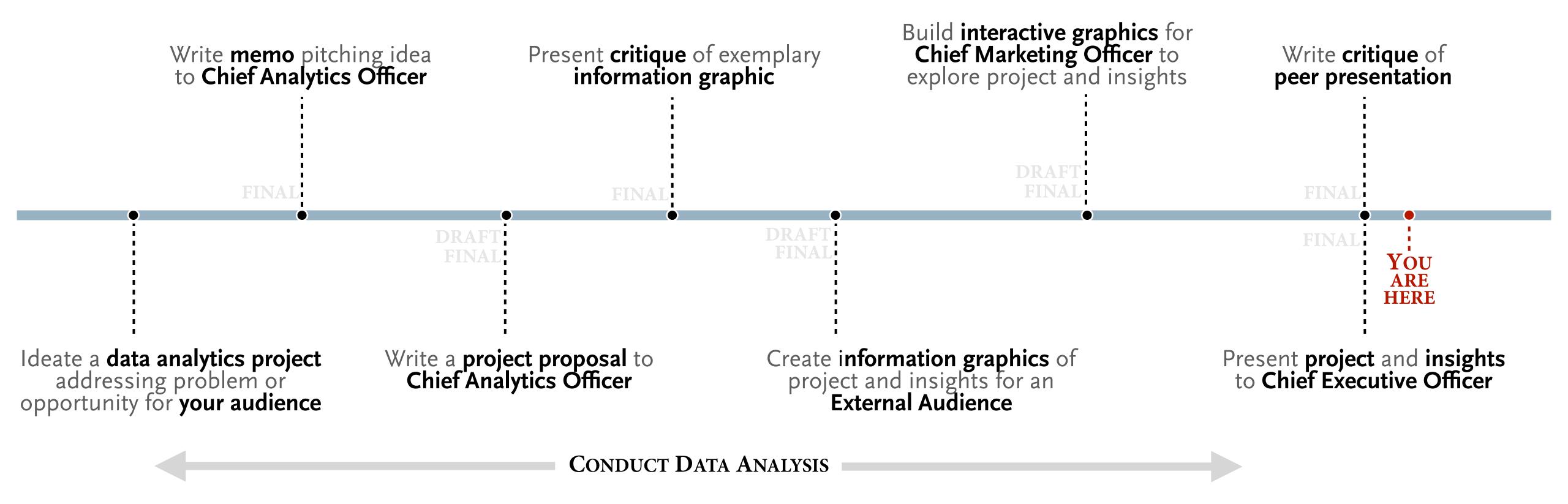
Storytelling with data

13 Processes of user-centered, content design — pair-wise prototyping

course overview, main course deliverables



course evaluations — improving *your* program

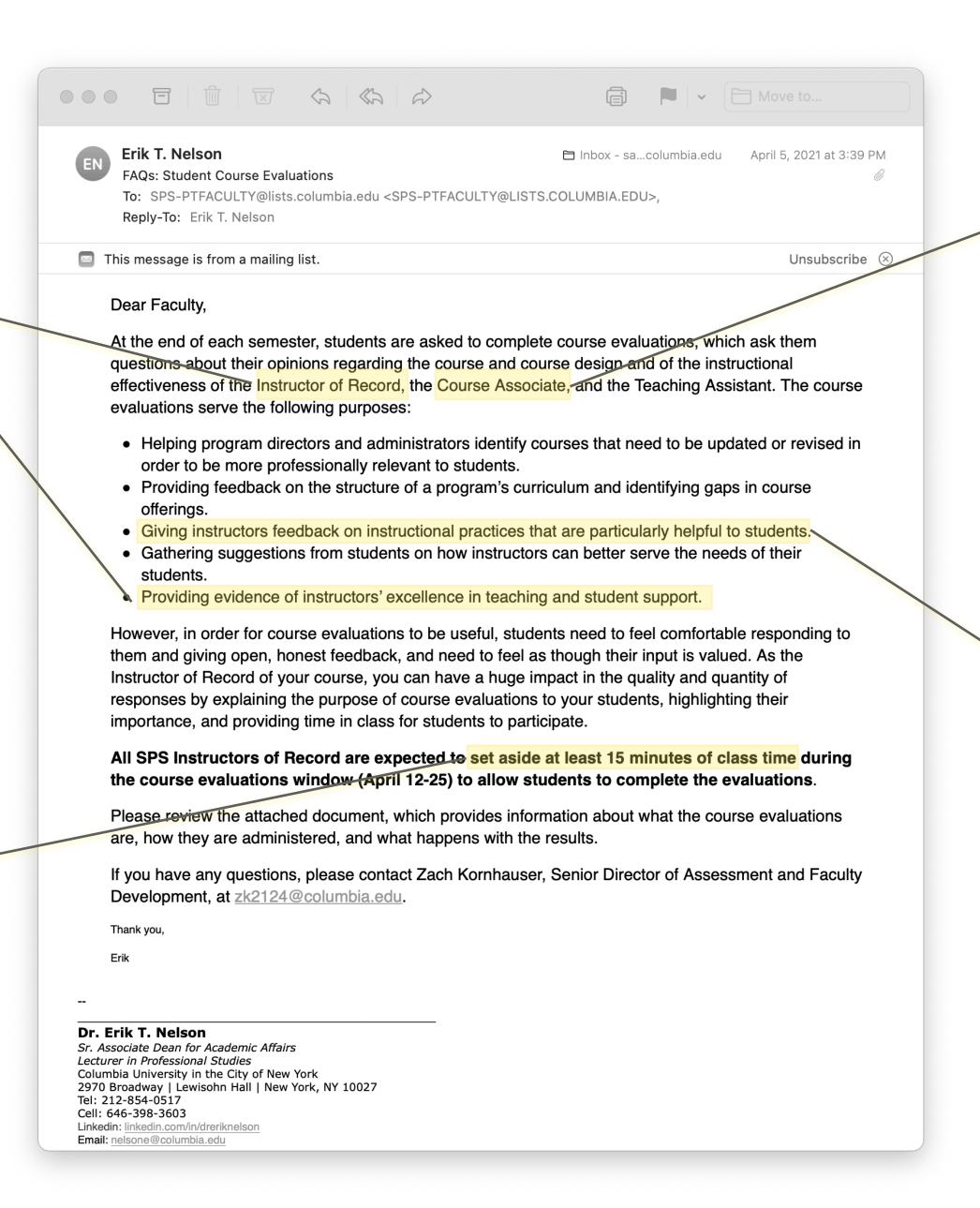
course feedback, why? — your thoughtful words help me help you!

Definitely, again, I want to use what you write to advocate for you and give you more of the type of guidance you found helped you.

I listen, learning what works, and keep updating my teaching material — examples, visuals, code, textbook of which I give you future access.



Let's use this time to be thoughtful, and keep improving our alma mater — I welcome you as a Columbian, too!



Please don't forget Laura, she worked tirelessly with me as a team — we both love helping you learn — to give you the best guidance we can!

Yes! I can use what you write that you found helpful to ask Columbia to let me give you more of what helped you in your future classes.



user and job stories, require research, helps you to be specific on structuring communications

As a [person in a particular role]

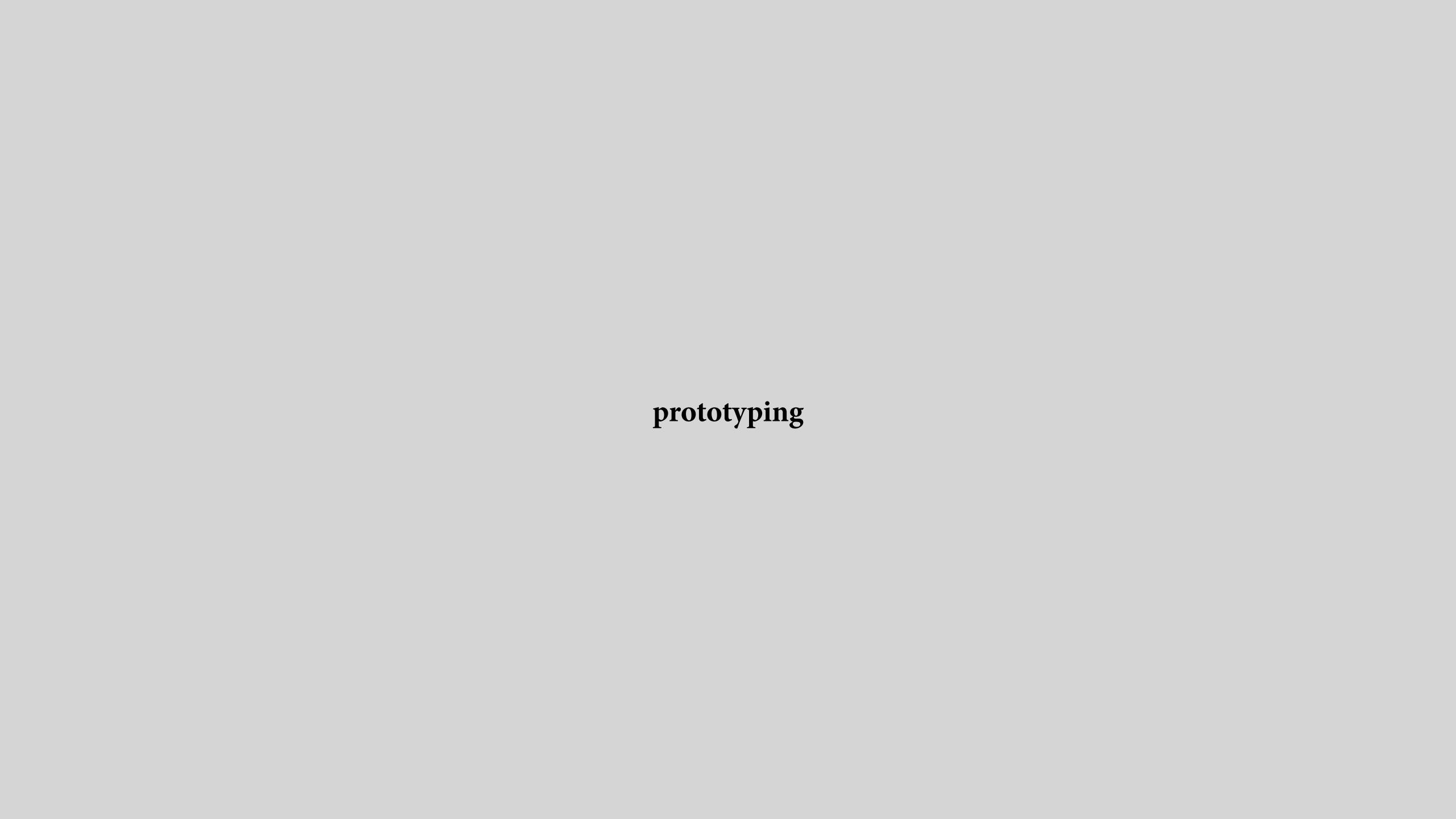
I want to [perform an action or find something out]

So that [I can achieve my goal of ...]

When [there's a particular situation]

I want to [perform an action or find something out]

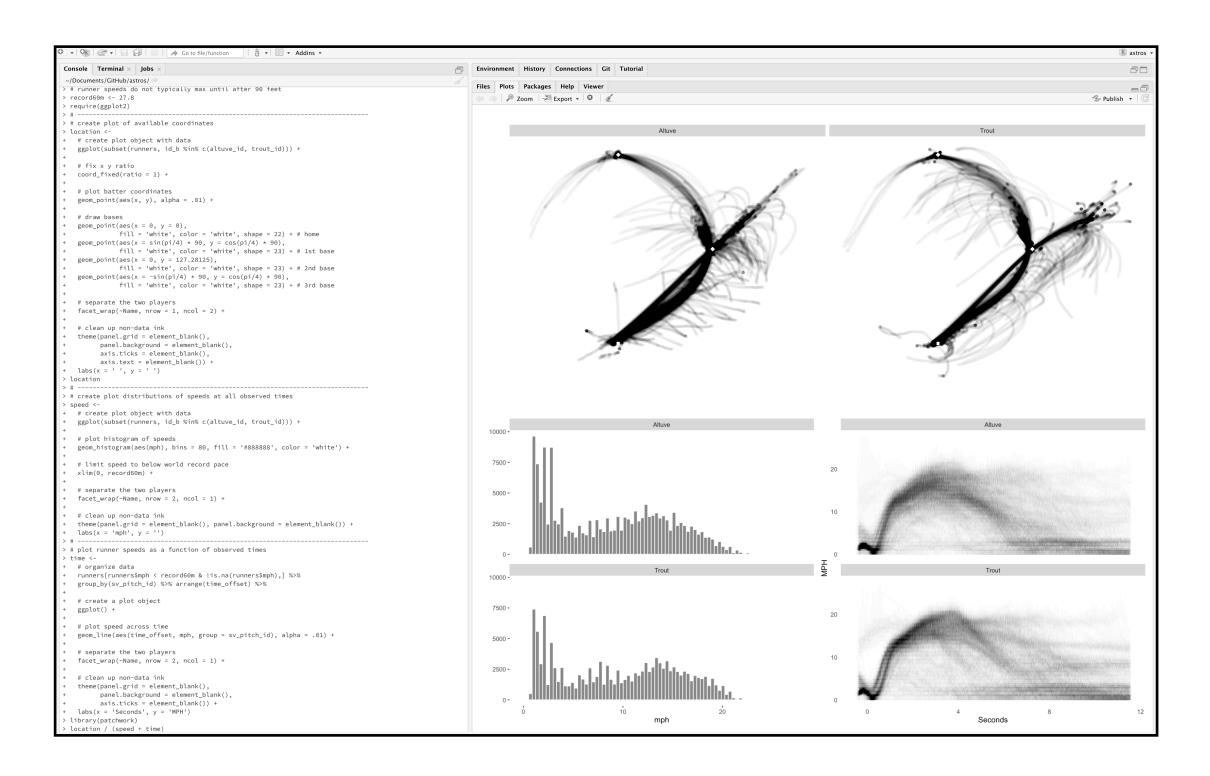
So I can [achieve my goal of ...]



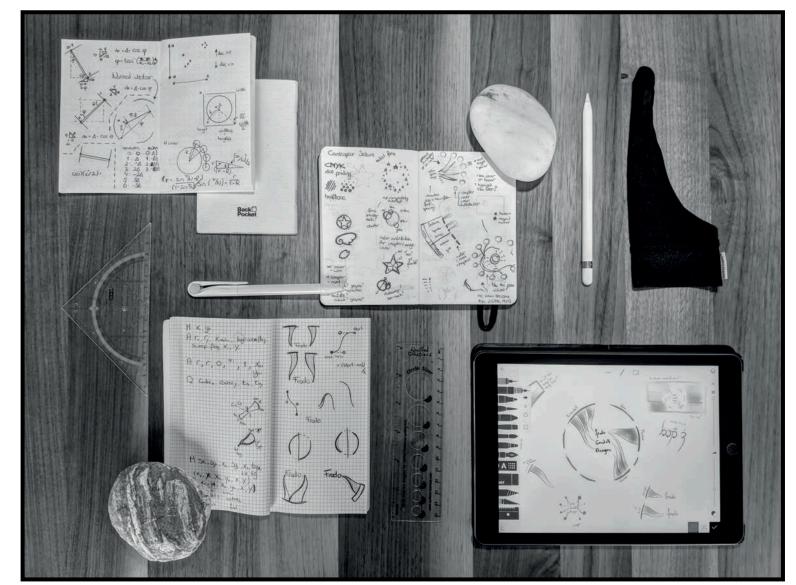
prototyping, benefits of prototyping — the best ideas come from the most ideas

Mike Bostock: "design is a search problem"

prototyping, benefits of code prototyping — depend on creator's proficiency and speed in coding



prototyping, benefits of sketching



Nadieh Bremer's sketch tools

Pen & Paper: Just about as simple as it gets. There's little that beats getting your ideas out in the open than plain pen and paper. We often sketch out our initial thoughts on paper (or the "digital" paper of our tablets). Nadieh basically always has a small pocket notebook and pen within her reach, even when outside, so she can start a brainstorming session wherever she might be. Shirley used a sketchbook until she got an iPad Pro mid-way through Data Sketches.

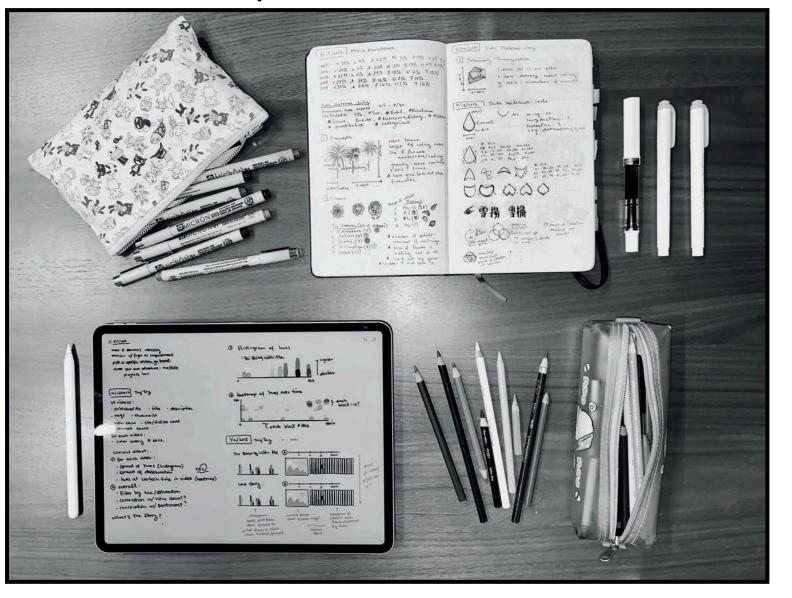
— Bremer & Wu, 2021

prototyping, benefits of sketching

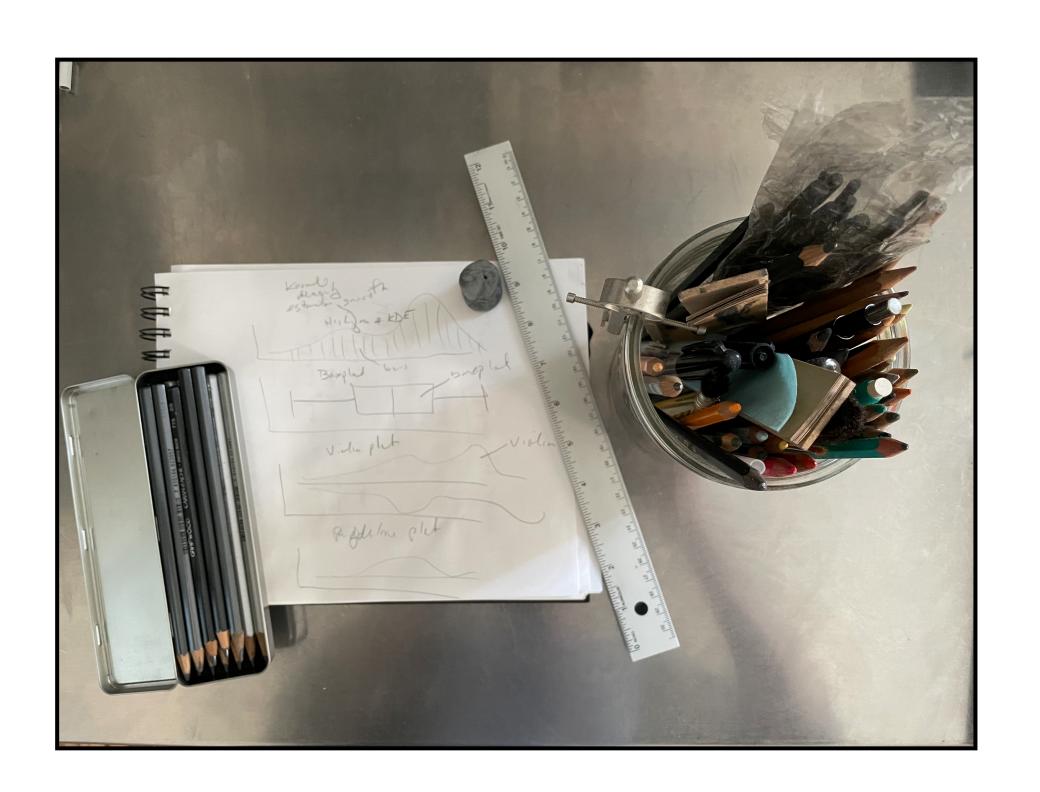
iPad & Apple Pencil: A stand-in for the conventional "paper and pen," the introduction of high precision tablets, drawing tools, and apps makes it easy to take a "sketch" to the next level. We can undo an action, easily switch between colors and pen types and work with multiple layers, while still having the ease of drawing with our hands (as opposed to code).

— Bremer & Wu, 2021

Shirley Wu's sketch tools



prototyping, benefits of sketching



Yep, me too.

pair-wise prototyping your interactive communications

pair-wise prototyping, first audience-purpose-affordances, then divergent sketching

A shares interactive communication with **B**. A does **not** describe or explain.

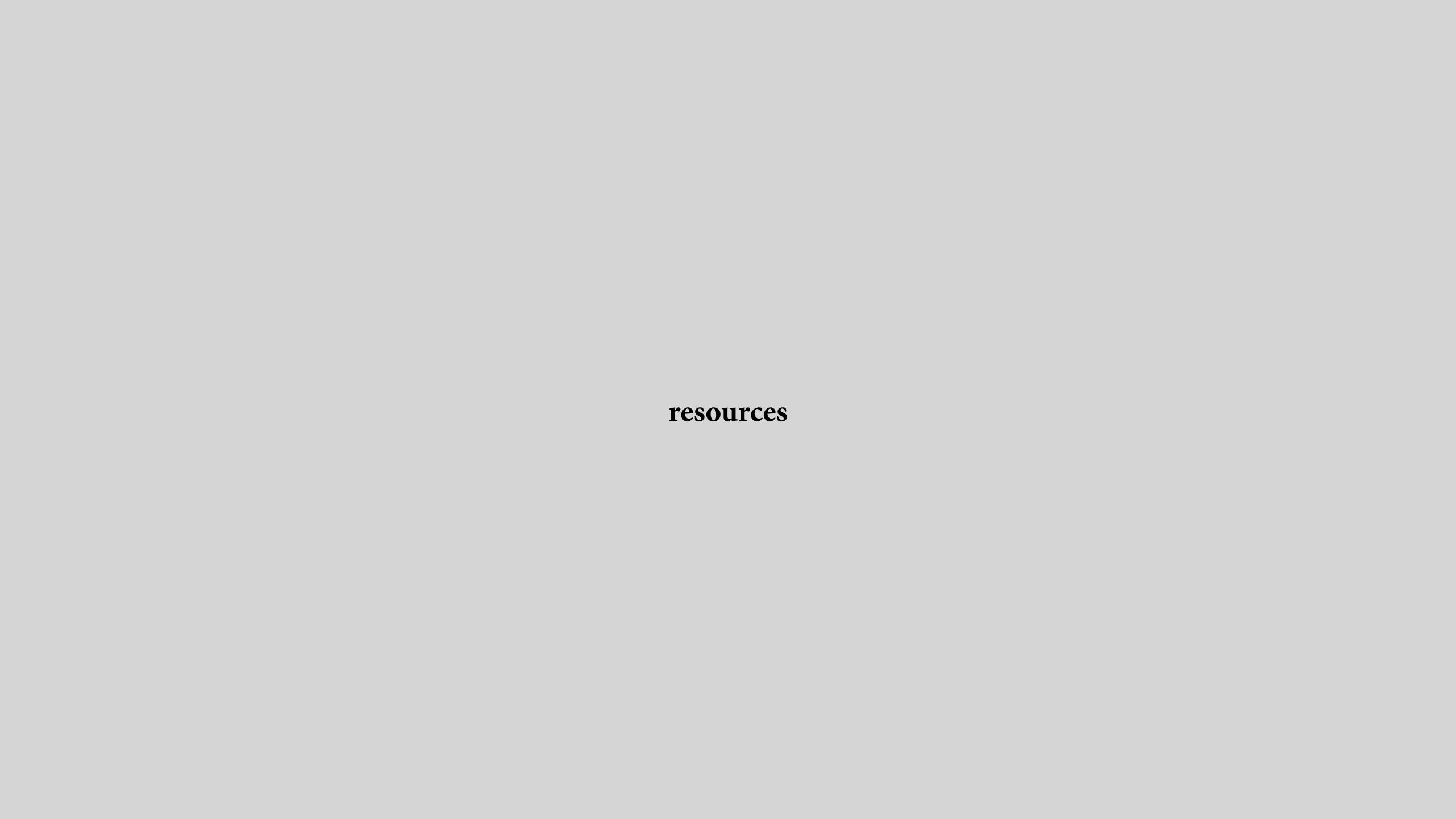
B thinks out loud, answering: whether and how the communication reveals its audience, purpose, and interactive affordances for exploring.

A listens and takes notes: this is an opportunity to learn outside perspective on the communication.

pen & paper: A shows B raw data. Together, start sketching divergent ideas of alternative structures to show and explore in the data.

Then switch. Use half the time for each interactive. Pair-wise prototyping is challenging, but hopefully fun.

The reward. The pair with the most divergent sketches wins ... the most divergent sketches.



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