



Data Storytelling Studio

course overview & asking questions

CMS.631/831
Rahul Bhargava

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

**Global temperature has increased
1.4° Fahrenheit since 1880.**

What's missing?



Overview

Focus on mini-projects and small group work as the best way to learn.

- Finding and Telling Stories with Data
- Sketch 1: Charts and Creative Charts
- Sketch 2: Data Sculptures
- Sketch 3: Personal Stories
- Sketch 4: Maps and Creative Maps
- Sketch 5: Participatory Data Games
- Final Project Studio

Many readings are recent blog posts or articles.

see the course outline

&

read the syllabus

Climate Change Data?

Information about the history, future, and impacts of climate change. This can relate to a broad set of topics - migration, sea level, unrest, tree cover, transportation, news reporting, and more. Think about your interests and passions and link them to this topic.

homework pair & share

your visualization review

- introduce yourselves
 - take turns describing what you reviewed
 - focus on why you think the thing you found is or is not effective
-

An example to think with



Processes for Going from Data to Story

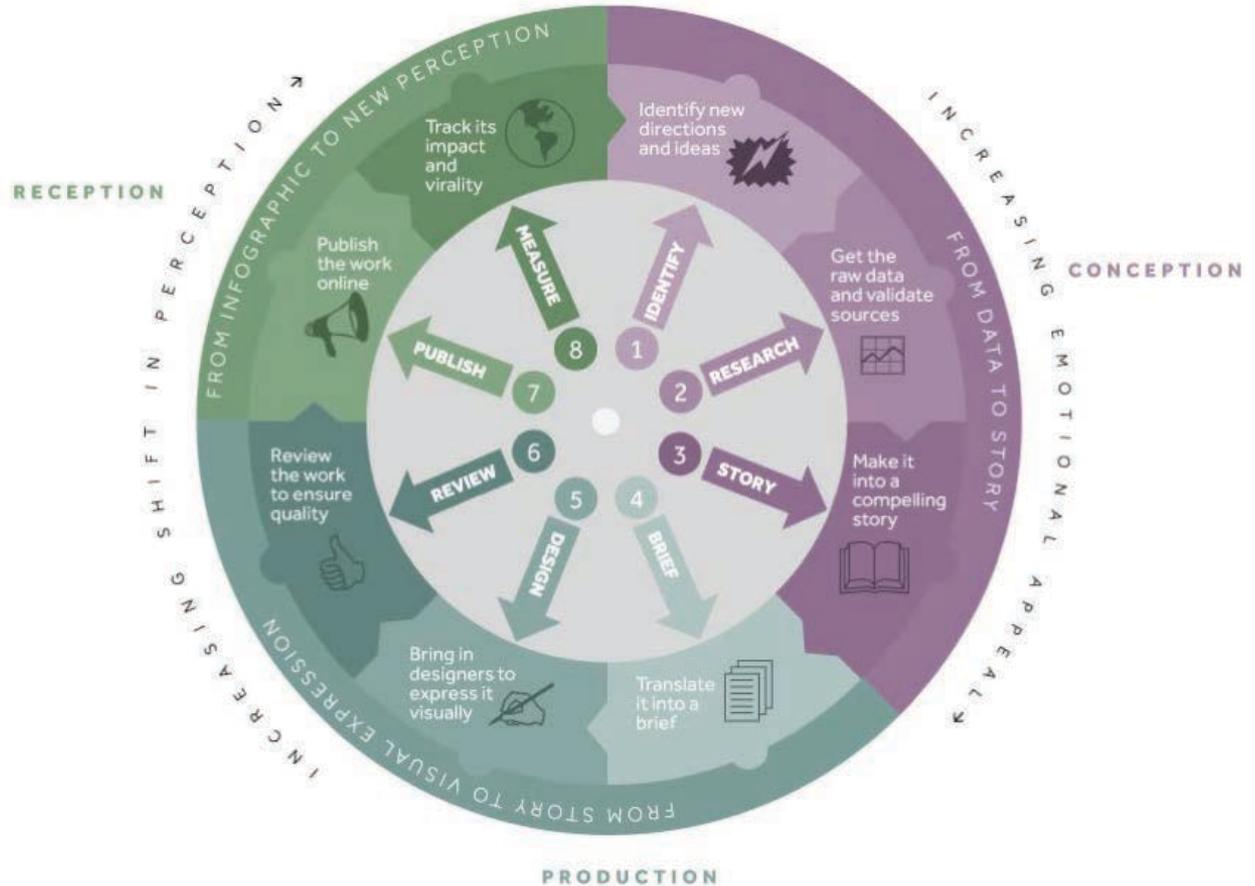
What is a story?



Other models

Infographic Process Wheel

Visualizing Impact



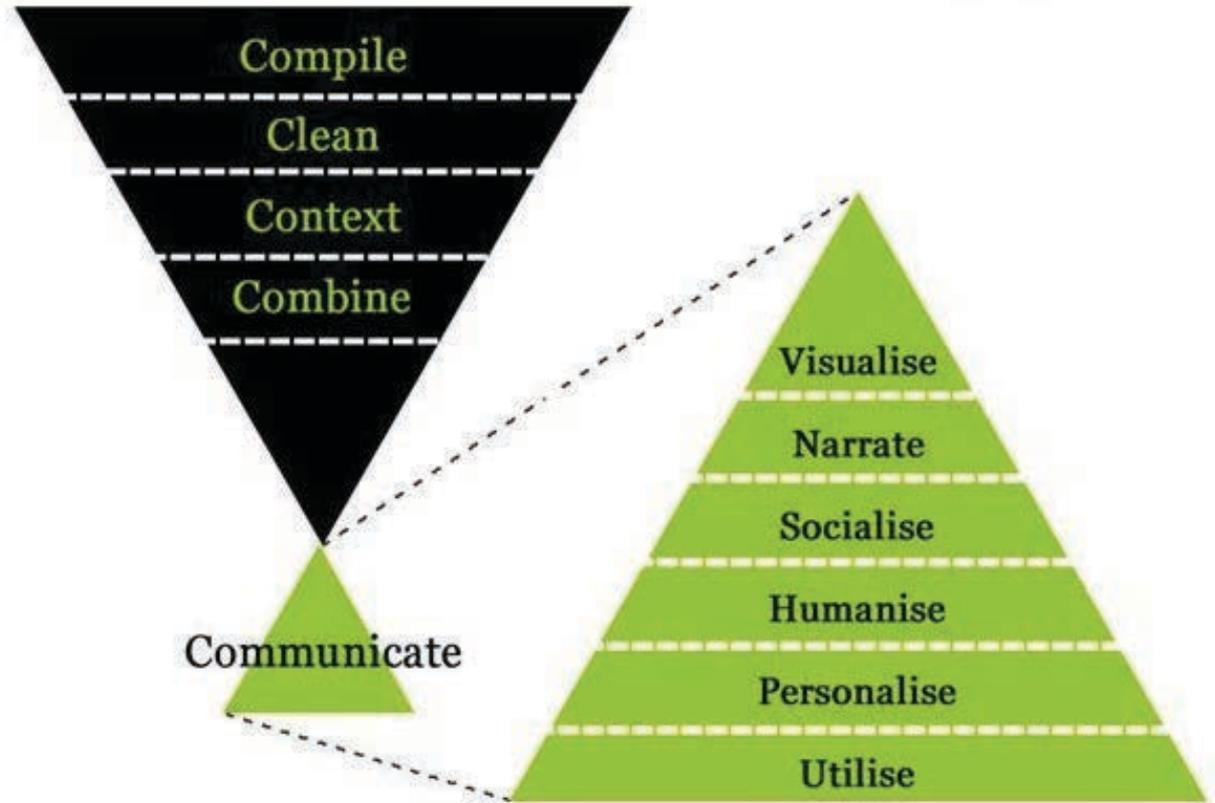
The Inverted Pyramid of Data Journalism (complete)

Paul Bradshaw, OnlineJournalismBlog.com

Other models

The Inverted Pyramid of Data Journalism

Paul Bradshaw



© Paul Bradshaw. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <https://ocw.mit.edu/help/faq-fair-use/>

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



A Process Model

brainstorming,
hypothesis forming,
audience and goals



Cleaning and analyzing



Assessment



Scraping, collecting,
cleaning



Picking a technique



Asking Questions

Practice Asking Questions Together

the Somerville Tree Census

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
1	dbh	trunks	suffix	facility	reduce	number	percentage	weak_fork	street	id	staff	raise	area	remote_id	cavityprese	species	further_insp	ground_mai	size_of_ex
2	2	1		MISC	No		0-25	No		park1	RG	Yes	3	4031	No	pear: callery	No	1 to 4 (1)	
3	11	1		MISC	Yes		None	No		park2	RG	No	3	4045	No	planetree: Lc	No	1 to 4 (1)	
4	0	0		MISC	N/A		None	No		park3	JG	N/A	3	3672	No	No Planting	No	N/A	
5	3	1		MISC	No		None	No		park4	JG	No	3	3627	No	pear: callery	No	1 to 4 (0)	
6	3	1		MISC	No		None	No		park5	JG	No	3	3628	No	pear: callery	No	1 to 4 (1)	
7	5	1		MISC	No		51-75	No		park6	JG	No	3	3841	No	pear: callery	No	4 to 20 (2)	
8	0	0		MISC	No		None	No		park7	RG	No	1	9344	No	vacant site: s	No	N/A (0)	
9	0	0		MISC	No		None	No		park8	RG	No	1	9345	No	vacant site: s	No	N/A (0)	
10	0	0		MISC	No		None	No		park9	RG	No	1	9346	No	vacant site: s	No	N/A (0)	
11	2	2		MISC	No		None	No		park10	RG	No	3	4048	No	cherry: black	No	1 to 4 (1)	
12	16	1		MISC	No		None	No		park11	RG	No	2	4718	No	tree-of-heav	Yes	1 to 4 (1)	
13	3	1		MISC	No		None	No		park12	JG	No	3	3661	No	pear: callery	No	1 to 4 (1)	
14	3	1		MISC	No		76-100	No		park13	JG	No	3	3712	No	pear: callery	No	1 to 4 (1)	
15	16	1		MISC	No		0-25	Yes		park14	JG	No	3	3782	No	elm: Americ	No	4 to 20 (2)	
16	23	1		MISC	No		0-25	No		park15	JG	No	3	3590	Yes	maple: red (μ	No	4 to 20 (2)	
17	13	1		MISC	No		None	Yes		park16	JG	No	3	3591	No	linden: littl	Yes	1 to 4 (1)	
18	12	1		MISC	No		None	Yes		park17	JG	No	3	3592	No	linden: littl	Yes	1 to 4 (1)	
19	4	1		MISC	No		0-25	No		park18	JG	No	3	3594	No	maple: red (μ	No	1 to 4 (1)	
20	5	1		MISC	No		0-25	Yes		park19	JG	No	3	3595	No	pear: callery	No	1 to 4 (1)	
21	6	1		MISC	No		0-25	Yes		park20	JG	Yes	3	3596	No	pear: callery	No	1 to 4 (1)	
22	10	1		BUILDING	No		0-25	Yes		park21	JG	Yes	3	3597	No	pear: callery	No	1 to 4 (1)	
23	4	1		MISC	No		26-50	No		park22	JG	No	3	3599	No	lilac: Japane	No	1 to 4 (1)	
24	4	1		MISC	No		None	No		park23	JG	Yes	3	3600	No	pear: callery	No	1 to 4 (1)	
25	4	1		MISC	No		None	No		park24	JG	Yes	3	3601	No	pear: callery	Yes	1 to 4 (1)	
26	0	0		MISC	N/A		None	No		park25	JG	N/A	3	3602	No	No Planting	No	N/A (0)	
27	12	1		MISC	No		0-25	Yes		park26	JG	No	3	3603	No	zelkova: Jap	No	1 to 4 (1)	
28	12	1		MISC	No		0-25	Yes		park27	JG	No	3	3604	No	zelkova: Jap	Yes	4 to 20 (2)	
29	9	1		MISC	No		None	No		park28	JG	Yes	3	3605	No	linden: littl	Yes	1 to 4 (1)	
30	6	1		MISC	No		None	Yes		park29	JG	Yes	3	3606	No	pear: callery	No	1 to 4 (1)	
31	7	1		MISC	No		None	Yes		park30	JG	Yes	3	3607	No	pear: callery	Yes	1 to 4 (1)	
32	13	1		MISC	No		26-50	No		park31	JG	No	3	3608	No	Japanese paj	No	4 to 20 (2)	
33	2	1		MISC	No		None	No		park32	JG	No	3	3609	No	cherry: Japar	No	1 to 4 (1)	
34	4	1		PARK	No		None	No		park33	JG	No	3	3611	No	pear: callery	No	1 to 4 (1)	
35	4	1		MISC	No		None	No		park34	JG	Yes	3	3612	No	pear: callery	No	1 to 4 (1)	
36	11	1		MISC	No		None	No		park35	JG	No	3	3613	No	maple: Norw	No	1 to 4 (1)	

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

The screenshot shows the WTFcsv website interface. At the top, there's a logo for 'data BASIC.io' and a 'WTF CSV' icon. The main heading reads 'WTFcsv tells you WTF is going on with your .csv file.' Below this, a sub-heading explains: 'Data arrives at your doorstep in the form of a spreadsheet but how do you find a story in rows and columns? WTFcsv provides the first step by characterizing each column's data type and contents so that you can ask more questions.' There are two buttons: 'use a sample' and 'upload a file'. A dropdown menu is open, showing 'Titanic Survivors' and an 'ANALYZE' button. Below the main content, there are two sections: 'About WTFcsv' which includes a video player showing the WTF CSV logo, and 'Are you an Educator? Try our Activity Guide' which provides information for educational use and a 'Download' button. The bottom right corner features a 'Google Analytics' logo.

homework

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

MIT OpenCourseWare
<https://ocw.mit.edu/>

CMS.631 Data Storytelling Studio: Climate Change
Spring 2017

For information about citing these materials or our Terms of Use, visit: <https://ocw.mit.edu/terms>.