Project 2: Genealogy of a Visualizer

Due Date: 3 days after session 6, 10 pm

1. Pick a visualizer, someone who produces or works with scientific visualizations. Should be at least a grad student, ideally a professor or post-doc. Do some preliminary research about them online, etc., you may have done this already based on your previous assignment.

2. Contact them and ask if they would be willing to be interviewed. The interview will be short 30min or one hour max. You are interested in their experience in their field, as a researcher. This is a class assignment, it will be taped if they are willing. It will not be shared beyond the class without their complete permission. They don't have to answer any questions they don't want to. If they agree, ask for a CV and research them so you can ask intelligent questions.

3. Begin the interview by asking them how they chose their research career. From undergrad to grad, from grad to post-grad. Etc. Did they change topics or fields? Did topics or fields change around them? Were there safer or riskier choices? Has that changed today? Are there changes in gender, race or nationality that have happened? Do they have an explanation?

4. How were they trained? Did they learn techniques that have since been automated? How valuable was that training (do they understand more than current students because of it)? Do they 'see' things differently because of their training? Do they/will they train others in the same way (even if technically unnecessary)?

5. What changes in research practice have they observed over the past 5 or 10 years – in how labs are organized, in who is in labs (computer scientists, physicists, etc.), in the use of computers and simulations and programs? Have there been changes in authorship – more people authoring papers, or less (e.g. in experimental physics)? Were these changes challenging – did the field split? Have there been large changes in funding opportunities – has this shaped the sorts of questions asked? In IP (intellectual property) awareness?

6. How interdisciplinary are their labs? Are there cultural or social differences as well as epistemological ones among the disciplines – what are they? Are new hybrid disciplines coming into being?

7. Are there differences in the presentation and use of visualizations in different labs? How are students trained to recognize these? Are there standards for the presentation of visualizations? What are the standards bodies? Are there disputes over standards? Are there attempts to collect data in more raw format (ie. PDB) and how has this affected publication and lab networking?

8. How are computer programs incorporated into research? (In house or off-the-shelf – Are these constantly changing or relatively static? Are there vendor relationships? Is computer programming and data storage a challenge for the lab? Is it a bottleneck? Has it always been so?

9. How is interaction/networking with other labs mediated – collaboration in person or online, through conferences, only through publications?

10. Thank them in person and with a followup email. Transcribe the interview or immediately type up your notes. Write an essay, at least 1600 words (approx 5 pages, might be longer). Describe the person and the field. It is understood that this is just one person's perspective. You can bring in other sources if you wish. You must use and cite concepts from class (including page numbers!).

Submit the paper and the transcript/notes by Mar 18, 10 pm.

Grading:
- A: Clear description of issues involved (many of the above sections covered). Excellent writing including critical use of concepts from class with citation.
- B: Very good writing, flow of paragraphs, use of concepts from class.
- C: Good grammar, Good account.