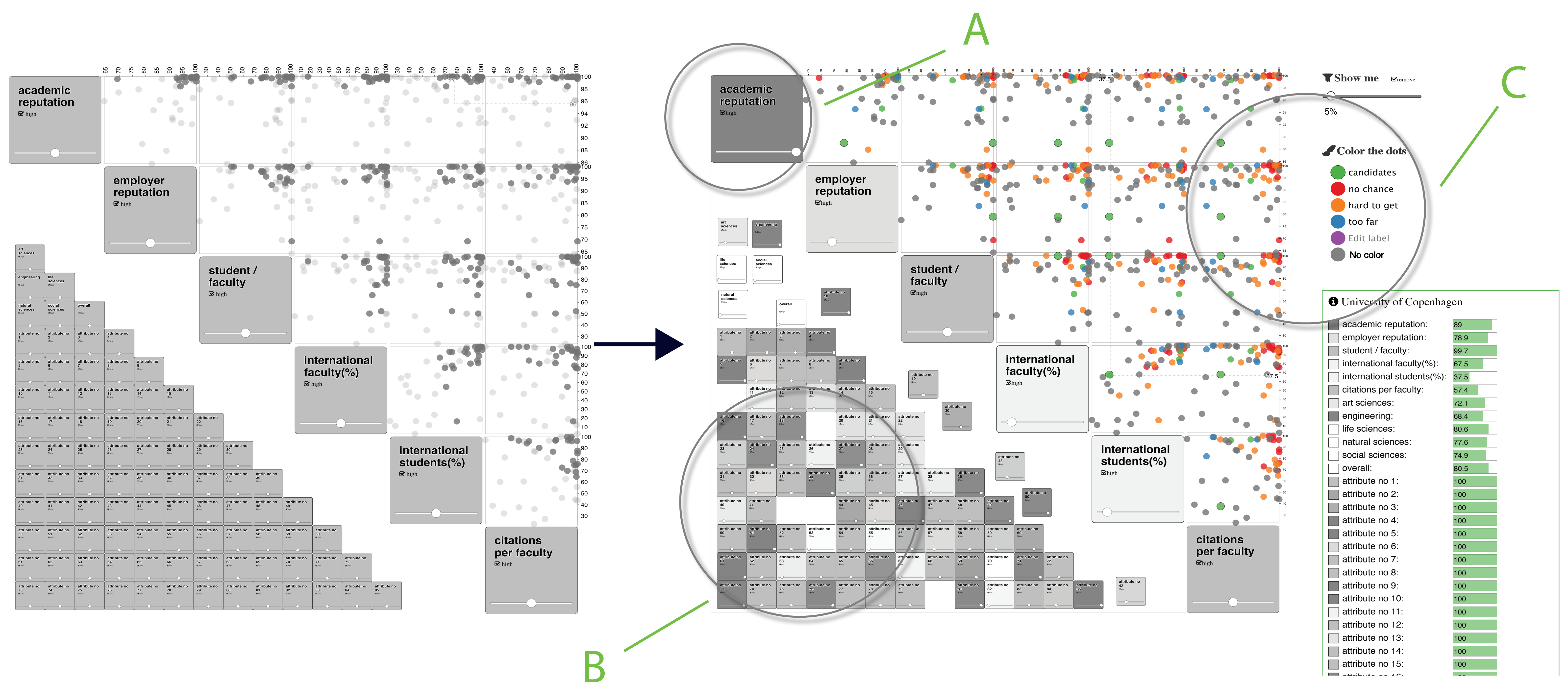


DcPAIRS: A Pairs Plot Based Decision Support System

Evanthia Dimara

Paola Valdivia

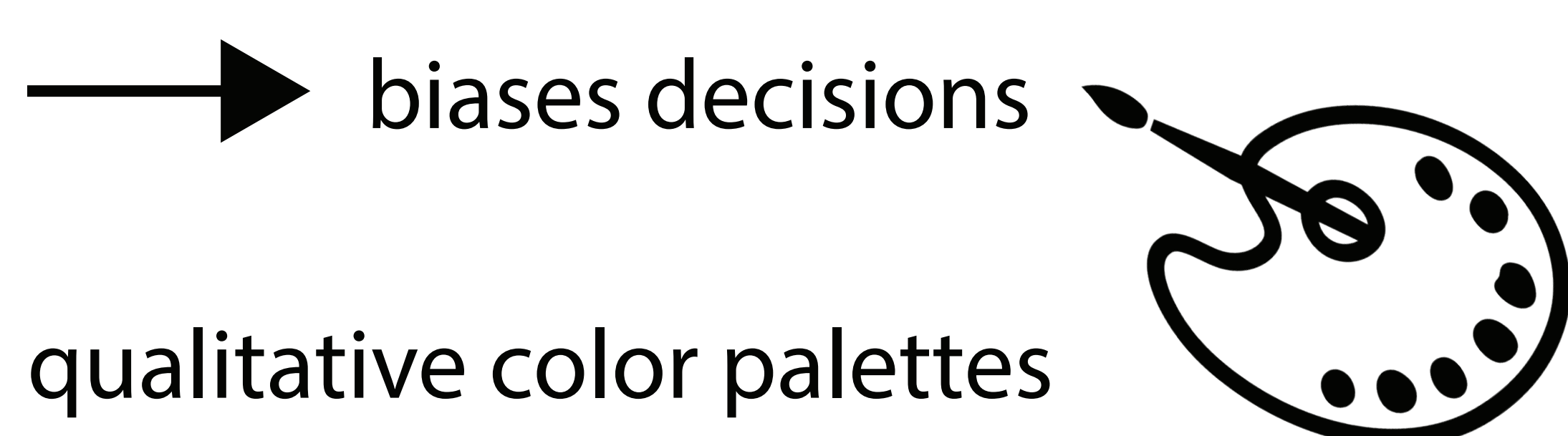
Christoph Kinkeldey



THE PROBLEM

Most decision support visualization systems use colors to map multiple attributes across coordinated views

1 color = semantics (e.g. red for danger)



2 qualitative color palettes



OUR APPROACH

- decision alternatives shown in a compact Generalized Pairs Plot (Emerson et. al, 2013)
- attributes as shaded boxes; on the diagonal for a detailed view [A] others in a pixel map overview [B]
- attribute importance weights in a continuous gray scale expressing preferences as relative tendencies rather than precise values
- colors used for user-authored annotations [C] to support all stages of decision process

CONTRIBUTION

DcPAIRS: Visualization system for decision support

- high number of decision attributes (>100)
- user-authored annotations
- communication of uncertainty in user preferences
- compact overview
- flexible multi-attribute decision space

CONTACT

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