# Grassroots Reproducibility: Just Do It!

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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

## Paper Types and Reproducibility

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

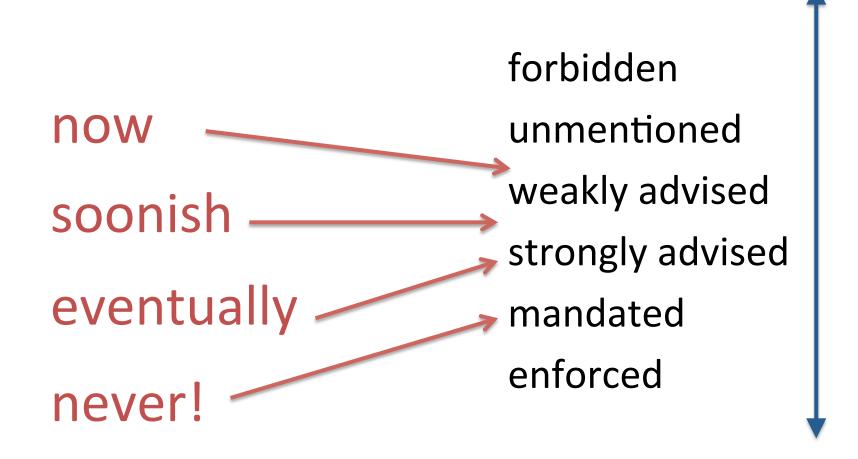
"The measure of success is not that a different visualization researcher would design the same system, it is that this particular researcher has created something useful."

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

### **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



#### 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

### 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!