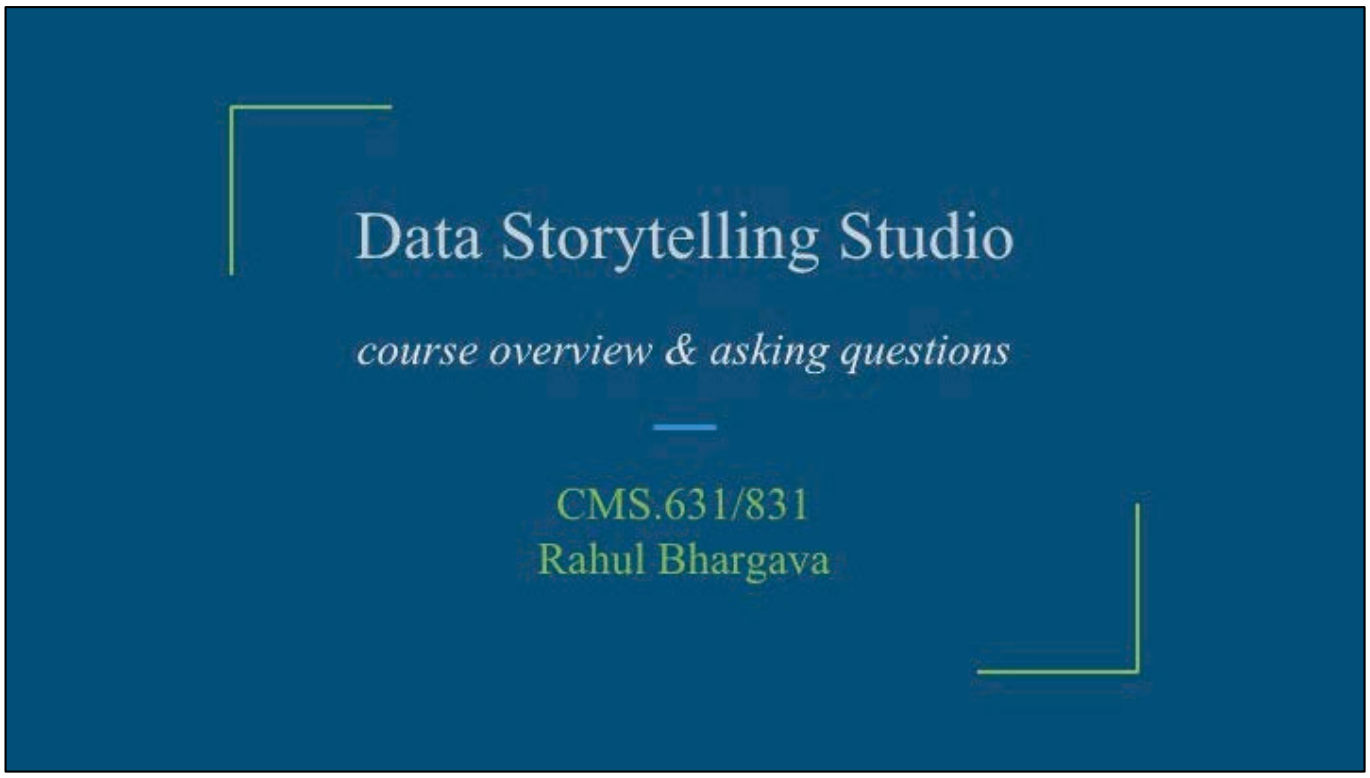


Supplies: printouts of USAID graphic, data sculpture arts and crafts supply bin

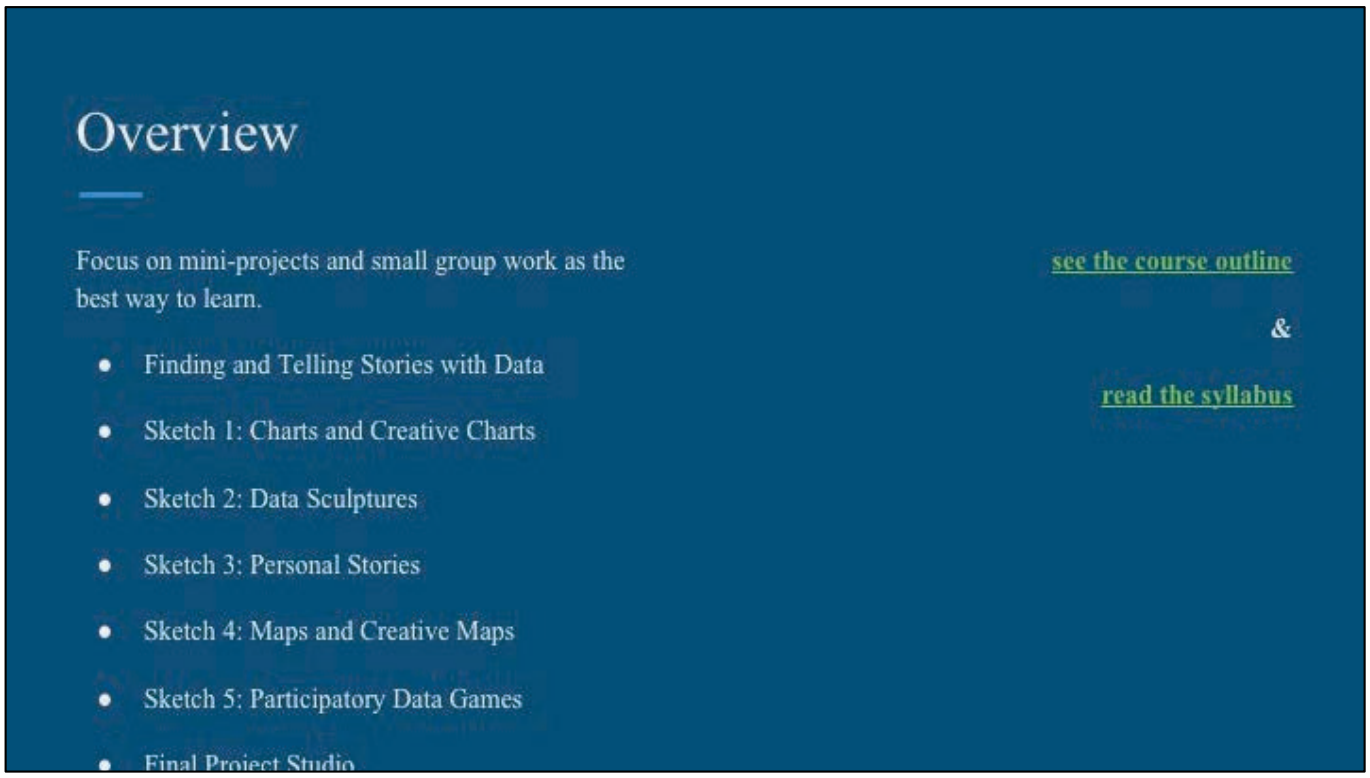
Agenda

- [15] Course overview
- [10] Homework pair & share
- [15] Crit practice
- [10] A process
- [10] Practice asking questions
- [20] WTFcsv question brainstorming activity
- [5] Homework review

A quick ice-breaker to warm up. Ask the audience "What is missing from this one-sentence statistic?". Hopefully they'll come up with things like:

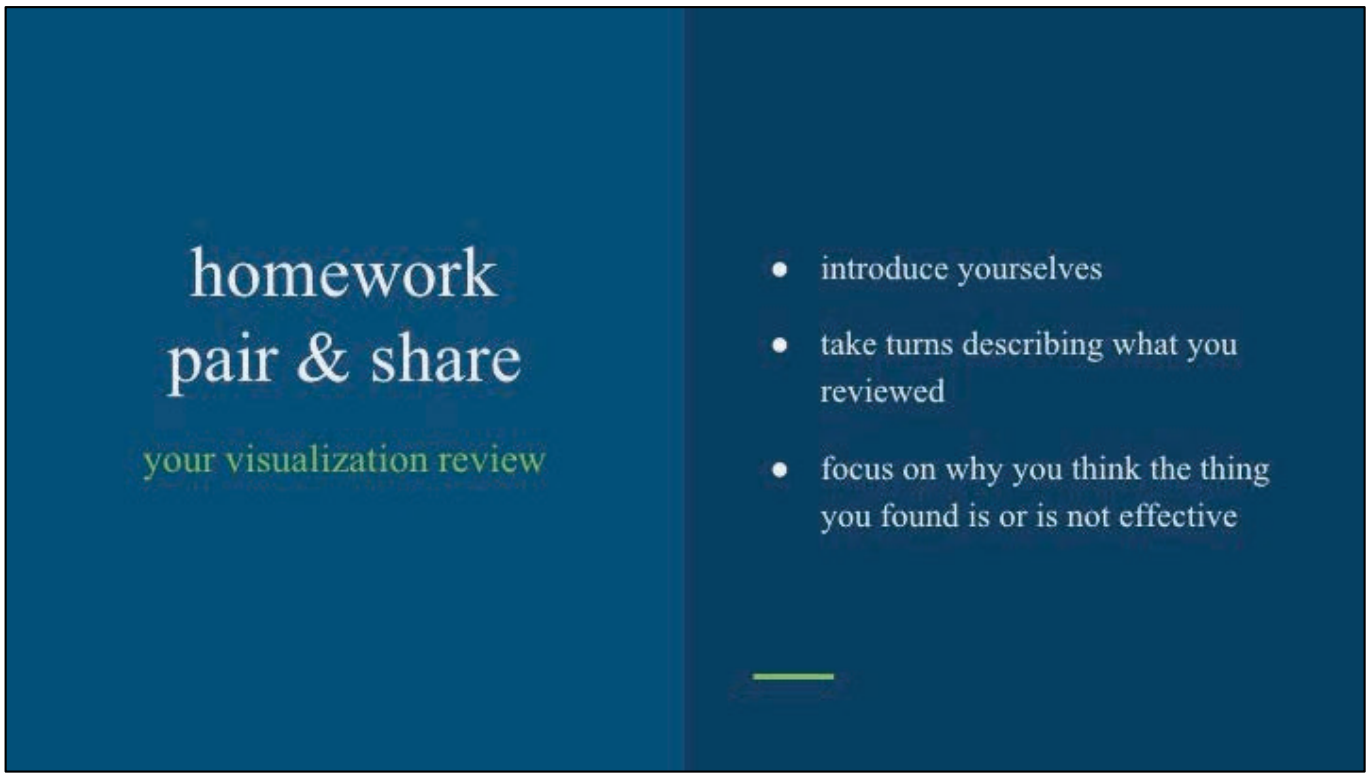
- Historical Context - is this a big change?
- Impact - Does this change matter? What are the expected impacts?
- Source - Who is saying this? (you can tell them it is from nasa)

This course touches on all these things. We'll be practicing our ability to turn information like this into a story with impact. This **is not** a data visualization course. This course **is not** a data science course. This course is about pulling information together into a story and telling that story in an effective way to get an audience to do something. That's why the word "storytelling" is in the name.



This is a project-based hands-on course. You will be making lots of things in small teams. The first module walks through a process for finding and telling stories with data. The rest (ie. majority) of the course is a series of quick 1-week sketches that practice using different media for telling data-driven stories. You'll be working on small teams and producing something new every week and a half.

Our "data to think with" will be climate change data. In the past I have used topics like "food security" and "civic data". This course is literally about looking at data to make arguments and tell stories. If you don't think data and information are a useful way to understand the changing world around us then you probably shouldn't be in this course. All the sample data you are provided to work with is related to climate change in some way. I take a broad definition here, so everything from migration, to sea level rise, to interplanetary colonization is included!



As indicated on the syllabus, you should have all found a visualization online and written a short summary of it on the course blog. Pair up with someone else in the class and spend 5 minutes showing them what you found and talking about these questions. Then switch and let the other person show you what they found for 5 minutes.

Teacher notes: Now run a share back. After students are done sharing ask the whole class to share any commonalities or differences they saw in the visualizations they looked at. Facilitate a discussion that lets students express their opinions about what is good and what is bad about the examples they shared together.

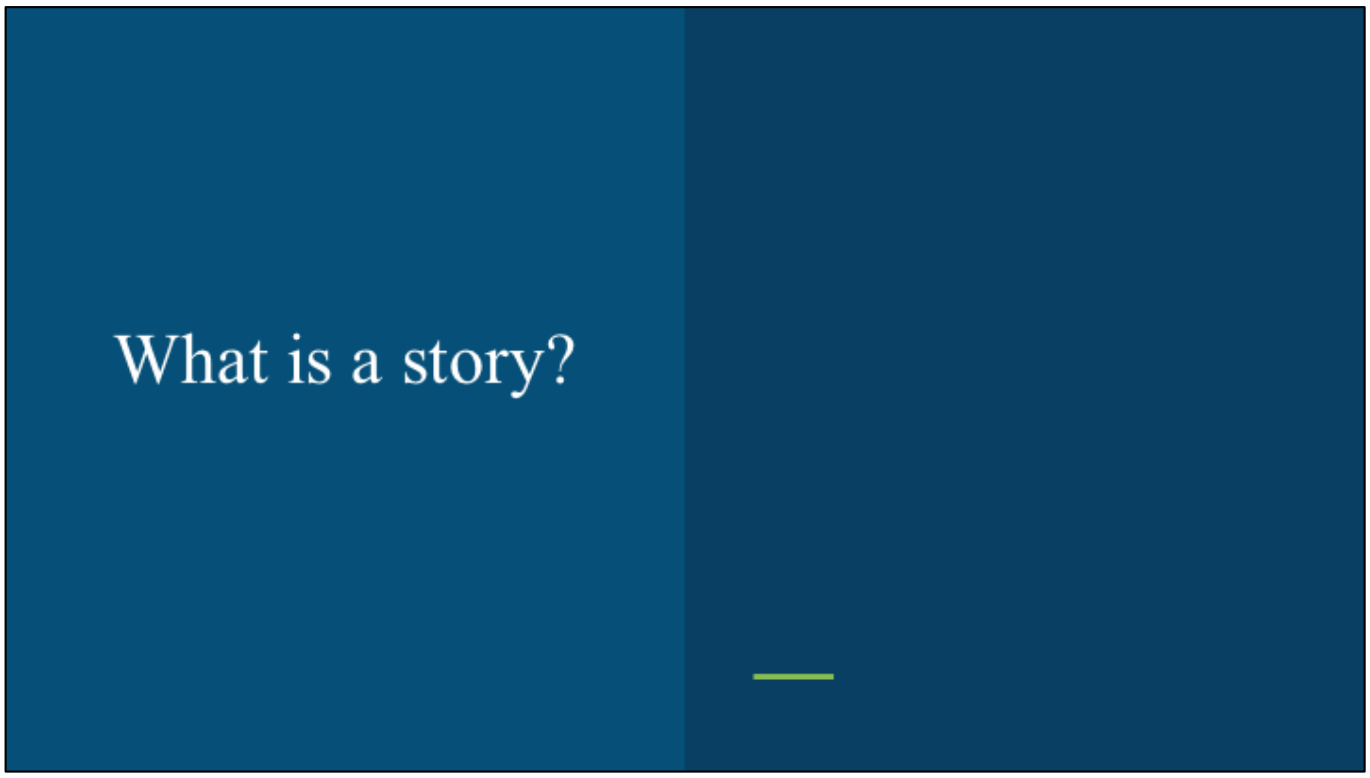
An example to think with

Create by Lemonly for the US AID
Public domain image

Run the 15 mins Collective Critique activity (link TBD)

Processes for Going from Data to Story

Now lets talk about how we go from raw data to a story



Ask the students what they think makes a story. After they share their definitions, make sure to highlight a few things if they haven't come up already:

- They have a beginning, a middle, and an end
- There is an audience
- Something happens
- There are characters

Other models

Infographic Process Wheel

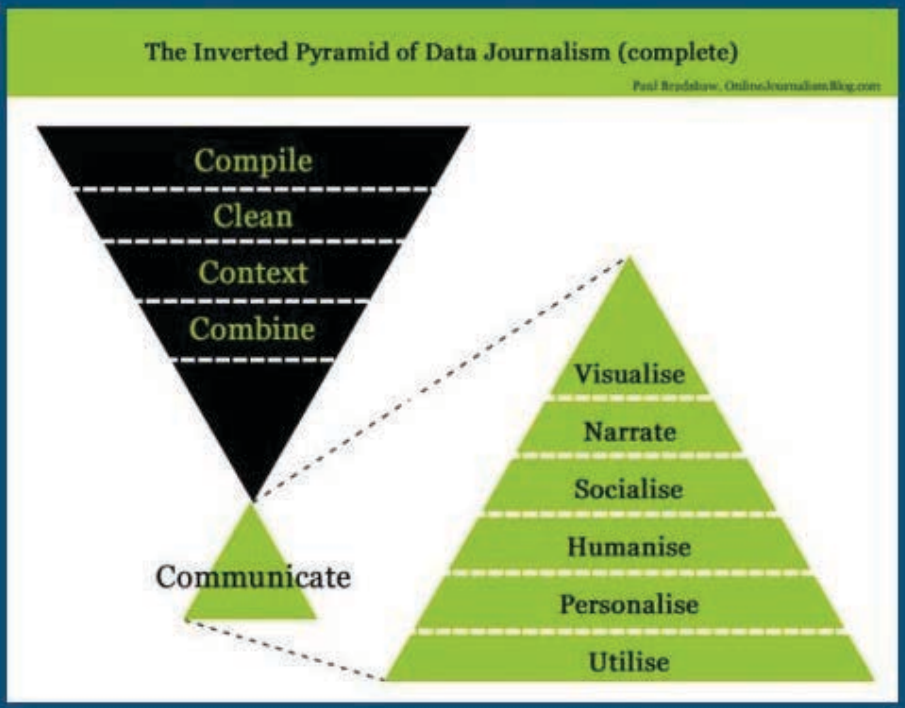
Visualizing Impact

Some people visualize the process of going to data to story with a wheel. This is from Visualizing Impact, a design firm. Make sure to highlight how this model includes the monitoring piece - "track its impact" on the top of the loop.

Other models

The Inverted Pyramid of Data Journalism

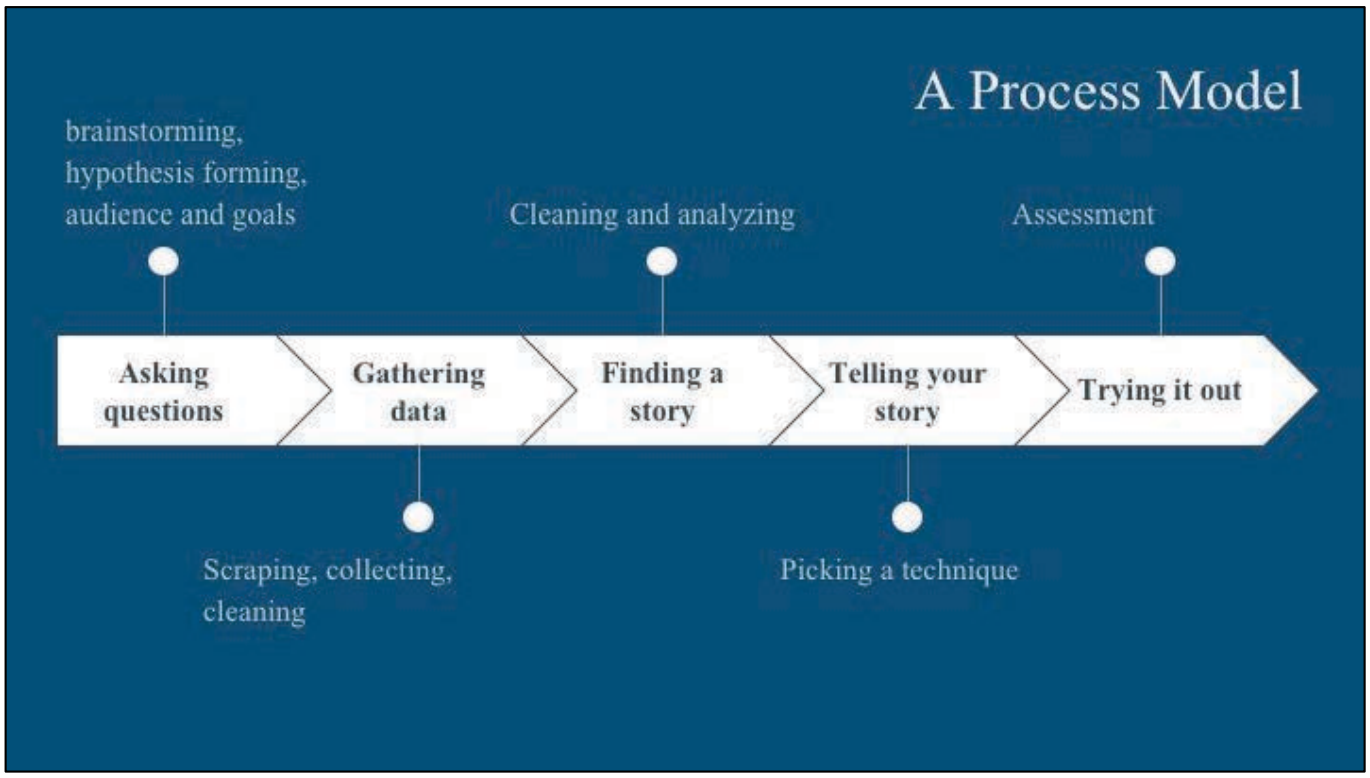
Paul Bradshaw



Other folks use triangles. Here Bradshaw is focused on data-driven journalism. The keys to takeaway here are the "humanise" and "narrate" pieces.

A process for working with data

1. asking questions
2. gathering data
3. finding a story
4. picking a technique to tell the story
5. trying it out



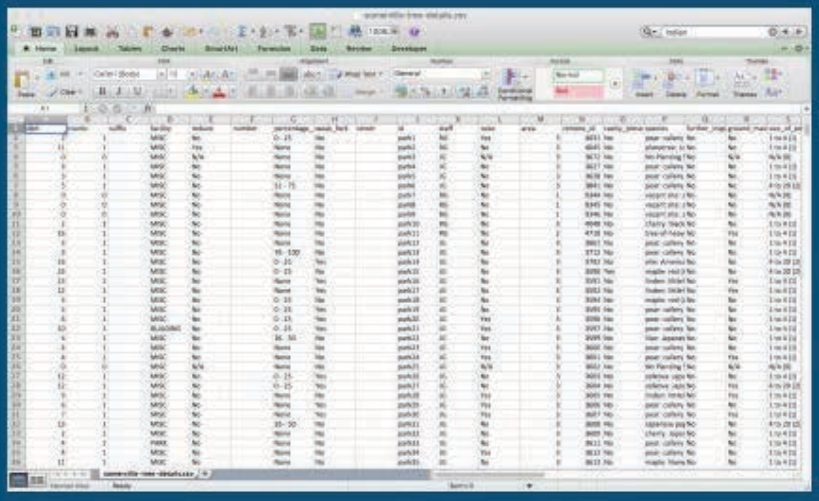
I draw my model as a line, but it is more circuitous than that. Each step is important. We'll be focused on the latter half of this model in this course. Remember that in data projects 80% of the time is spent cleaning the data, so we'll try to use relatively clean data sets so we can practice our muscles for telling data-driven stories in various ways.

Asking Questions

Let;s start with asking questions.

Practice Asking Questions Together

the Somerville Tree Census



We'll use this data-set as an example. This is a list of all the trees in the town of Somerville, MA, USA. This was collected by the city in 2010. This includes each tree's species, location, health condition, and more. Imagine that you lived in this city, what questions would you want to ask this data set? For example, one question you could ask is: do more expensive parts of town have more healthy trees? To answer this you'd need to get data about housing prices. Here in the US you could probably get that from online real estate listings; or you could pull census data and look at average income level in different parts of town.

Now ask the students for their ideas.
Make sure to cover that there are different types of data they can pull from: open data with APIs, semi-open data - PDF munging, scraping, crowdsourcing, citizen science - manual data collection. Also that there are lots of different sources of data: social media, government, non-profits / interest groups, DIY.

WTFcsv - learning to asking questions

https://databasic.io/wtfcsv

Come back with:

- 1 question to ask
- list of other datasets you'd need to answer it
- how you'd try to get those datasets

Run the "Asking Questions" activity. Find facilitation notes and videos to show here: https://databasic.io/en/culture/ask-questions

homework

- install stuff
- read stuff
- grad student to read and present about Open Data readings

5 mins

CMS.631 Data Storytelling Studio: Climate Change
Spring 2017