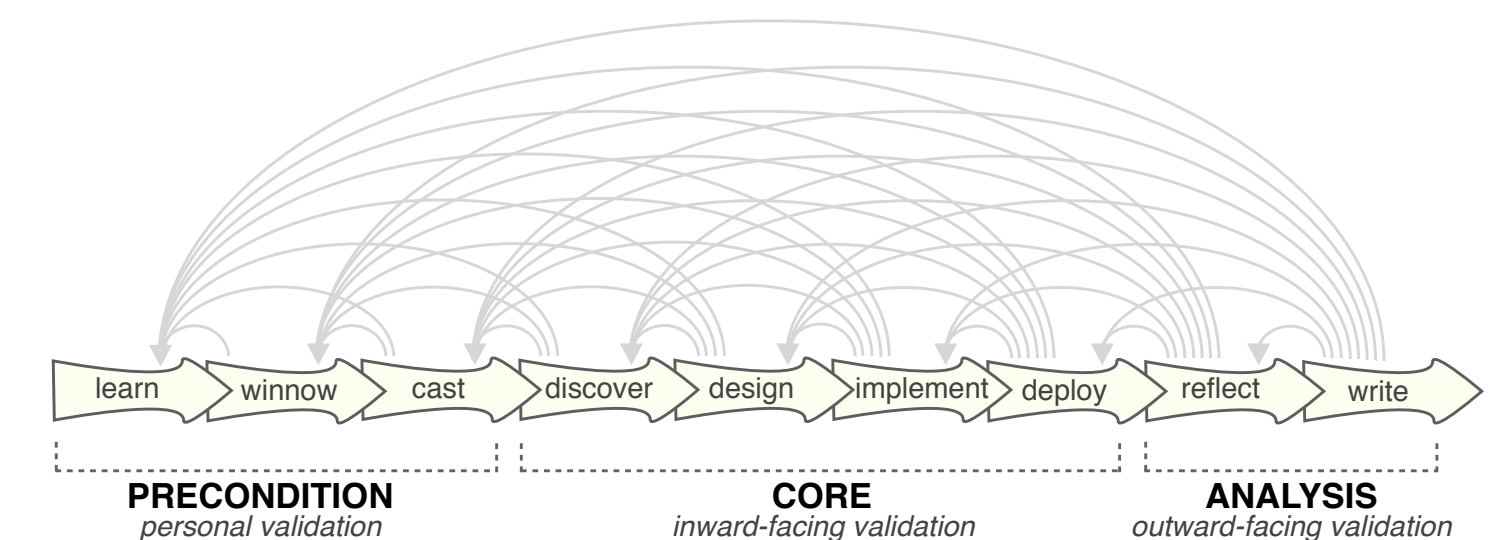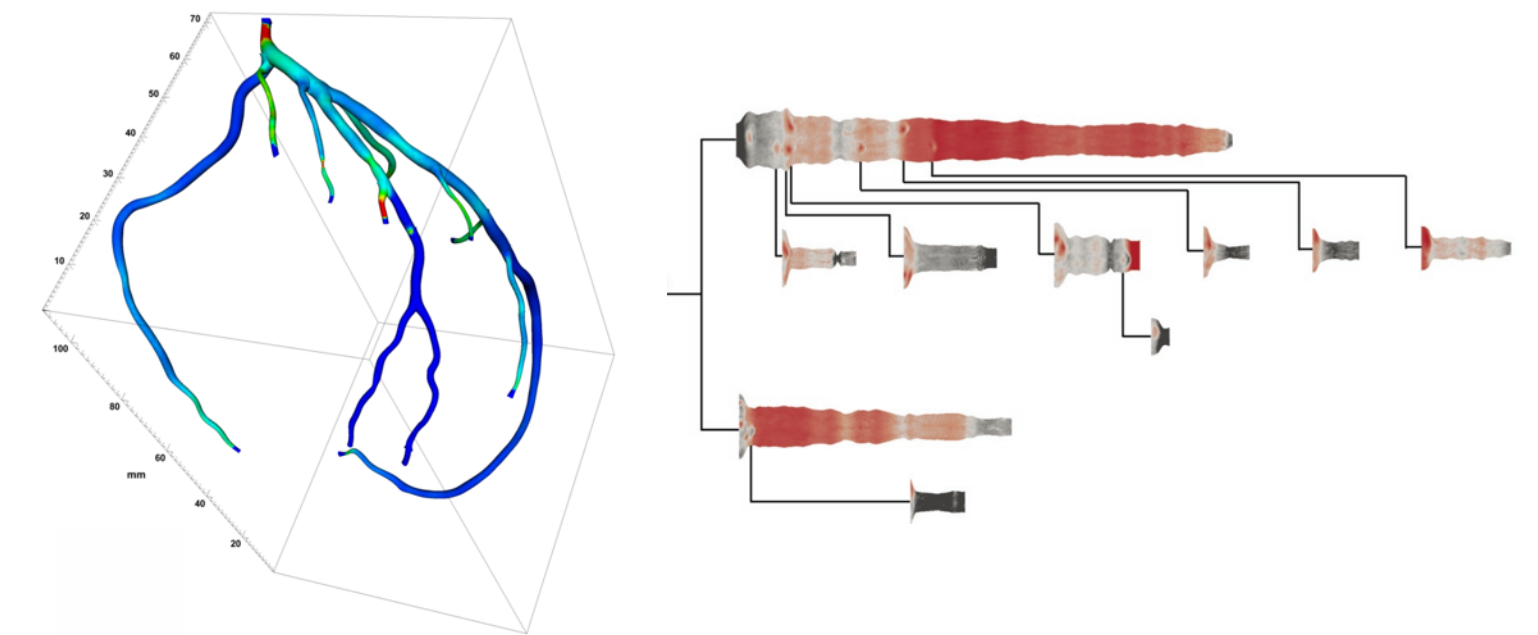6. Problem readers care about

7. Strong evaluation

Lloyd and Dykes, InfoVis 2011

Sedlmair et al., InfoVis 2012
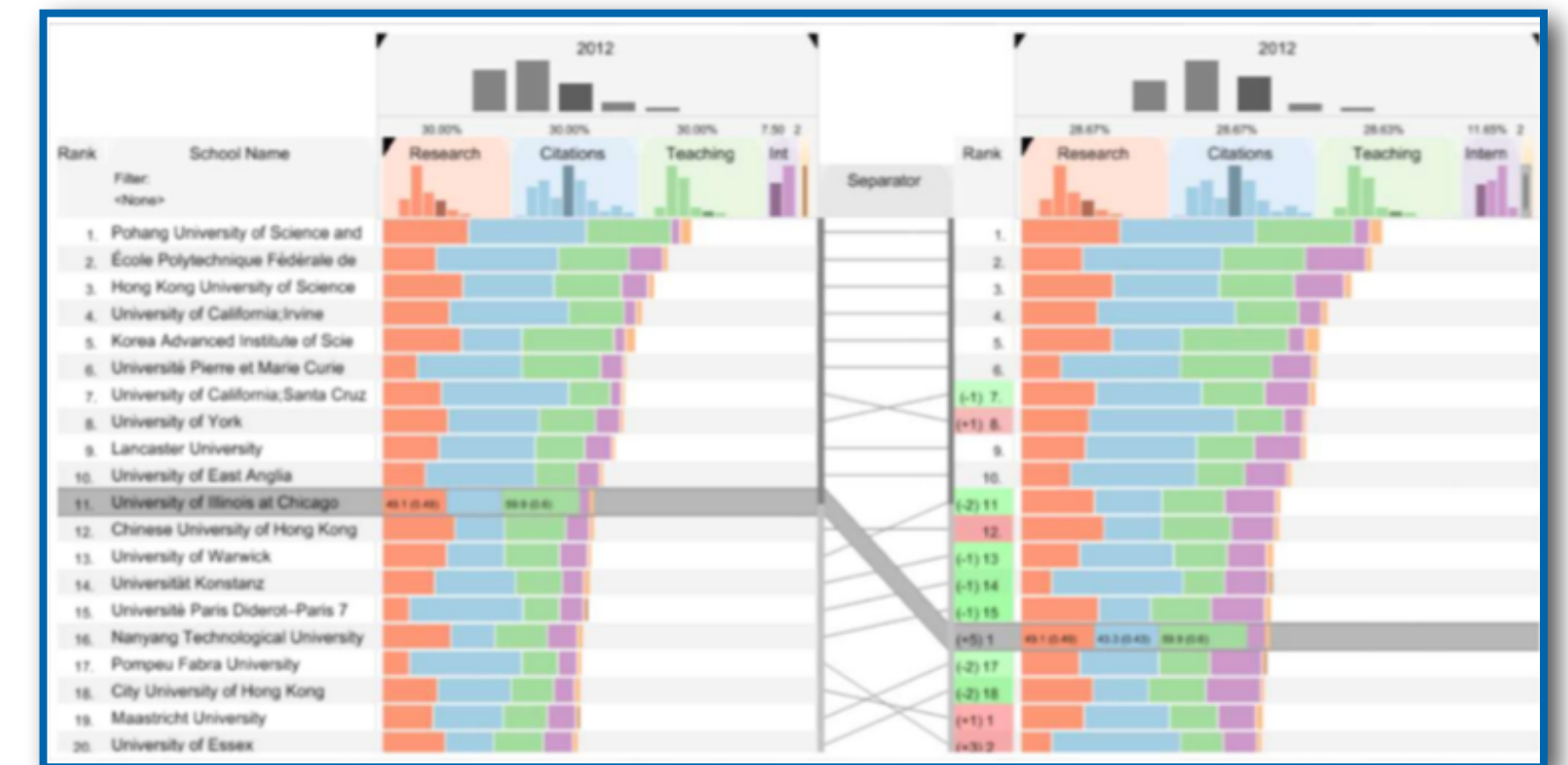
7 Guiding Scenarios for DS Contributions

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Borkin et al., InfoVis 2011

5. Improve understanding

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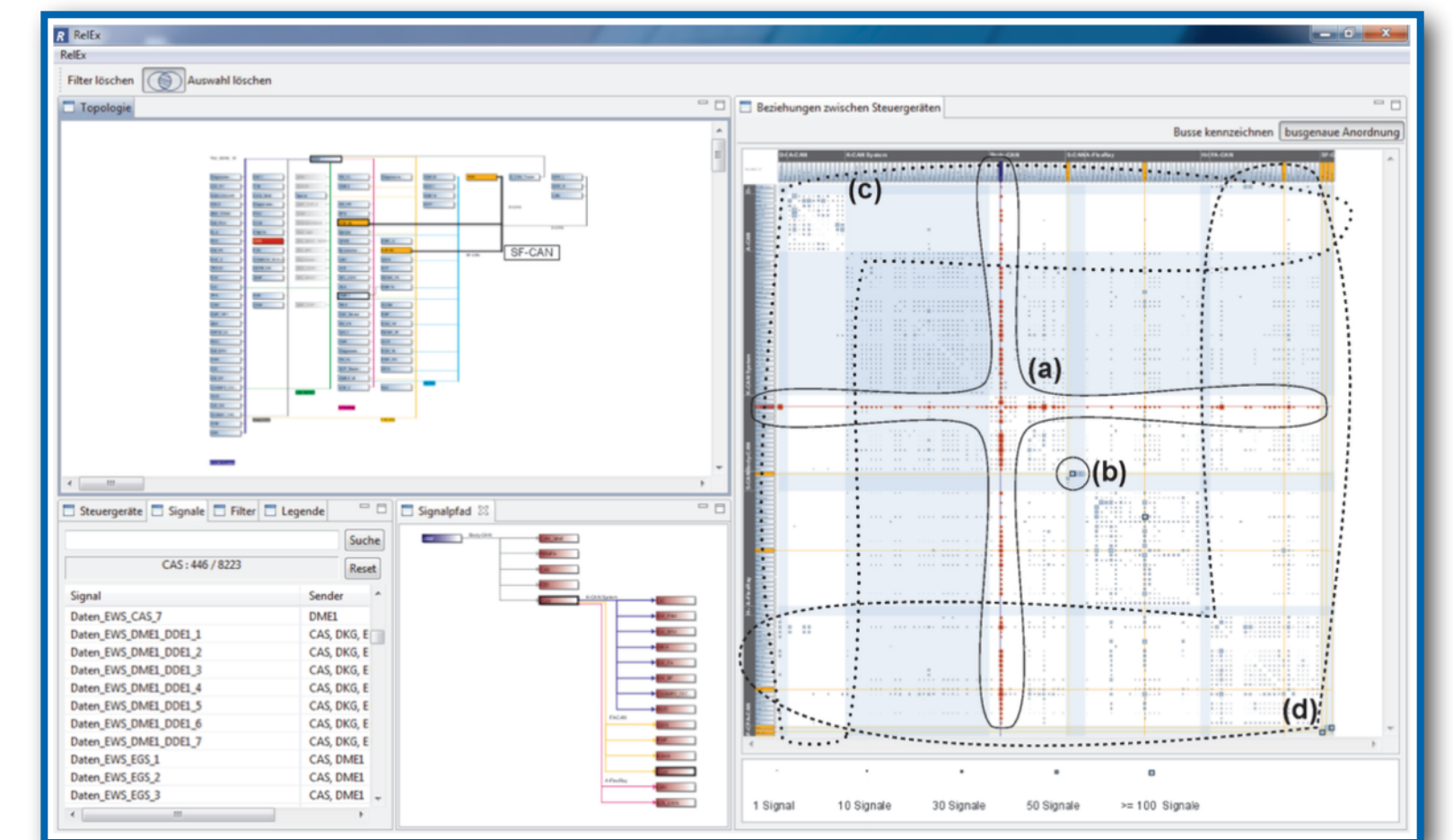
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Gratzl et al., InfoVis 2013

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5. **Improve understanding**

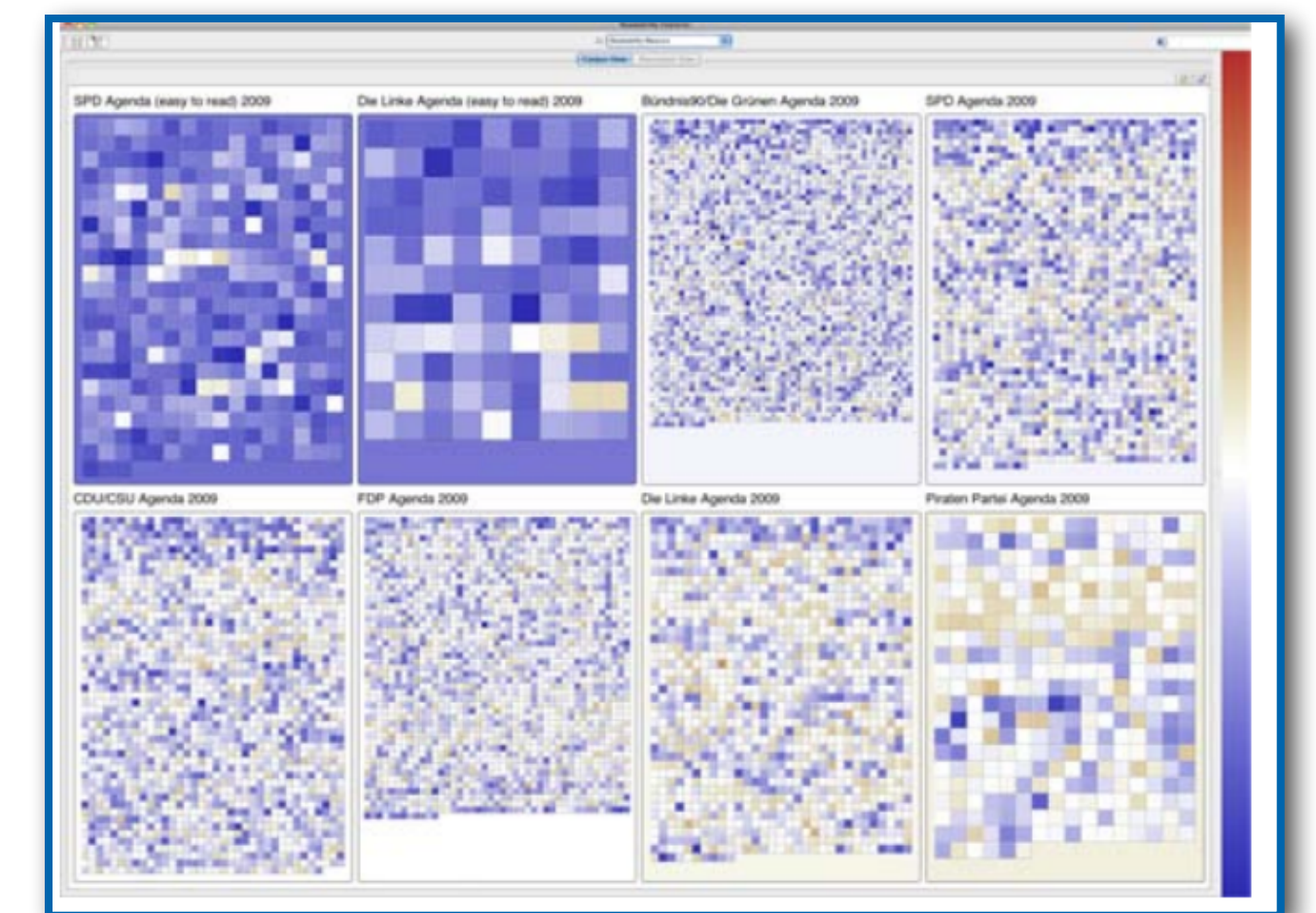6. Problem readers care about

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Sedlmair et al., InfoVis 2012

7 Guiding Scenarios for DS Contributions

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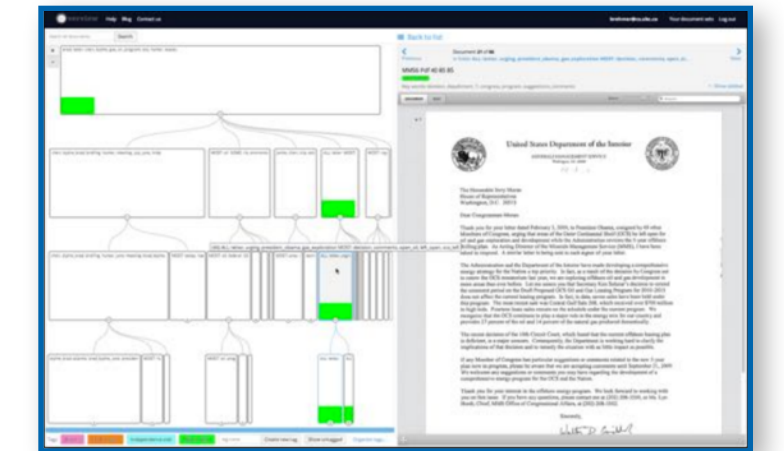6. **Problem readers care about**

7. Strong evaluation

Oelke et al. VAST 2010
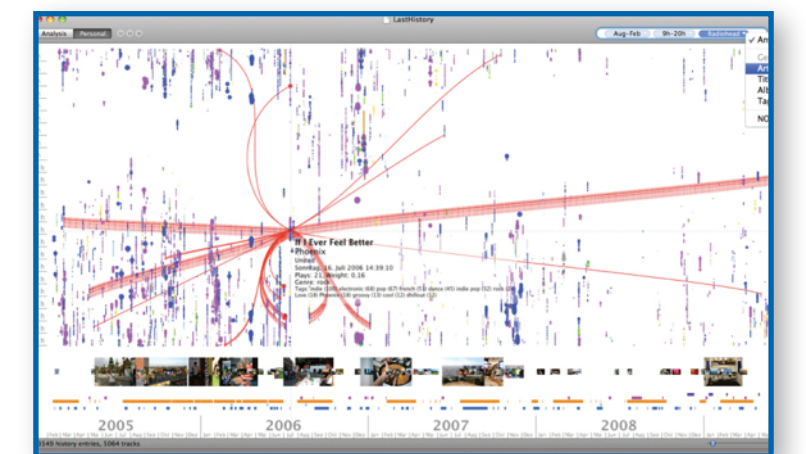
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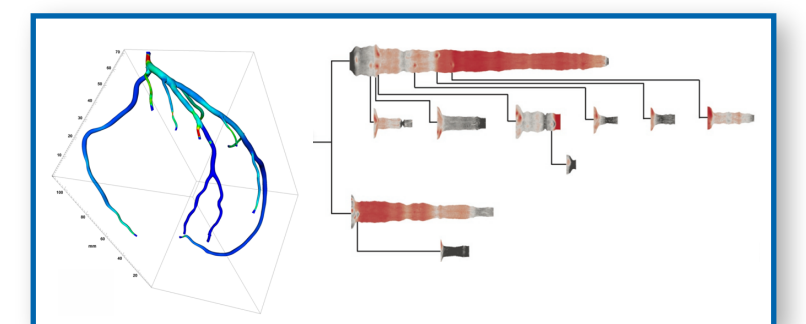
7. Strong evaluation

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!