

Grassroots Reproducibility: Just Do It!

Tamara Munzner
University of British Columbia

Reproducible Visualization Research: How Do We Get There?
VisWeek12 Panel

Reproducibility By Paper Type

- technique / algorithm: **yes!**
 - video documenting look/feel of interaction
 - code, data, parameters
- evaluation: user/lab studies: **yes!**
 - all of the above, plus
 - all experimental stimuli (images), not just a few
 - data that you gathered
 - experimental protocol/methods details

2

Paper Types and Reproducibility

- models, systems: **maybe?...**
- design studies: **reprod. of process not results!**
 - highly qualitative work

"The measure of success is not that a different visualization researcher would design the same system, it is that this particular researcher has created something useful."

Design Study Methodology: Reflections from the Trenches and Stacks. Sedlmair, Meyer, and Munzner. Proc InfoVis12.

4

Existing Mechanisms Suffice

- supplemental material
 - beyond just video!
 - code, data, parameters, stimuli,...
 - just host on your own web page for paper
 - in addition to centralized conference/journal DL
- no need to wait for culture change
 - funders/publisher mandates

Continuum of Culture



5

High Payoff: Enlightened Self-Interest

- helps **you**, not just community in general
 - your work will (probably) have more impact
 - citations
 - benchmarks
 - you can reproduce your **own** work
 - when creating images with latest algorithm for paper
 - when creating comparison images with older alg variants
 - six months after paper for new student followon work - without bothering old student
 - years after first author leaves your lab

6

Just Try It

- easy to change your own process incrementally
 - try something new next time
- the earlier you start, the more you can do
 - ethics approval to release user study data when project starts, long before writing paper
 - makefile-driven figure creation with documented parameter settings best when from day one
- if you go too far, back off
 - hasn't happened yet, I only regret what I didn't do!

7