

Join at slido.com #ucla

## Humanizing Technology Critical Cartography and Civil Society

Albert S. Kochaphum Week 2 | April 6<sup>th</sup>, 2021

#### March Madness anyone?

```
I only cared about ucla
                  gonzaga got rektd
go bruins oOOF Boooooo sad UCLA BABY :( Spain SY YESSSSS
   Sports? what's basketball
              i do not know sports
                   MY BOI JAIME
```

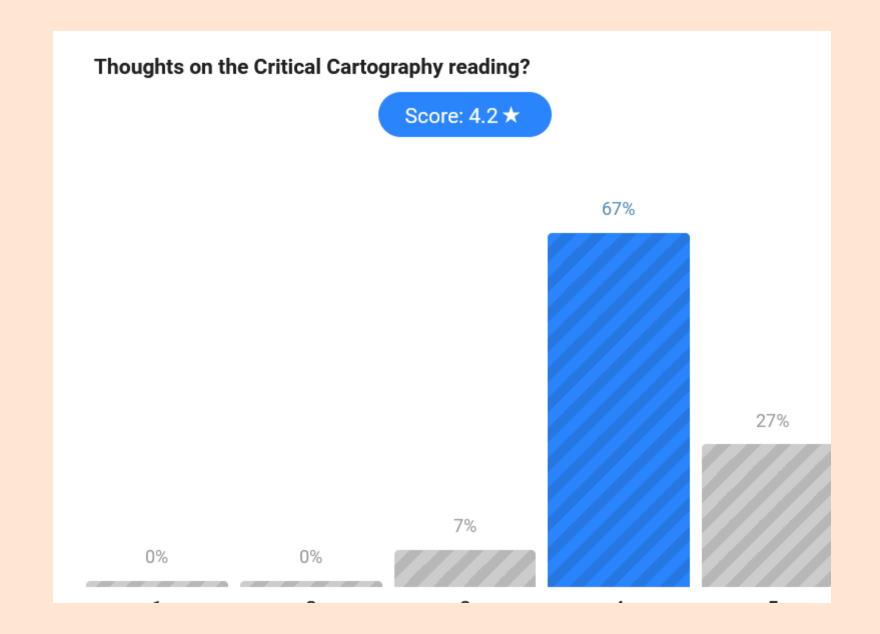
#### Thoughts on the Critical Cartography reading?

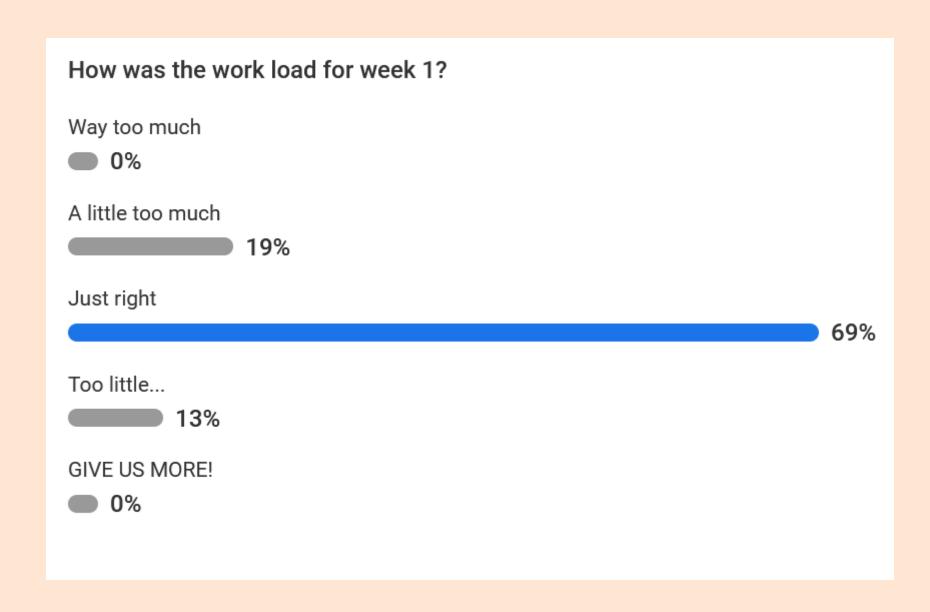
Fantastic! Super interesting!

Interesting but kinda confusing and full of jargon here and there Dense but interesting dense pretty alright

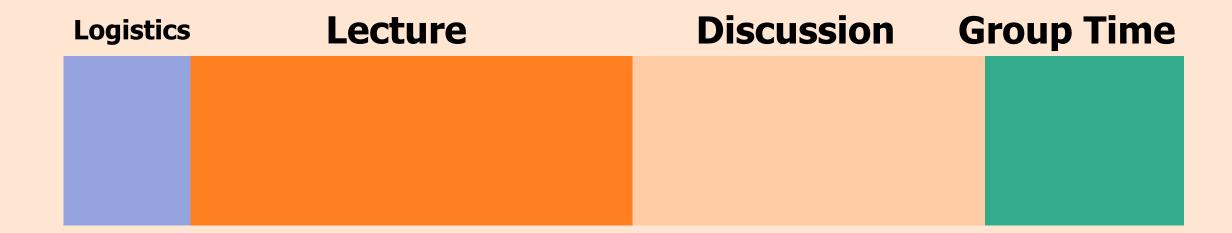
yery good!! Good Really intreresrung

Nery good!! Good Interesting





#### Today's Agenda



#### Week 1 ALwards and ALccolades

# tic tactful topic choices

Problems in how we use data/GIS: dogmatism for statistical significance #24

anmindi started this conversation in Week 1

"Although numbers cannot exactly lie, the people and methodologies behind data collection do hold their own biases, which then in turn influence how data is measured and portrayed."

Problems in the way Data and GIS is Used #28

nnhimichelle started this conversation in Week 1

"For instance, data with Asian American and Pacific Islander communities are incredibly difficult to disaggregate... creates such skewed data for the demographic and perpetuates the Model Minority Myth..."



Problems with Data and Ethics: Palantir #40

vcta99 started this conversation in Week 1

"Palantir and the use of unethical data analytics to target undocumented communities"

Biased questions and biased presentation of results #32

rh5140 started this conversation in Week 1

Machine Bias (ProPublica, 2016), which concluded that risk-assessment software is biased against Black people.

# Good Ricolalecting last week's material

Problems in how GIS and data can be used

ktgreenler started this conversation in Week 1

I think, concerning data usage within GIS, beginners are the most likely to fall into unintentional uses or displays of information because they are so focused on what these tools can do rather than the harm they can also generate.

Problems with the way we use data and GIS

alizezila started this conversation in Week 1

"there are real people with real biases behind much of the data and coding that may affect how others perceive it."

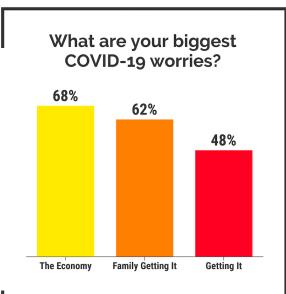


Problems with the way we use data and GIS

#19

rachan2023 started this conversation in Week 1

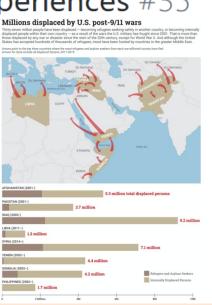
"People, who may not recognize that all the percentages totaled up exceed 100%, may believe the politician's narrative. As a result, the issues with data and GIS are that they can be used to hurt communities and spread false information in order for personal gain."



## Problems with Data/GIS: Possibility of Overlooking Human Experiences #35

epham36 started this conversation in Week 1

Data, when it overlooks the human experiences of people who are captured in the data, can fail to grant pressing topics the true gravitas they deserve, especially when numerical figures grow to be this enormous.







#### Problems in Using Data and GIS - Ethical Data Collection #29

Wny-Duong started this conversation in Week 1



Wny-Duong 1 hour ago

edited - ···

I've noticed a lot of fellow students already discuss issues regarding how to properly disaggregate data and applying data towards ethical use cases, but I feel it's also very important to address issues with the data starting from the process of collecting it. There are many historical cases of data being collected unethically. More recently, however, there have been greater strides in trying to collect and use data in ethical fashions I've looked through a few papers and videos discussing the issues that I'll try to summarize here.

 (Crash Course video on Ethical Data Collection) https://www.youtube.com/watch?v=CzNANZnoiRs This video discusses some historical cases of unethical data collection in the world. These instances included the study of the digestive system on an infirm man (Alexis St. Martin), the Tuskegee Syphillis Study (which was considered ethically unjustified since even the 1970s), and most notably, the collection of HeLa cells used for biological research without compensation to the patient, Henrietta Lacks, or their family. What these cases all had in common, looking back, was that researchers lacked consideration for the people from whom their data was sourced. There were failures in informing subjects about the intent of their experiments, misinformation on how the studies would serve them directly, and even straight-up neglect and harm inflicted to study patients.

#### Problems with the Way We Use Data and GIS

#44

jsxu315 started this conversation in Week 1

When collecting data, the categories that we use can be affected by our own biases; for example, in the Lab1 shapefile table, there are two fields for race, 'other' and 'mixed'. The choice to use these two categories instead of, for example, letting people write in/check all groups they belong to, can erase some minorities' backgrounds. For example, if a report shows that people in the 'other' group experienced a disproportionate percentage of hate crimes, that data can't be used to enact meaningful change without intensive follow-up — it's hard to combat 'other'-based discrimination without knowing where it comes from and the social dynamics behind it.

Even non-other/mixed categories can encompass a broad range of backgrounds and experiences so that data collected on them doesn't accurately reflect what a population experiences or needs. For example, the Census defines "White" as "a person having origins in any of the original peoples of Europe, the Middle East, or North Africa" and "Asian" as including "Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam." (1) There's a vast range of experiences among the people who check these boxes, which means that some will inevitably be drowned out when schools and policymakers make decisions based on the data.

## Most thoughtful com mentos

Problems in how we use data/GIS: dogmatism for statistical significance #24

anmindi started this conversation in Week 1



skarakas1 9 hours ago

Great point! Earlier this morning I was listening to an interview with Kim Tran, a diversity, equity, and inclusion (DEI) consultant and author, critiquing the DEI industry. She mentioned that many companies and consultants look at organization-scale results which skew statistics--for example, if a company is 80% white, survey responses are likely to show that a majority of employees find the work environment sufficiently tolerant in what is an essentially meaningless statistic because it is not weighted to represent those who would actually be subject to workplace discrimination. I think it's so important as GIS and data science users to critique our own work and try to see how we can do better, and also to provide transparent explanations of the statistical methods behind visualizations. So often statistics are presented as purely factual representations when, in fact, there are so many decisions and uncertainties throughout the processes behind them.



#### annyrviloria yesterday

Such an important point. I have worked in research for a long while and just staring my PhD journey and I cannot tell you how many biostatistics lectures I have sat through where the concept of statistical significance is not challenged. It is as if the idea that a made up cutoff for determining the likelihood of something happening should make perfect sense. Tufuku Zuberi, a brilliant demographer, writes about the imperialist and racist thought embedded in our collective rationalization of statistics in his book "White logic, white methods". I highly recommend it!

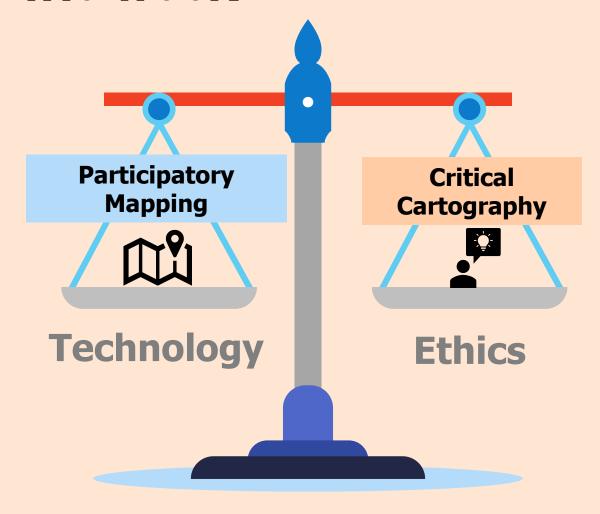
#### Other Feedback

#### Onto Week 2 Lecture!

## Humanizing Technology



#### Theme of the week



**Balancing critical tools with critical thinking** 

Remember this? **GIS Coding Ethics** 

**Where was Critical Cartography?** 

#### Venn (will you stop showing us these) diagrams?

Please, let me just: Ven Timo Diagram to Vou

# **Sectors of Society Private Government Civil Society**

#### **Civil Society**









#### Civil Society in mapping





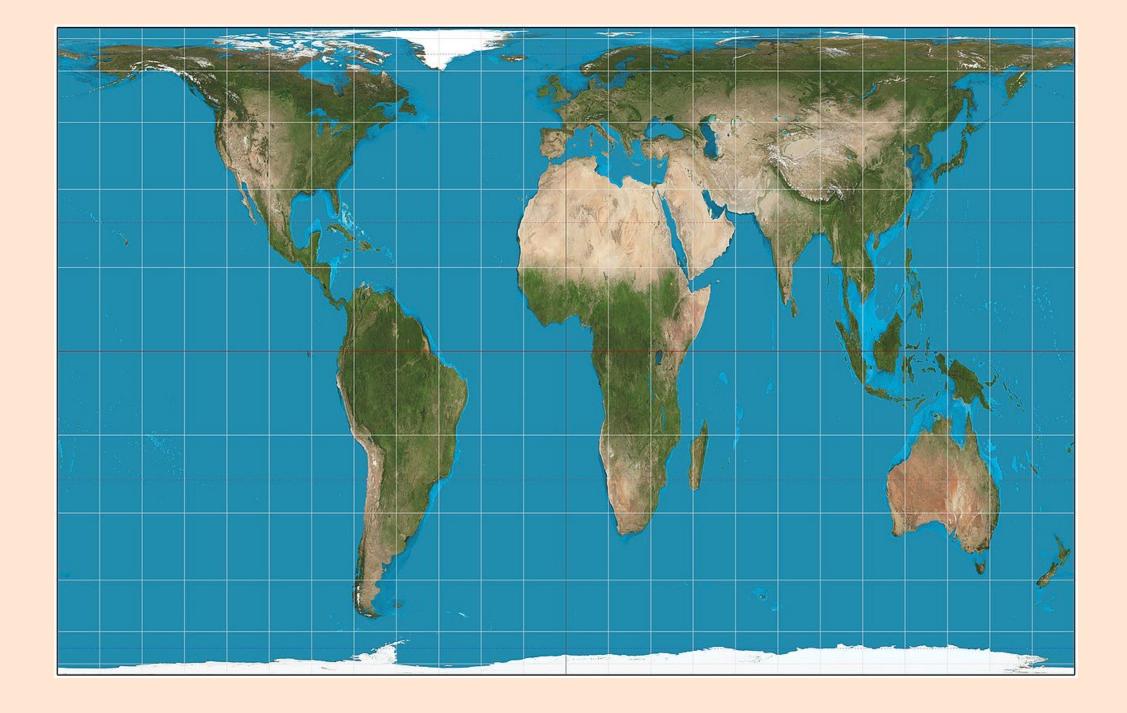




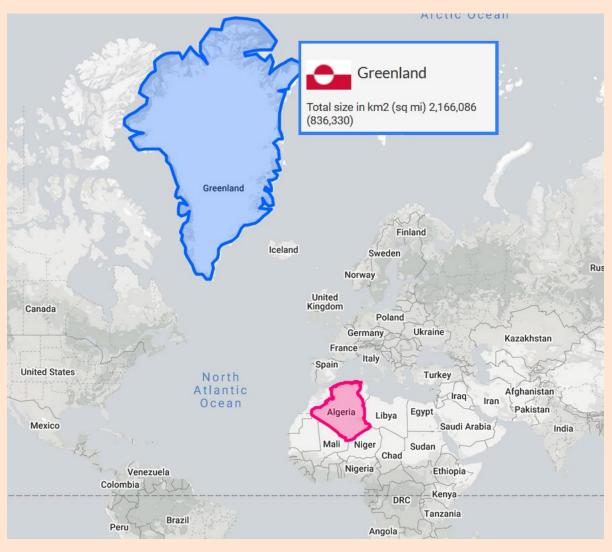
### Civil Society and Critical Cartography



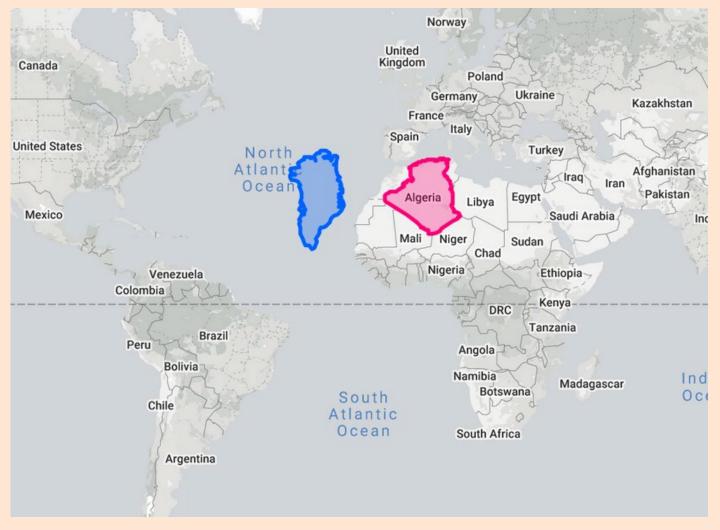
"Critique is about the politics of knowledge"



### Undisciplining Cartography



### Undisciplining Cartography



https://thetruesize.com

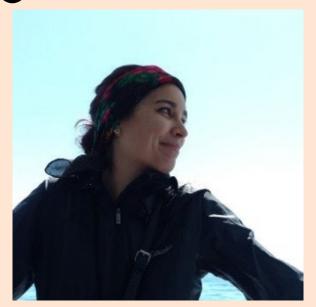
#### Undisciplining Cartography

When you realize that Greenland is smaller than Algeria



### Visiting Voice: Mariah Tso

#### Visiting Voice: Mariah Tso



Mariah Tso is a Diné woman, artist, and GIS Specialist for the Ralph J. Bunche Center and the Million Dollar Hoods Project.

#### slido

#### Audience Q&A Session

i) Start presenting to display the audience questions on this slide.

#### Discussion

#### Discussion #1

- 1. Random breakout rooms of 4 people each
- 2. Click on your breakout room in this Google Doc: <a href="https://tinyurl.com/453eb3z4">https://tinyurl.com/453eb3z4</a>
- 3. Discuss the questions together
- 4. Take notes
- 5. Pick 1-2 representatives to share back to the larger group

# Q1. How do we increase awareness of critical cartography? Should we?

## Q2. "Oppression" seems to be a running theme of cartography, how do we avoid it?

# Q3. We will be "map hacking" ourselves, but what about the role of "map artists"?

#### Thinking Cap for the week:

## How can participatory mapping and critical cartography be improved?

#### **Assignments**

#### **Due Thursday 4/8:**

- 1. Pre-Lab
- 2. Group Assignment #1
- 3. Individual Assignment #1

## **Group Time**

#### **Group Time**

- Current Groups:
  - https://tinyurl.com/wbsvmr53
- Explain the Group Assignment #1:
  - https://tinyurl.com/hejumjtd
- Optional demo: Creating a repo and inviting others
  - Those who do no need the demo, please go to your breakout room and work on Group Assignment #1

#### **Assignments**

#### **Due Thursday 4/8:**

- 1. Pre-Lab
- 2. Group Assignment #1
- 3. Individual Assignment #1

