

# Uncertainty Unveiled: Revealing the Uncertainty of Distribution Visualization Through Cross Reality

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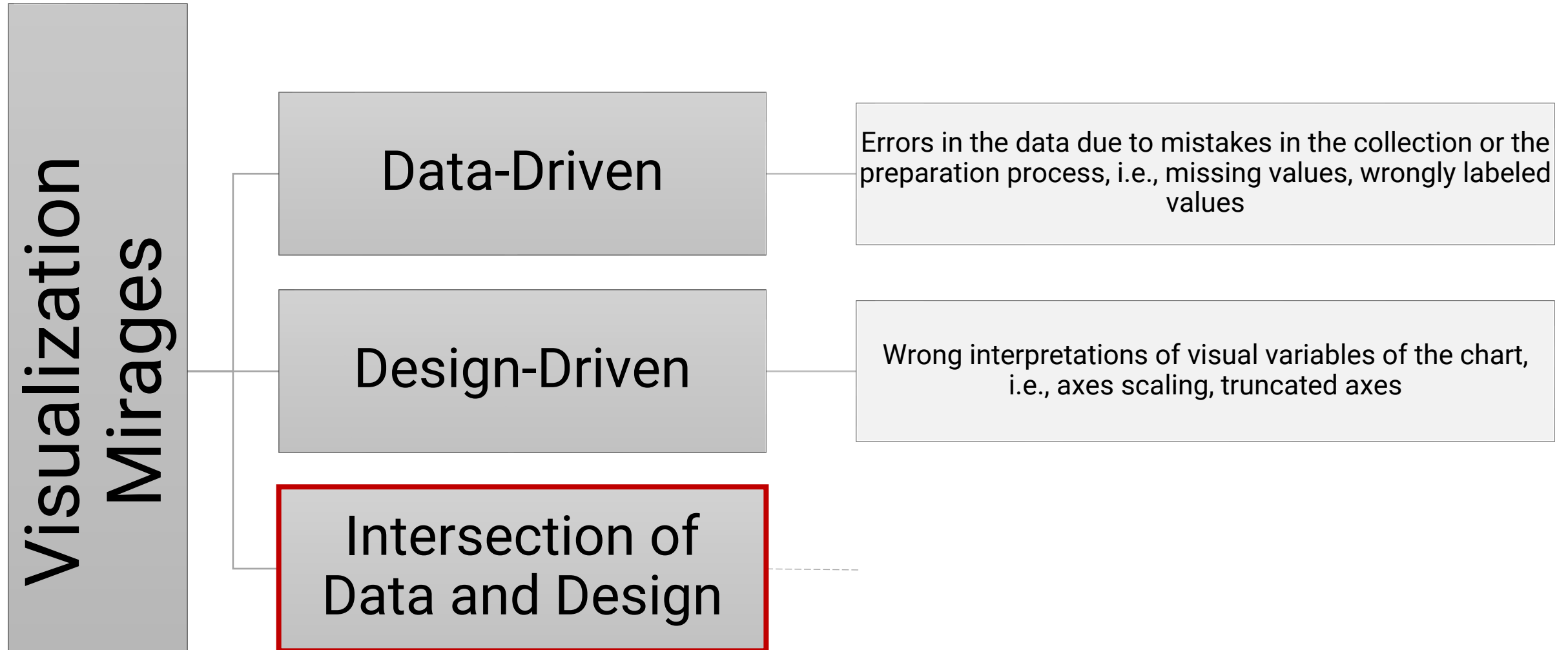
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<sup>2</sup> University of Passau

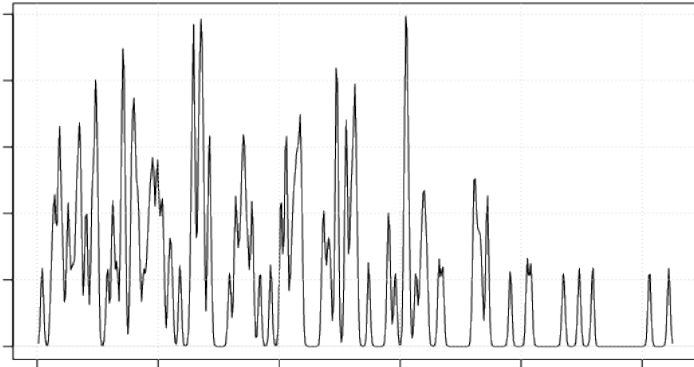
<sup>3</sup> TU Wien



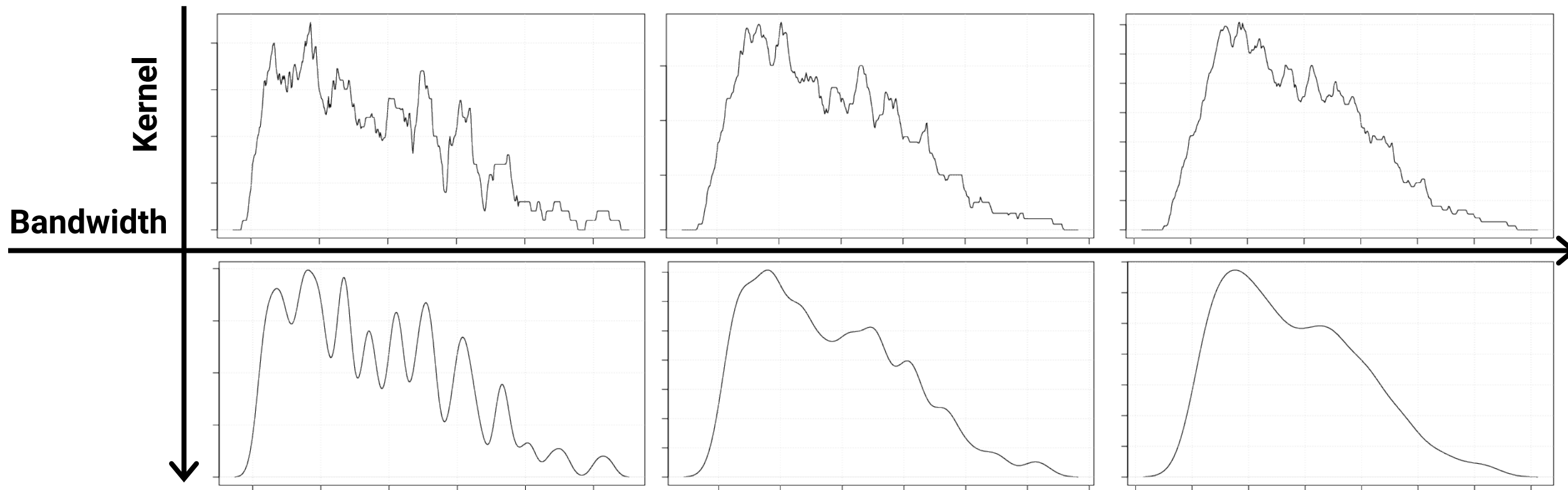
# Motivation



# Visualization Mirages



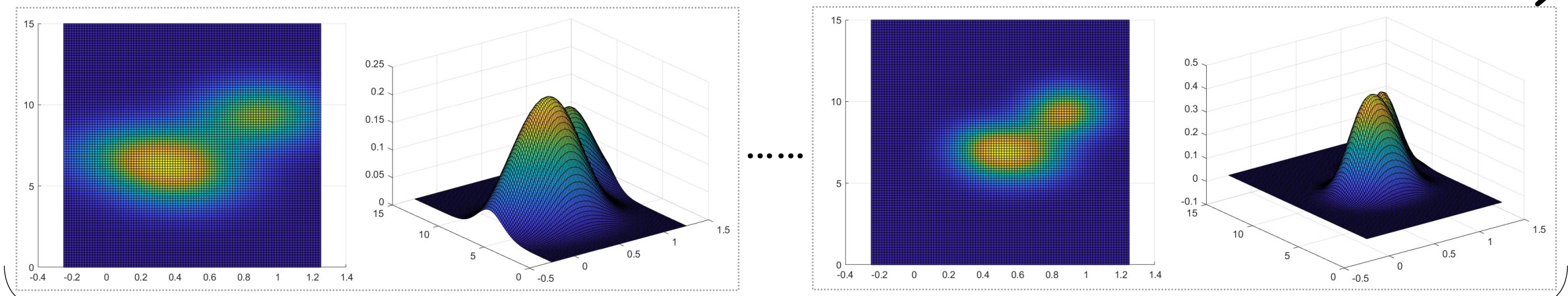
- A typical distribution before aggregation
- **All correct visual representations**



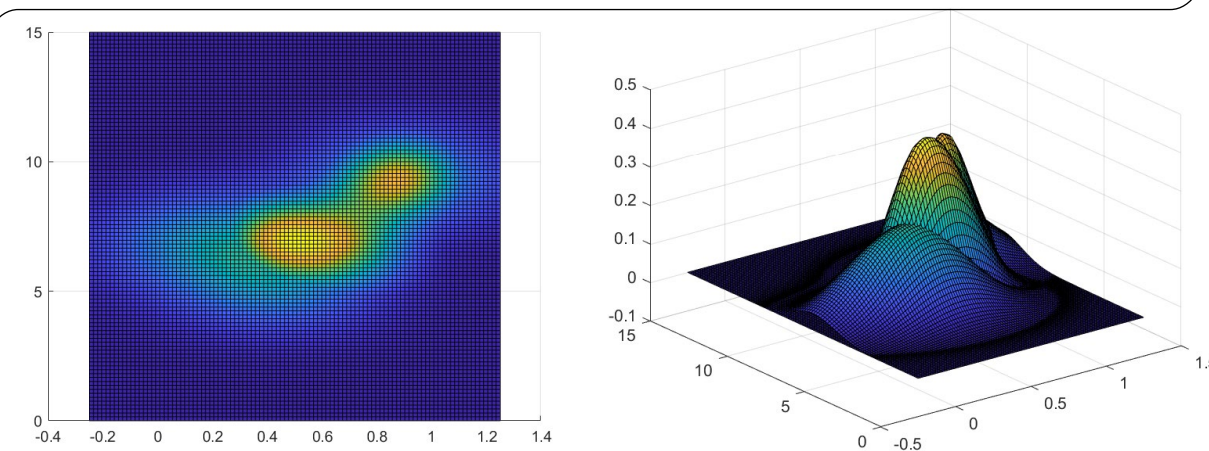
# Visualization Mirages

- Challenge bivariate distributions
  - Difficult to analyze on 2D monitors

Bandwidth & Kernel →

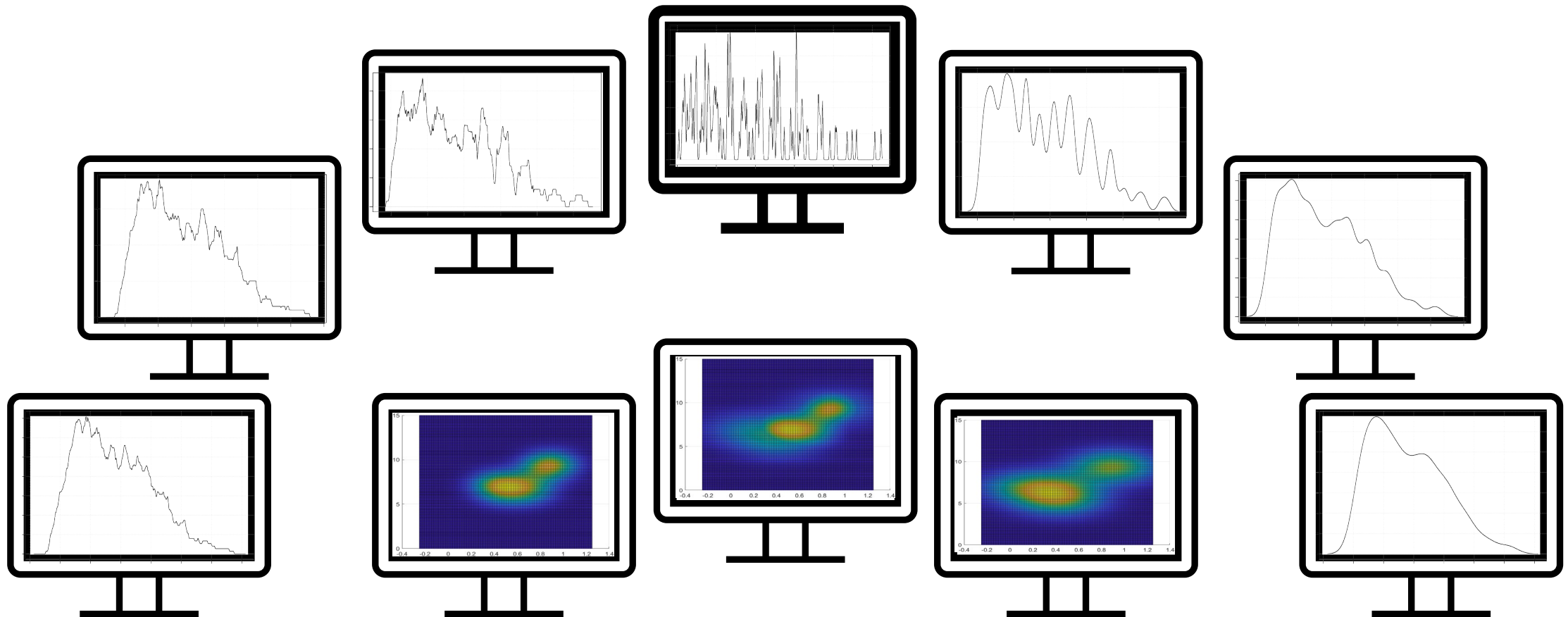


- Possible parameter space
  - Min/max hull of visual representations



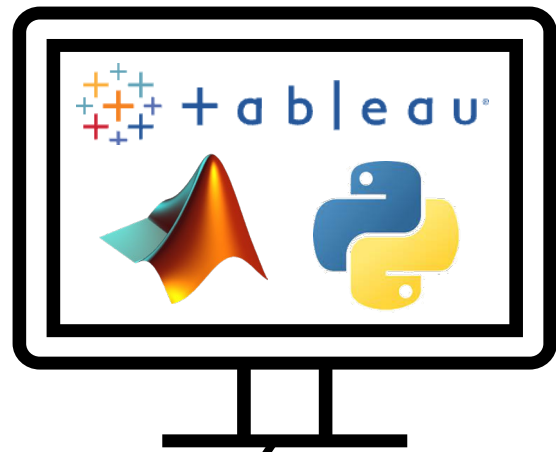
# Visualization Mirages

- Comparing different visual representations difficult
  - Many views needed = many screens



# IA & CR Approaches

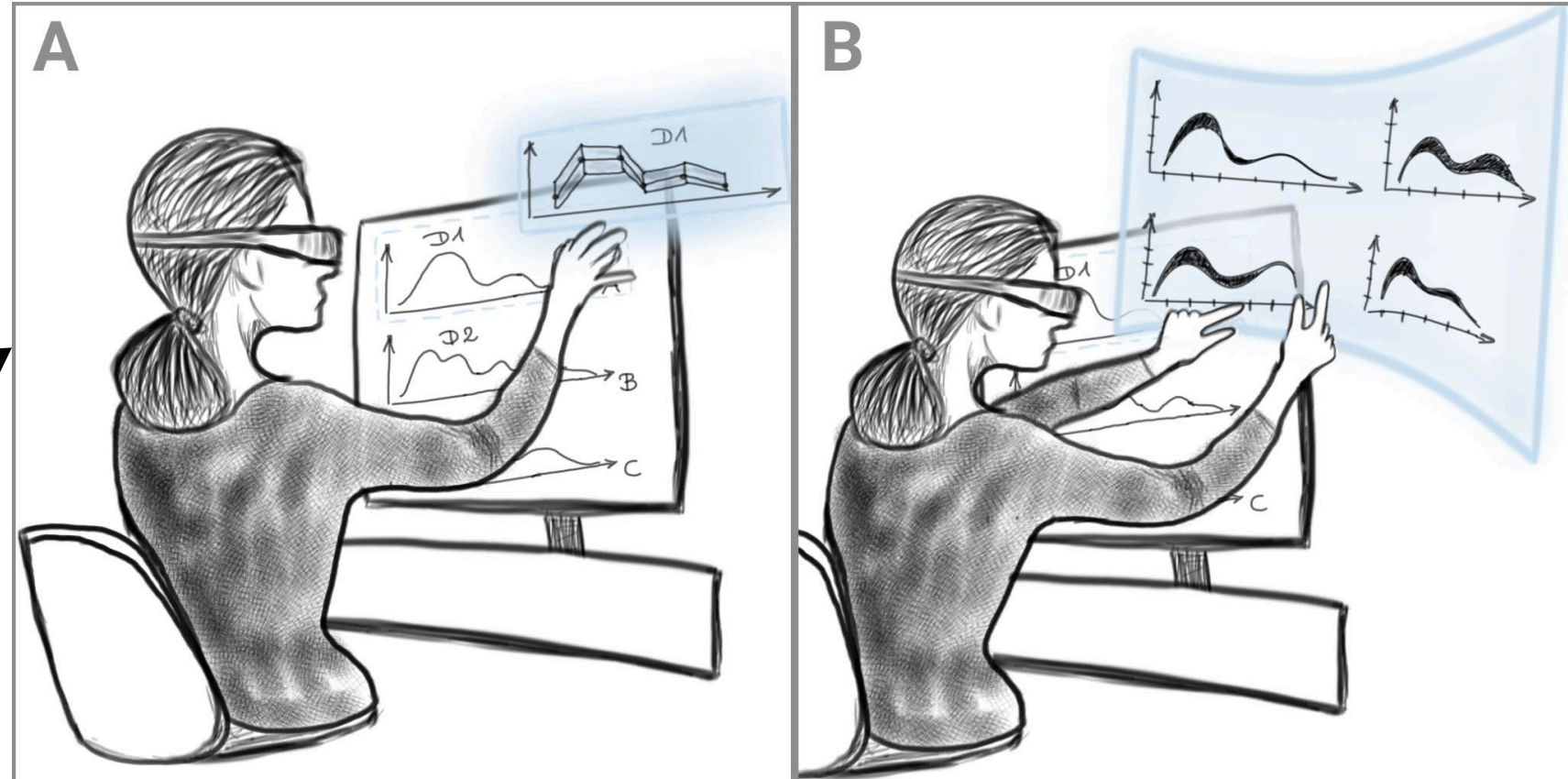
- Enhance current workflow
- Natural gestures to interact



QR-Code

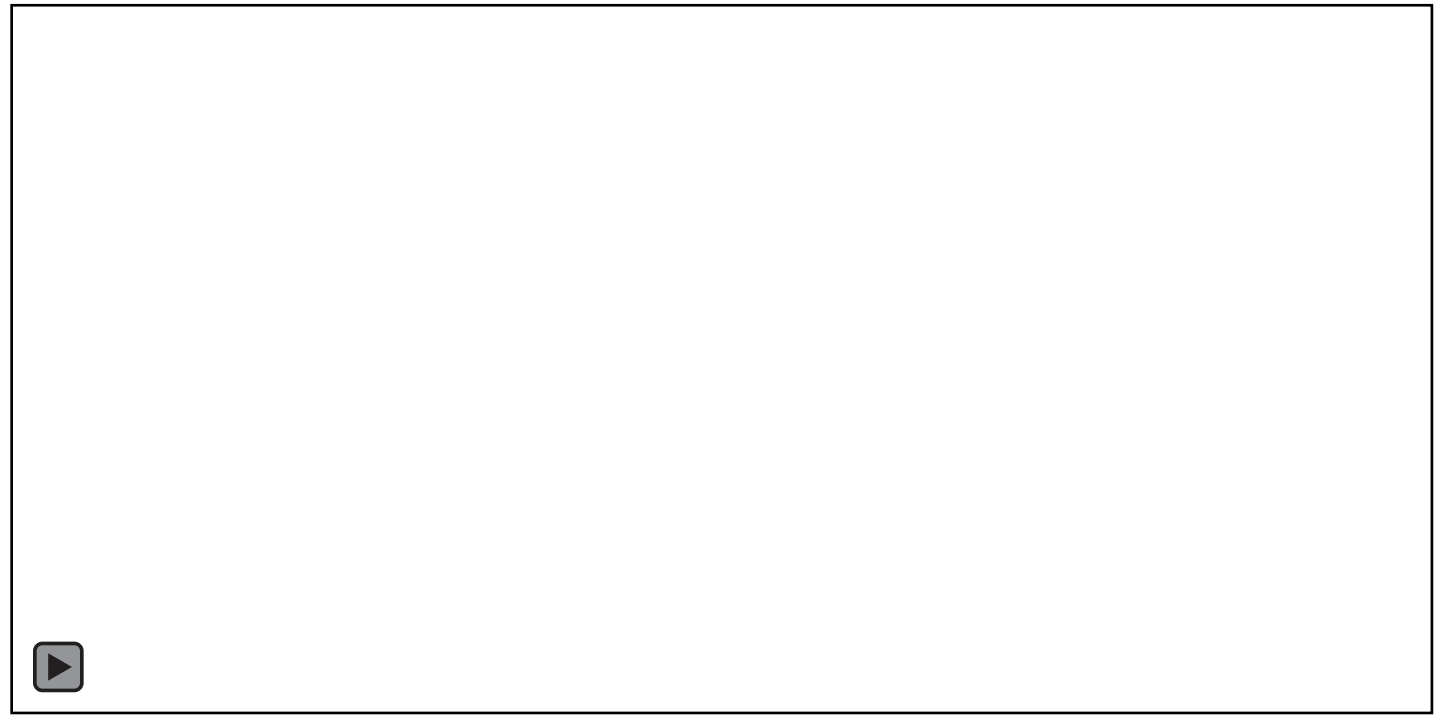
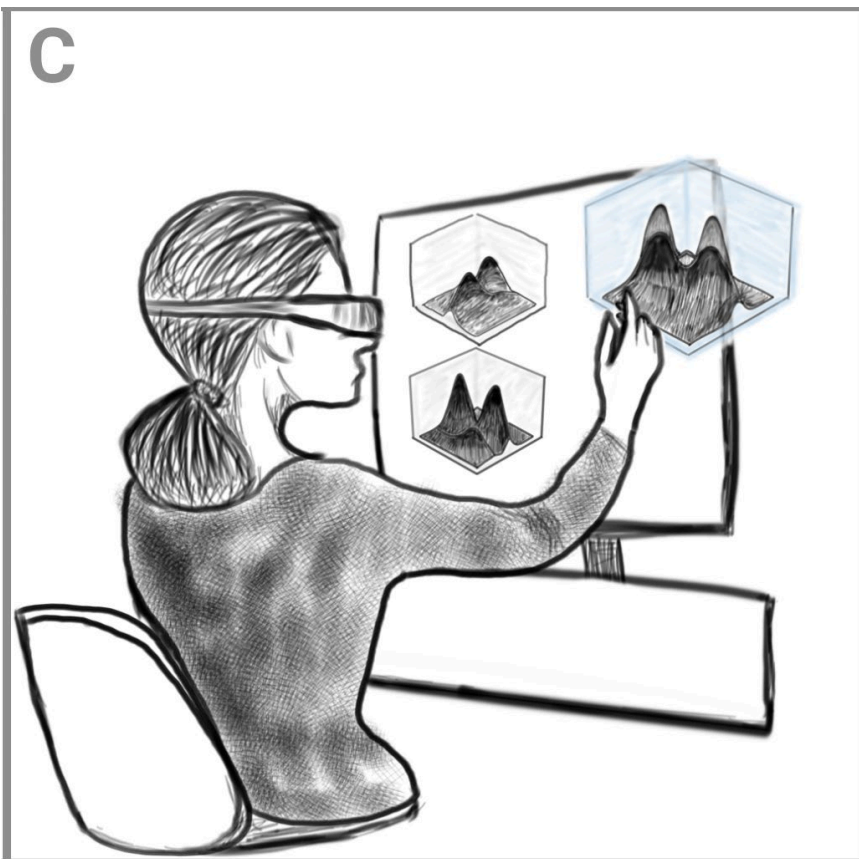


CSV file

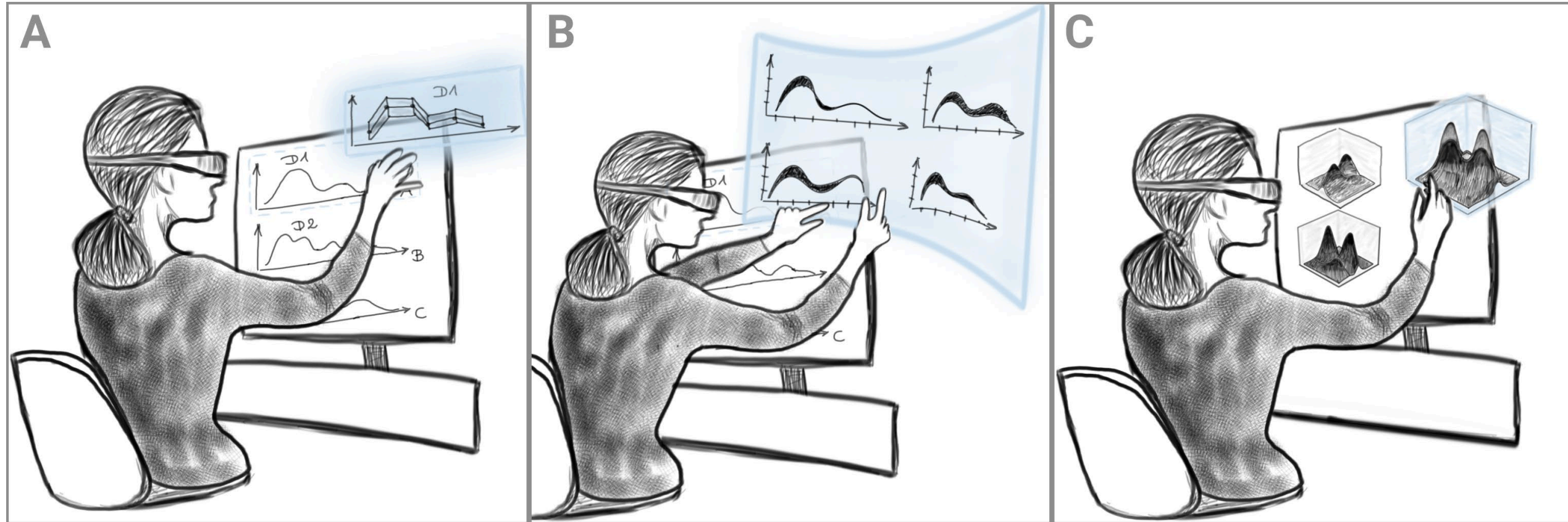


# IA & CR Approaches

- Analysis of 3D distributions



# Thank you for your attention!



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