My **ways** to write a **good** (HCI) paper

CMSC839E: Uncertainty Communication for Decision-making

https://fumeng-yang.github.io/CMSC839E

October 7, 2024 @ UMD by Fumeng Yang

Many available advices!

how to write an academic paper

All | Images | Videos | Forums | Shopping | News | **Web** | More | Tools

Template | PDF | Conclusion | For college | Introduction | Reflection | Response | For publication | Concept

Harvard University
https://communicate.gse.harvard.edu › files › files PDF

The Structure of an Academic Paper

The thesis is generally the narrowest part and last sentence of the introduction, and conveys your position, the essence of your argument or idea. See our ...

5 pages

Wordtune
https://www.wordtune.com › Blog

Writing an Academic Paper: A Beginner's Guide

Jun 13, 2024 — Essential Steps of the **Writing** Process · Thesis Statement · **Writing** an Introduction · Body Paragraphs · Drafting a Conclusion · Revising.

Reddit · r/AskAcademia
10+ comments · 3 years ago

Tips for writing an academic paper for the first time?

Prepare the outline of the **paper**. Include the figures, tables, charts that to the outline. **Write** down the observations and talking points. Be as ...

Marquette University
https://www.marquette.edu › oie › documents PDF

General Tips for Writing Academic Papers

1. Begin **writing** your **paper** as early as you can. Remember you need to spend more time working on your assignment than other students. Give yourself enough time ...
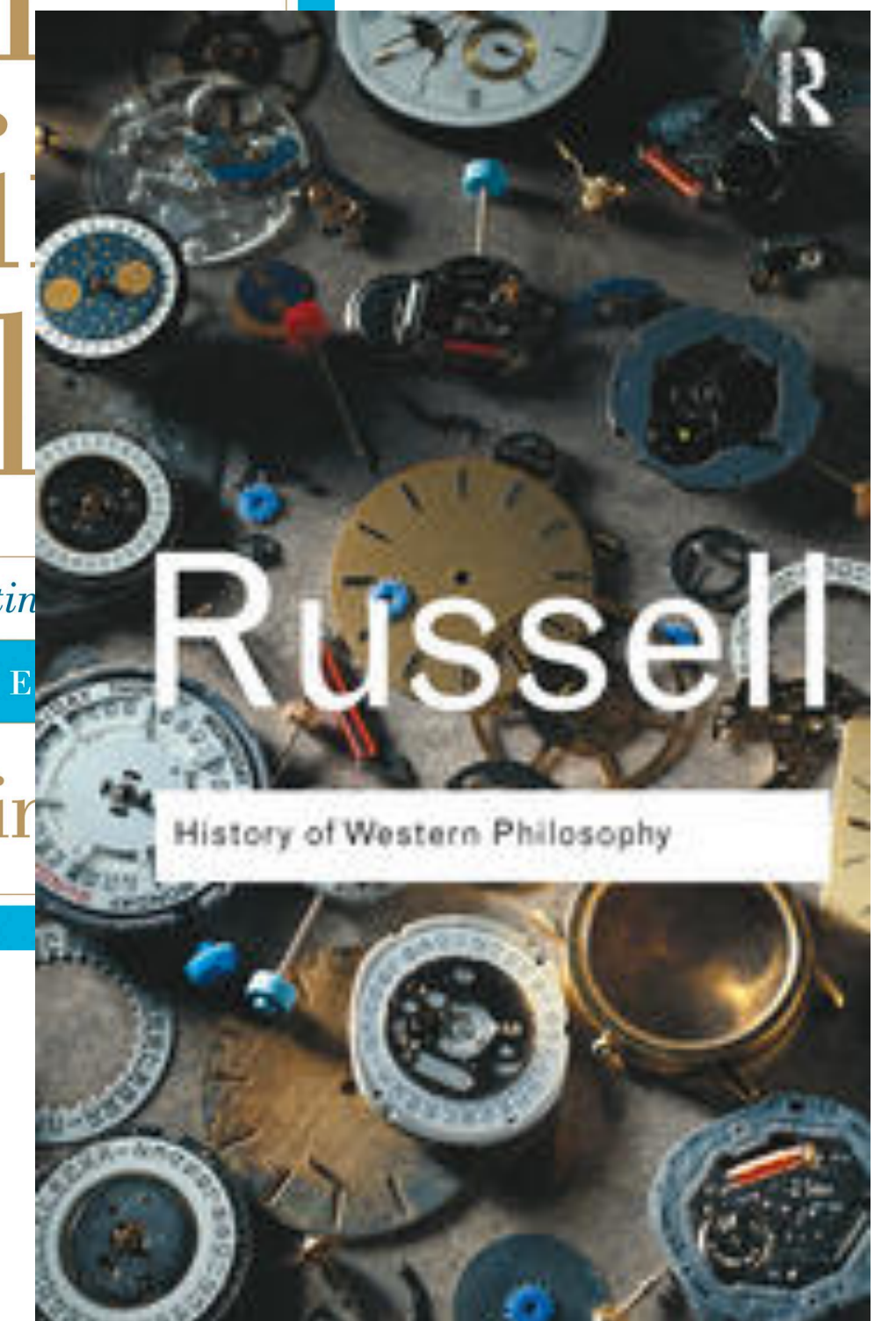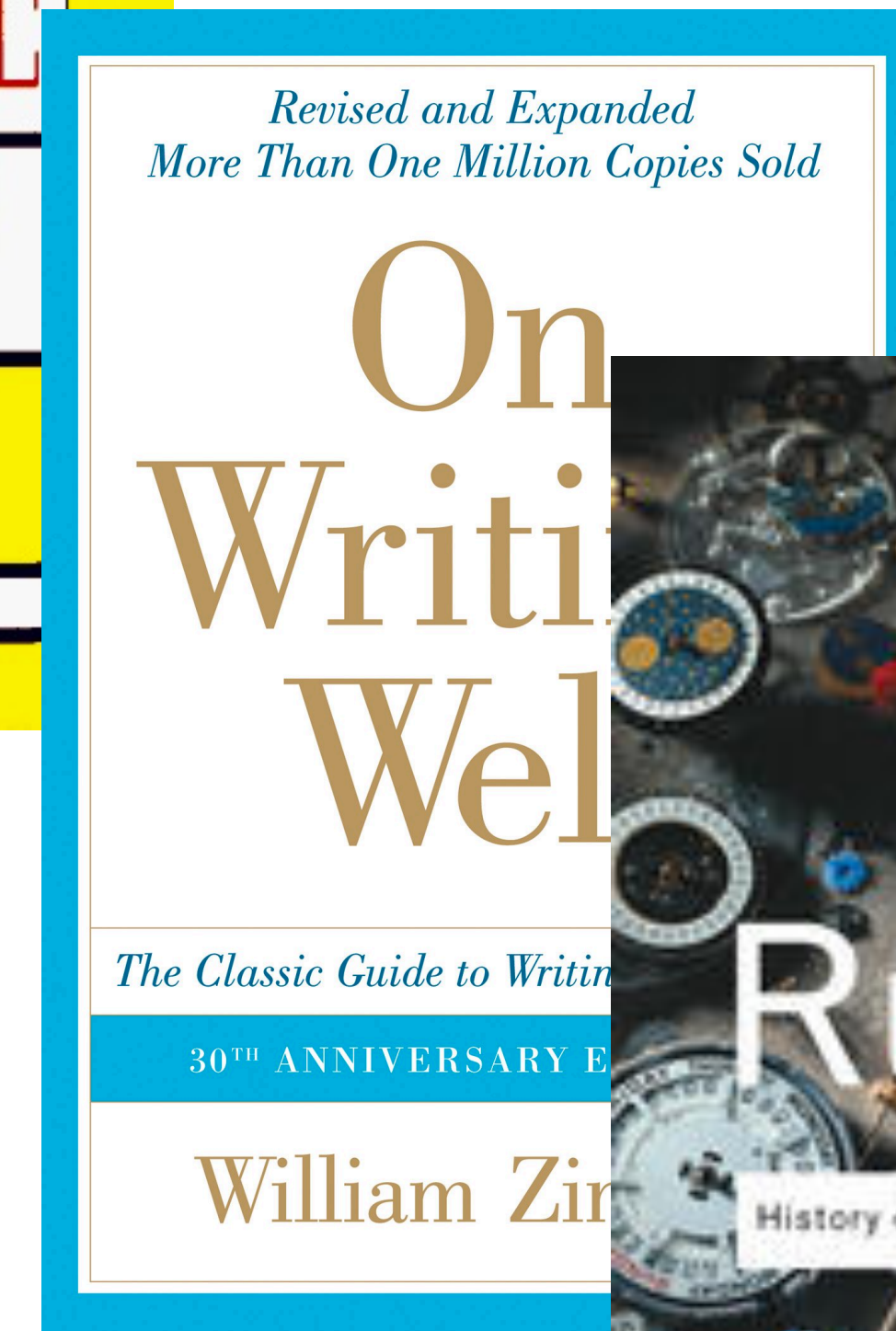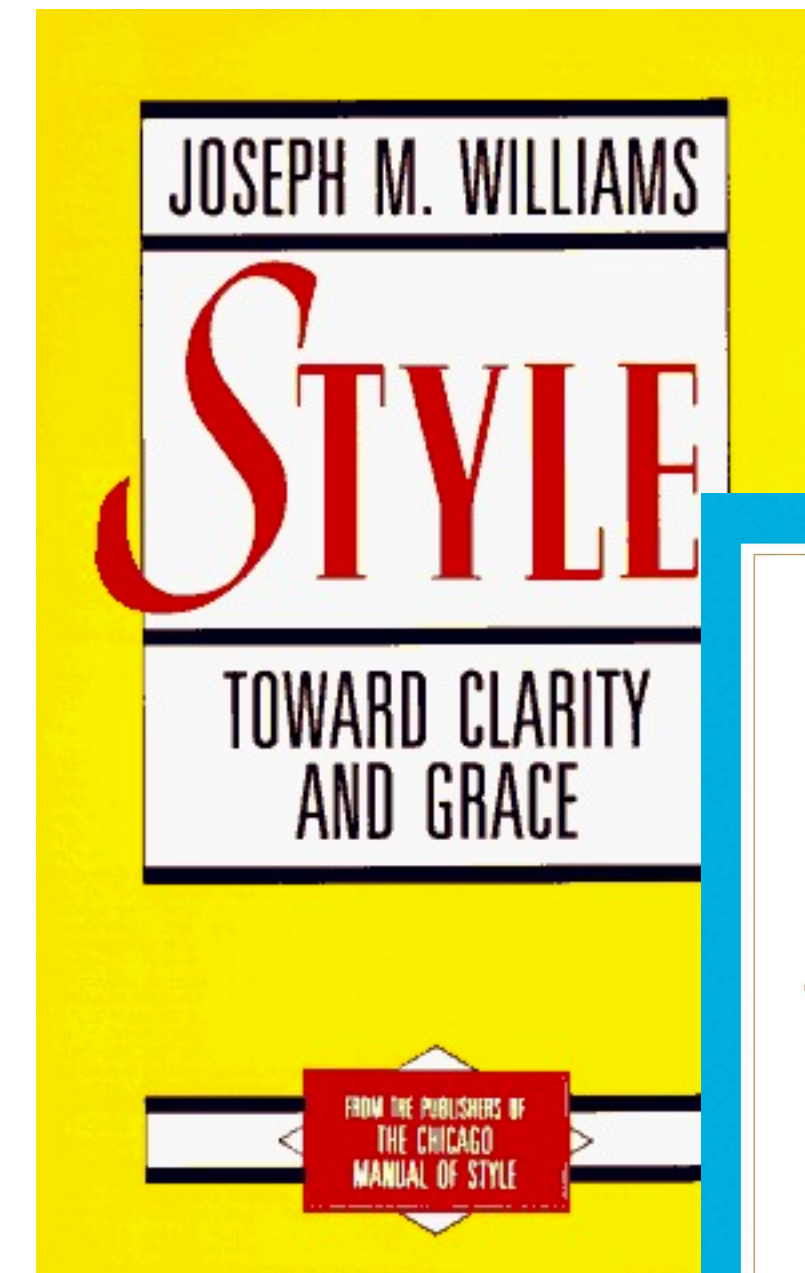
1 page

2

Many available advices!

Style: toward clarity and grace

On writing well

Find books/journals you like!

What I feel I have to do in order to write a good paper

good = understandable

concise, clear

often simpler language

can have compelling/long sentences when needed

logistically sound

not a torture for reviewers and your advisors (well)

well-written, well-presented

What about a good work with bad writing?

Writing is a communicative tool

If the writing is bad, people may not understand your work or it is hard for you to get attention

Fumeng's cents

Start early! Edit many times!

Concise language!

Good figures!

A non-linear, recursive structure

A non-linear writing order

The "wrong" mental model

Some of my previous colleagues write the paper in the last few days…
maybe most people?

Their mental model: **finish the last word in the manuscript = finish the paper**

No! No! No!

At least this is wrong for most of the students. If you have
been writing for 60 years, things might be different

It takes time

It takes time to draw good figures, write compelling introduction, smooth method sections, revise long sentences, frame the work, edit each sentence, …

Quota

The first drafts of any is shit
~~All~~ first drafts of everything ~~are~~ garbage.

Ernest Hemingway

How early?

I start to outline and generate some words **2 months** before the deadline.

One person I know starts to write introduction while he was doing the work.

This means that you have to plan your research and get it done sooner!

I may finish **7-15 days** before the deadline.

I need **fewer days** after I write more.

Some groups ask their students to finish 14 days before the deadline.

Concise and clear language

In STEM, concise and shorter sentences are often preferred.

Some students I worked with really like to write unnecessarily long sentences. I felt I couldn't breathe.

One sentence could be a sentence with 7 lines. We felt we could cut half of the words while preserving the amount of information…
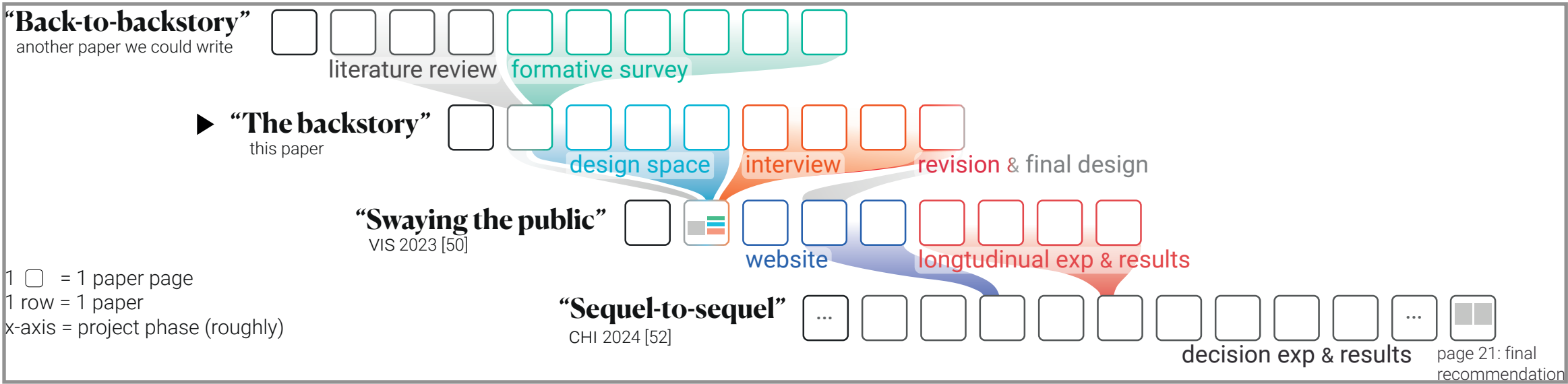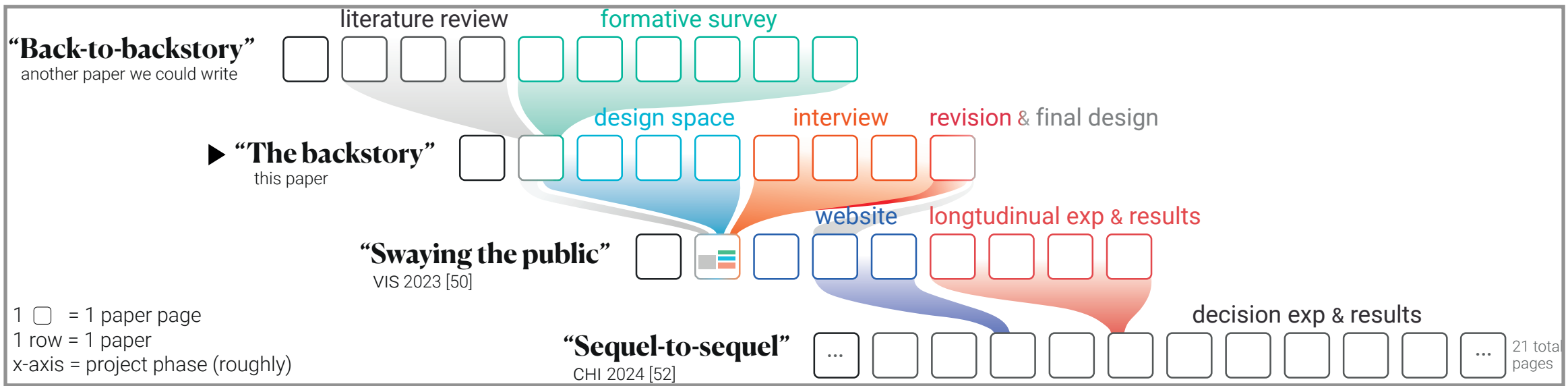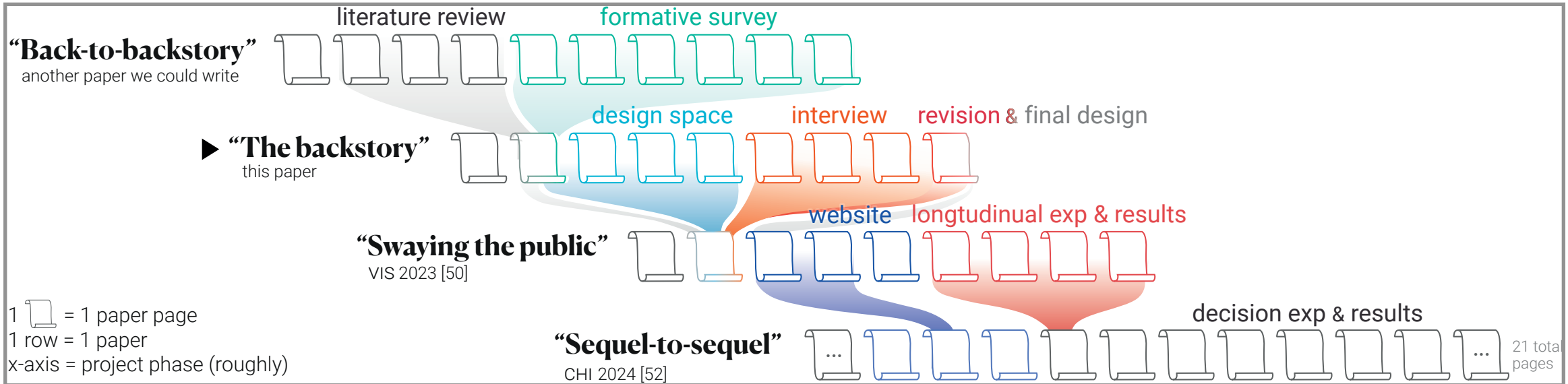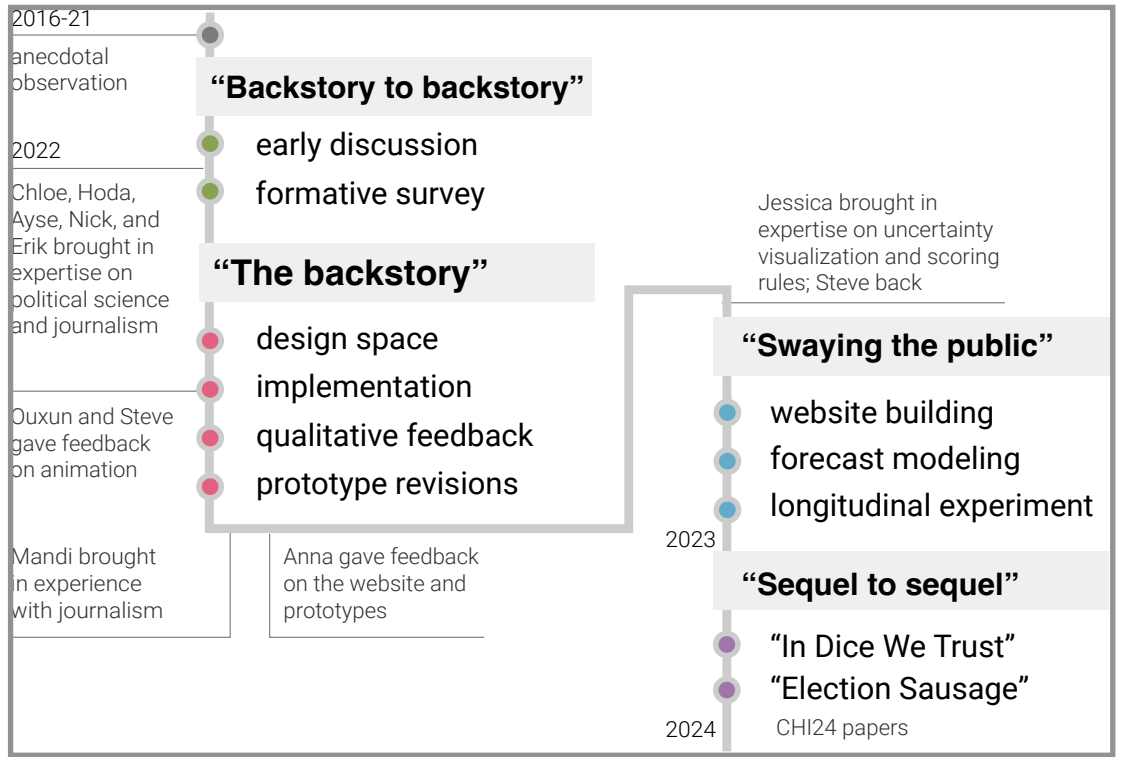
Good figures

Might be specific to HCI or even data visualization
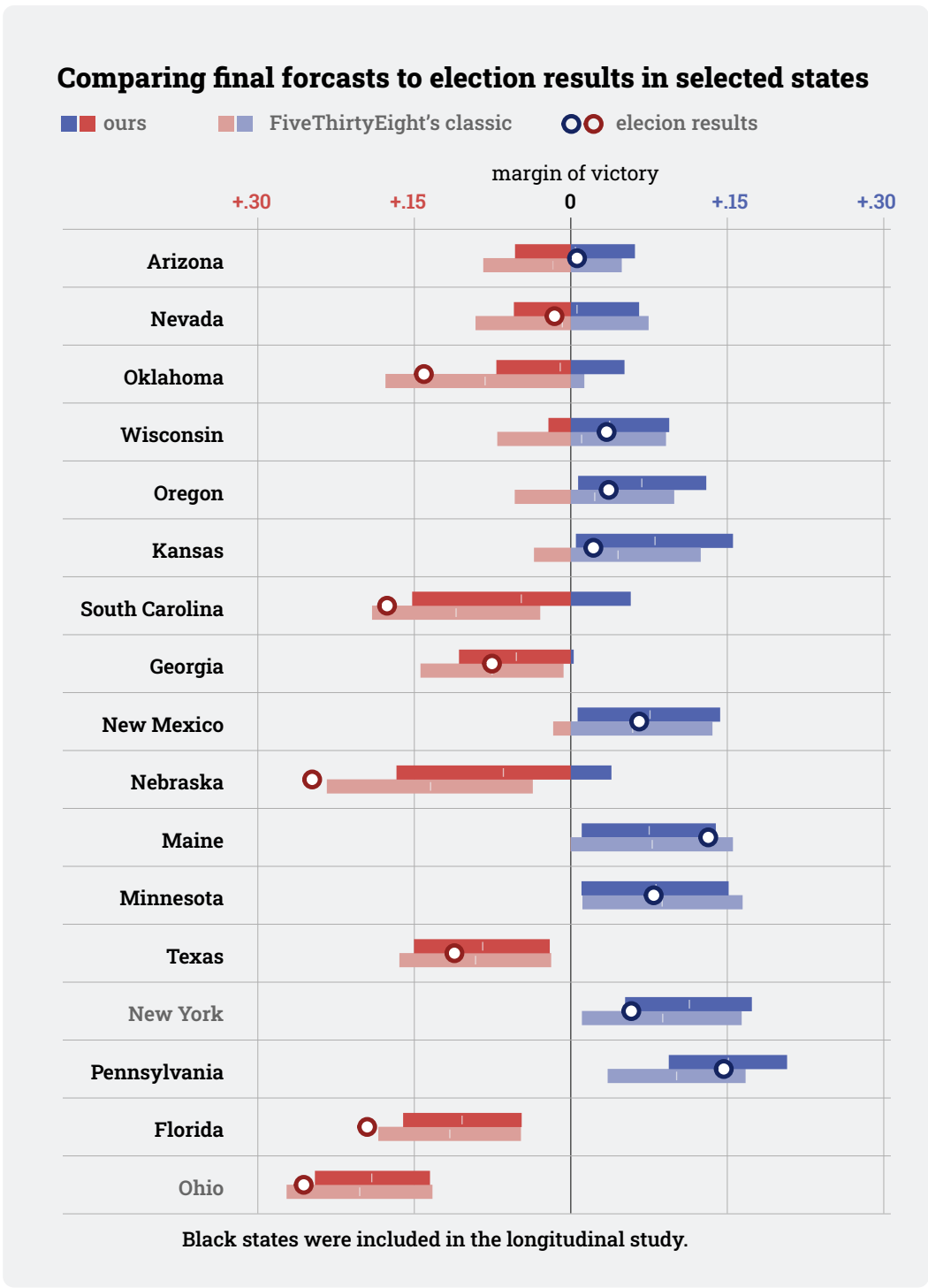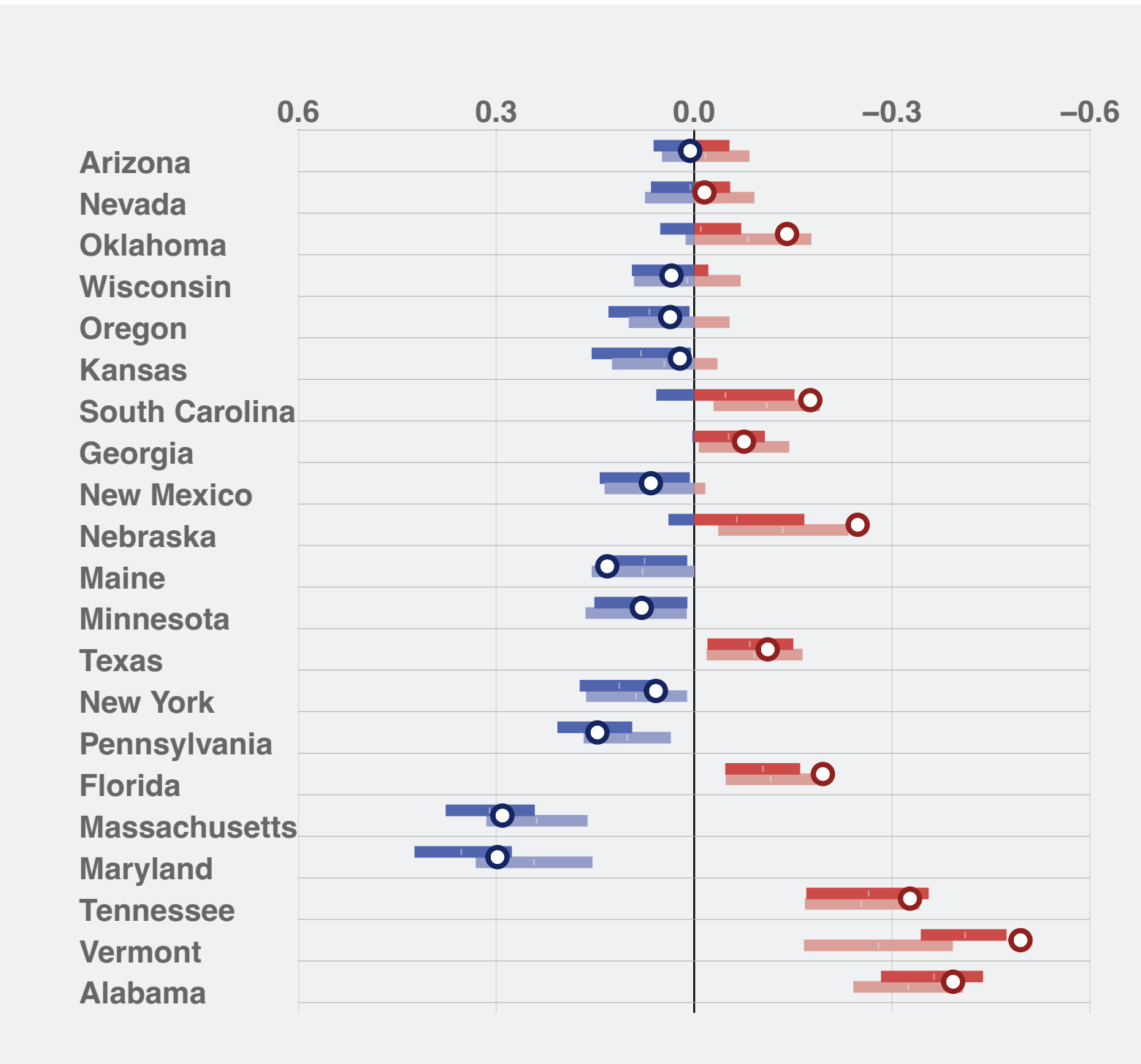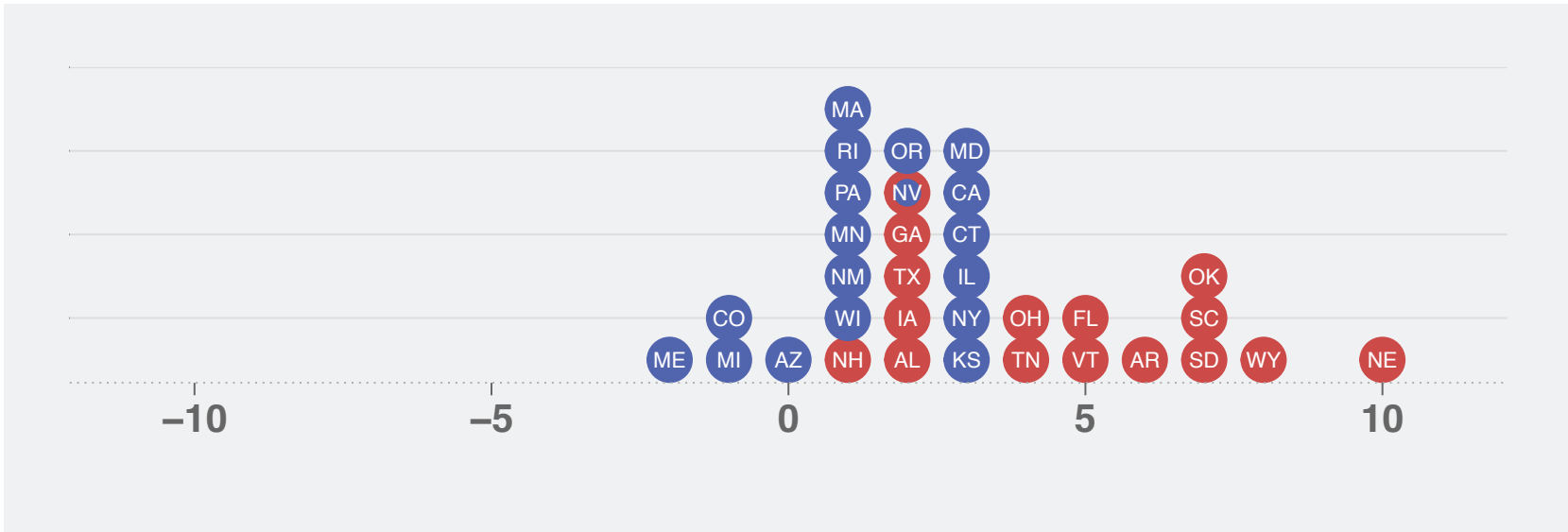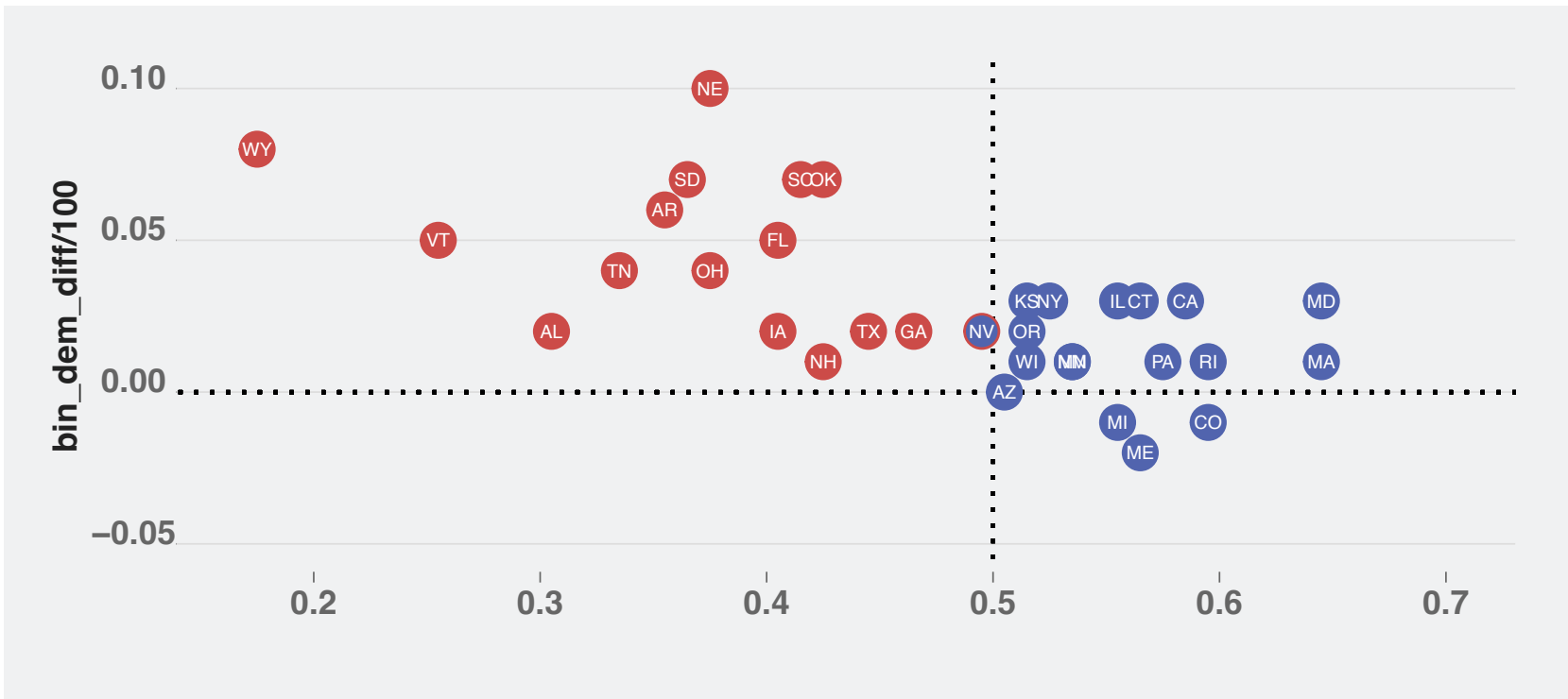
Iterations for the Fig. 2 in the "Swaying the public" paper

Good figures

The teaser/scope figure iterations
for the "backstory" paper
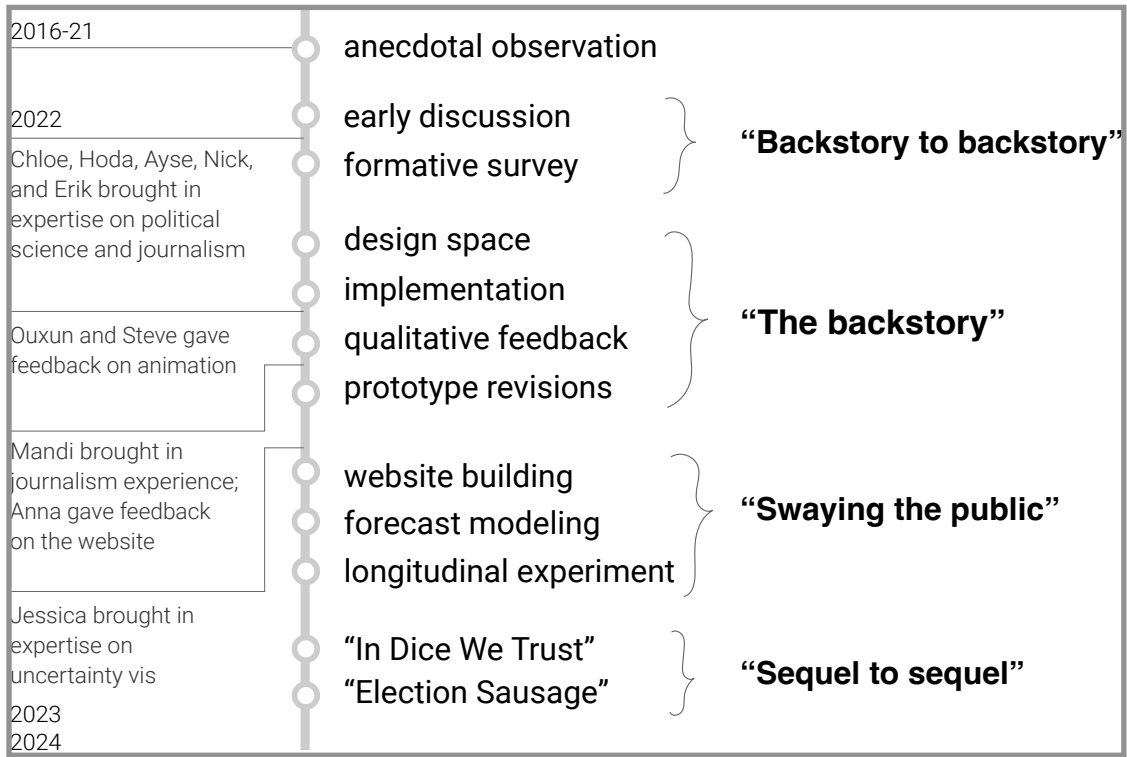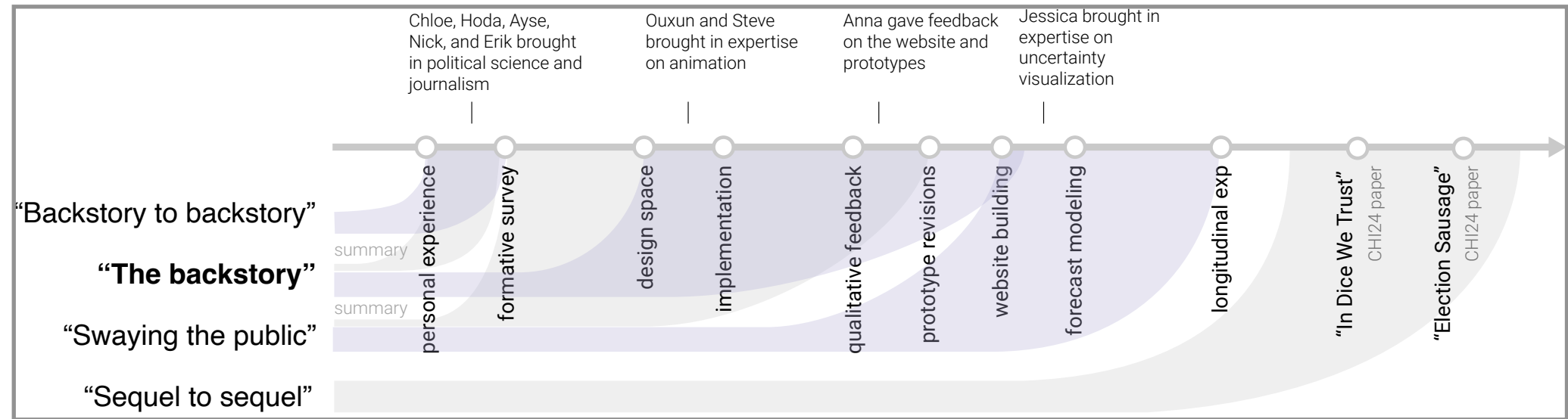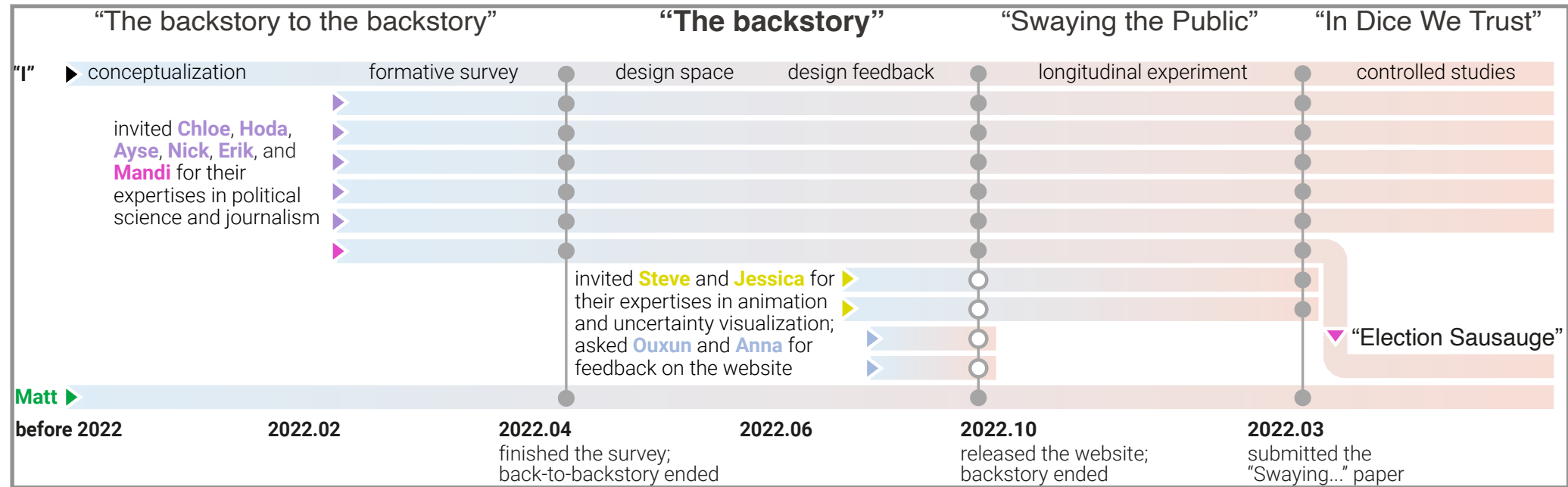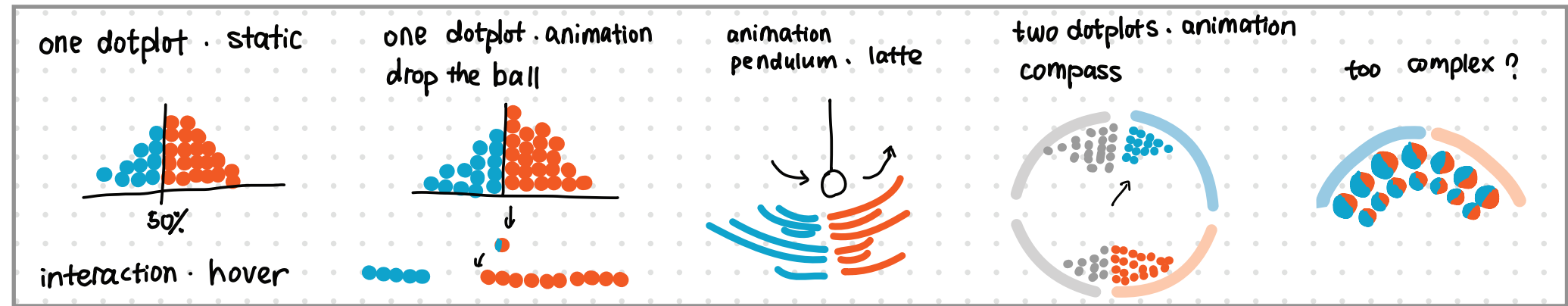
A linear structure

Students usually just describe what they did in a linear way

"We used Model A. Our parameters are. Results are.

We used Model B. Our parameters are. Results are.

We used Model C. Our parameters are. Results are."

As a reader, I don't know why you need these models, and how many more models are there.

A non-linear, recursive structure

Start with a summary and a motivation/justification

e.g., We explored three state-of-the-art model architectures, which cover the majority of the available choices.

….

A non-linear, recursive structure

Abstract is a summary of introduction

Introduction is a summary of the rest of the paper

The first paragraph of the section is a summary of the section

The first sentence of a paragraph is a summary of the paragraph (topic sentence)

Not golden rules. But they give people an expectation for what's next, and make the paper easier to read.

A non-linear writing order

Which part of a paper to write first?

I usually write methods and results first

Then, depends on how hard to write the Introduction

I write Introduction or discussion

I know the most of the paper when writing intro. I feel it's much easier to write intro in this way & to write a strong intro

Then, abstract

I have the whole paper when writing abstract, making it easier

Related work?

I hate writing RW, but I do literature review at the beginning so I won't be stressed out

Exceptions

ggdist: Visualizations of Distributions and Uncertainty in the Grammar of Graphics

Matthew Kay

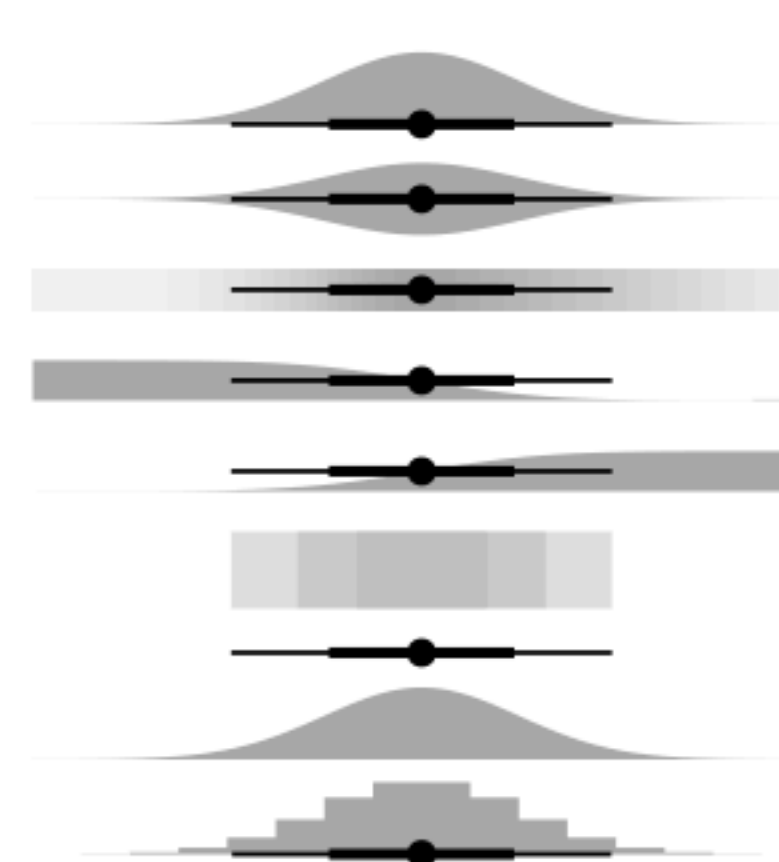**A.** Some combinations of *slabs* and *pointintervals*

B. Multiple *lineribbons* with varying probability mass
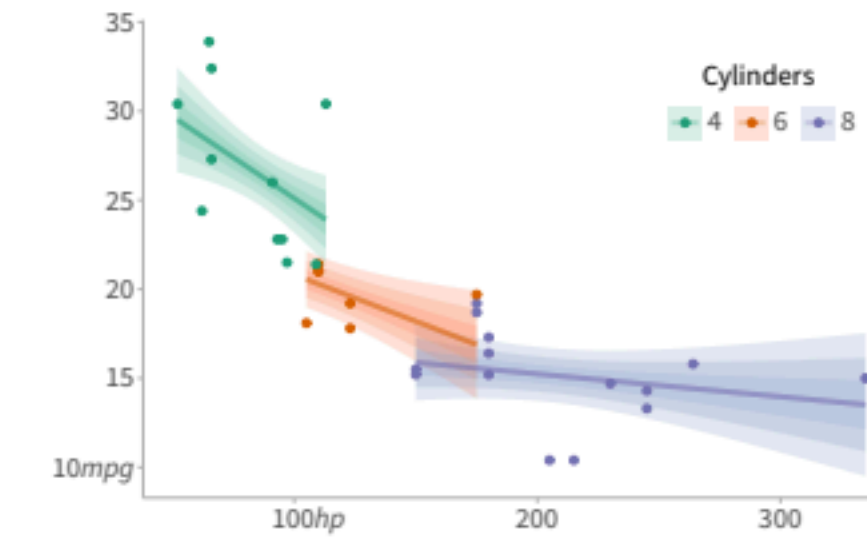
C. Anthropomorphic dotplots using the *dots* geometry and the *Wee People* font

D. Logit dotplot using *lineribbon* and *dots* geoms

E. Raincloud plots created by combining *slab*, *pointinterval*, and *dots* geometries
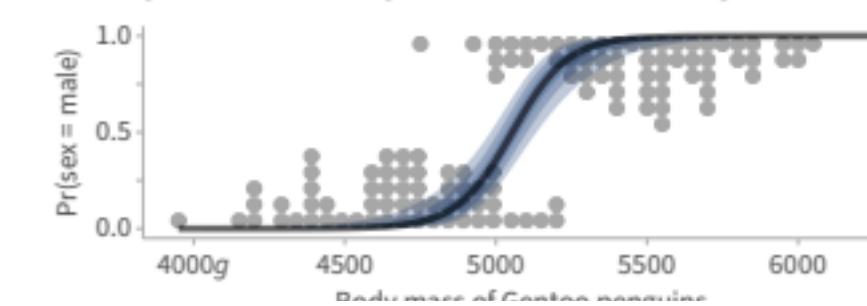
The Backstory to "Swaying the Public": A Design Chronicle of Election Forecast Visualizations

Fumeng Yang, Mandi Cai, Chloe Mortenson, Hoda Fakhari, Ayse D. Lokmanoglu, Nicholas Diakopoulos, Erik C. Nisbet, Matthew Kay

The ggdist paper

Matthew Kay Today at 1:09 PM
the ggdist paper reviews have some mixed thoughts. it's also a weird paper though

Fumeng Yang Today at 8:17 PM
did you have negative comments about the content?
to use the reviews you got, i need to find a place in the syllabus to list the ggdist paper as 'required reading'...

Matthew Kay 29 minutes ago
hahaha

Matthew Kay 28 minutes ago
well if you want to teach your students to turn twitter rants into papers

Fumeng Yang 8 minutes ago
it would be easier for me to read their papers...

Fumeng Yang 7 minutes ago
(but their advisors may complain)

The ggdist paper

Questions for [33] ggdist: Visualizations of distributions and uncertainty in the grammar of graphic and/or its reviews

1. My advisor (Jordan) loves the ggplot family of packages because they provide a very modular and systematic way to create plots (unlike things like matplotlib). I feel making the communication of uncertainty easy to use and systematic in this way would increase its adoption, which is important if we want researchers to give more uncertainty estimates. I'm surprised this was not reflected in the review.

2. I'm surprised that this paper didn't have to go through **double blind reviewing**? It's actually a big problem in NLP/ML that people will just assign high scores to papers they were already aware of, maybe this is not as much of an issue in HCI?

3. Looking at the Reviewer 1's review, I think it's a great example for **how not to write a review**. The review is 2 pages explaining why he doesn't like the paper, based on personal point of view, rather than assessing weather the paper has achieved what they claimed, performed sufficient experiments, and it's usefulness. The comments are just "this criteria is not met"m without any explanation why they think this way.

4. Why was this article not in the form of a blog?

The ggdist paper

Matthew Kay 4 minutes ago
Lol I like "why was this article not in the form of a blog?"

😂 1

Fumeng Yang 3 minutes ago
okay next paper

Matthew Kay 2 minutes ago
Maybe students should wonder why we have particular conceptions of what is valuable in an article or not

😂 1

The backstory paper

Fumeng Yang Dec 13th, 2023 at 1:17 PM

- ^ *(details later)* i think this paper can provide some good knowledge and give me something relaxing to work on. we may add the probability reasoning i talked last summer and a self-reflection for all these papers. the writing will be more like a story.

1 reply

Matthew Kay Dec 13th, 2023 at 1:49 PM

I like the idea of a reflection style paper with more story about how the projects have unfolded (I want more papers like that!). I think it would be fun to write and would work better at vis since we'd want it to be non anonymous

👍 1   🙌 1   😊+

Both papers: single blind

Single-blind: you don't know reviewers

Double-blind: you don't know reviewers, and reviewers don't know you

CHI, UIST, IUI, etc: must be anonymous; otherwise desk reject

VIS: could choose to be single-blind

Journals: they prefer single-blind

Questions?