Interview Script

Introduction and Kick-off

- 1. [interviewer(s) self-introduction]
- 2. Introduction to the study: Thanks again for participating in our research. We would like to know your visualization process and diagramming experience to inform our design of the next generation of visualization tools that we are currently working on.
- 3. What do you mostly work on?
- 4. Do you use visualization? By "visualization" we are not only referring to physical diagrams, but also to "pictures in your head".

Past Diagramming Experience

- 1. What was the last visualization you made?
 - a. If answered with a mental visualization that only happened **conceptually**:
 - i. What did you visualize?
 - ii. Why didn't you draw it?
 - iii. What was the last diagram you made? (jump to "physical visualization" part)
 - b. If answered with a **physical** diagram: (diagram questions)
 - i. What did you visualize?
 - ii. For what purpose did you produce the visualization?
 - iii. Can you tell us about the **process** in which you came up with and produced the diagram?
 - iv. What was the most challenging/time-consuming/tedious part of making this particular diagram?
 - v. Can you give me a couple more examples of diagrams you've created with purpose X?
- 2. Can you remember one diagram you made that you are most proud of?
 - a. Ask diagram questions
 - b. Why are you proud of it?
- 3. Can you remember the most challenging and/or time-consuming diagram you made?
 - a. Ask diagram questions (i), (ii), (iii)
 - b. What made it challenging?
 - c. What took so long?
- 4. Are there diagrams that didn't make it into the final version of a particular work, such as a paper or a slide deck, you have done but were included in the drafts?
 - a. Why were they not included?

Diagramming practice and Tools

- 1. What diagramming tools, libraries, and/or packages are you familiar with?
 - a. Which tools do you currently use? Tell me about them.
 - i. If **multiple** tools are mentioned:
 - 1. Which one(s) do you use most frequently?
 - 2. In what cases is each of them used?
 - 3. Do you use multiple of them at a time?
 - ii. If a **single** tool is mentioned:
 - 1. Why do you consistently use it?
 - b. Can you tell me about the tools you know but no longer use, if any?

Reuse questions

- 1. Introductory questions
 - a. Do you ever use earlier diagrams as a basis for new diagrams?
 - b. Are there features of some of your diagrams that are common?
- 2. After the introduction
 - a. What is the process you use to start from one diagram and move the next?
 - b. What aspects of the starter diagrams are you making use of?
 - c. What is the most tedious part of this process?
 - d. Do you use any features of your tool to make this process easier?
 - e. Are there any limitations to this tool?
- 3. Meta-questions
 - a. How did you borrow feature X from diagram A to make diagram B?
 - b. What tool support do you take advantage of (e.g. style libraries, templates, copy and paste of code, etc.)?
 - c. When is the tool support inadequate for you to reuse your diagrams?
 - d. What reuse work is particularly tedious and burdensome?

Audience reception

- 1. How do people interact with your diagrams?
- 2. What do students, readers, audience members, peers, reviewers, etc. do?
- 3. Do they talk about the diagram, point to parts of it, use it in relation to some prose?