BELIV Panel: Looking Back, Looking Forward

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http://www.cs.ubc.ca/~tmm/talks.html#beliv20panel

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Looking back: Evaluation waves

- wave 0: no human-subjects evaluation, some computational benchmarks
- wave I: add paper types beyond technique
 - IA: human-subjects eval (quant)
- wave 2: beyond quant
 - -2A: human-subjects qual eval
 - -2B: design studies
 - -2C: rise of systematic reviews
- wave 3: more sophisticated quant eval
 - 3A: replication crisis / credibility revolution
 - more supplemental materials, experimental power, pre-registration, avoiding QRPs
 - 3B: methods infusion from vision science

Looking forward: Fine-grained contribution types

General Contributions

- -Algorithms
- Data Abstractions and Types
- Datasets
- Deployment
- Methodologies
- Application Motivated Visualization
- Guidelines
- -Interaction Design
- -Process/Workflow Design
- Software Architecture, Toolkit/Library, Language
- -Software Prototype
- -State-of-the-art Survey
- Task Abstractions & Application Domains
- Taxonomy, Models, Frameworks, Theory
- -Visual Representation Design
- -Other Contribution

Evaluation Contributions

- -Computational Benchmark Studies
- Human-Subjects Qualitative Studies
- Human-Subjects Quantitative Studies

Looking forward: Wish list

- wave 4: more sophisticated qual
 - deeper connection to social science & humanities frameworks
 - interpretivism, intersectional feminism, ...
 - -abstractions common beyond design studies, also in technique papers
 - -design studies & application-driven vis stay vibrant & at forefront
- wave 5: true mixed-methods approaches
 - -bridging the quant/qual divide
- benchmark datasets
 - data, & tasks too
- actual replication
 - -still very rare
 - -reflecting on past results: repudiation (less extreme than retraction)