Hello, welcome to the Sketching Data Representations study. Thanks for coming. Before we start I’d like to get a few administrative details out of the way.

Here’s how the study will go: First, I will get you to read through and sign the consent form you received. Then I will explain a data set and what I would like you to do. We will then have a period of sketching. And at the end of the session I will ask you to fill out a short questionnaire. As you are leaving, I will get you to sign a sheet saying you received the $20 I owe you.

As stated in the consent form, your participation in this study is entirely voluntary, and you may withdraw from the study at any time. Just come up to me and state your intention to withdraw.

Instructions + the Data Set

So now I have given all of you a data set and a blank sheet of paper, and there are pencil crayons in various colours scattered around the room.

This data set is taken from the results of a psychology paper published in 1974, for which the authors asked students to rate how appropriate various behaviours were in various situations. This data set shows the mean ratings for each behaviour-situation combination. A score of 0 means a behaviour is extremely inappropriate; a score of 9 means a behaviour is extremely appropriate in that situation. So if you take a look at your data set, you can see in the first row and column that the students gave running in class a mean score of 2.52, so it’s not too appropriate.

What I would like you to do is to represent this data set on the blank sheets of paper.

How you do that is completely up to you. There is no wrong way to do this. What I want you to do is to think about what might be interesting about this data, and to draw the data as you explore it.

It might be helpful to think about the following: - connections between different pieces of data - ways to group the data - similarities in the data - differences in the data - interesting patterns - surprising findings in the data

Now, the data set is quite large and you won’t have time to draw the entire thing, so it is absolutely ok to pick only the parts of the data you find interesting.

After you are done, I will give you a questionnaire and I will ask you to describe some of the things you have learned or found interesting in the data.

You can feel free to chat amongst yourselves, but I would like each of you to do this activity individually.
Are there any questions about the data set or about what you need to do?

**If question is something like: How do I draw this?**

- Any way that makes sense to you. To draw a data item, you have to make some sort of mark on the paper to represent it. You decide how that mark looks.

(If they keep pressing) - Do you see anything interesting in the data set right now? …. Ok, how would you draw that? … Can you compare it to something else, is it related to something else?