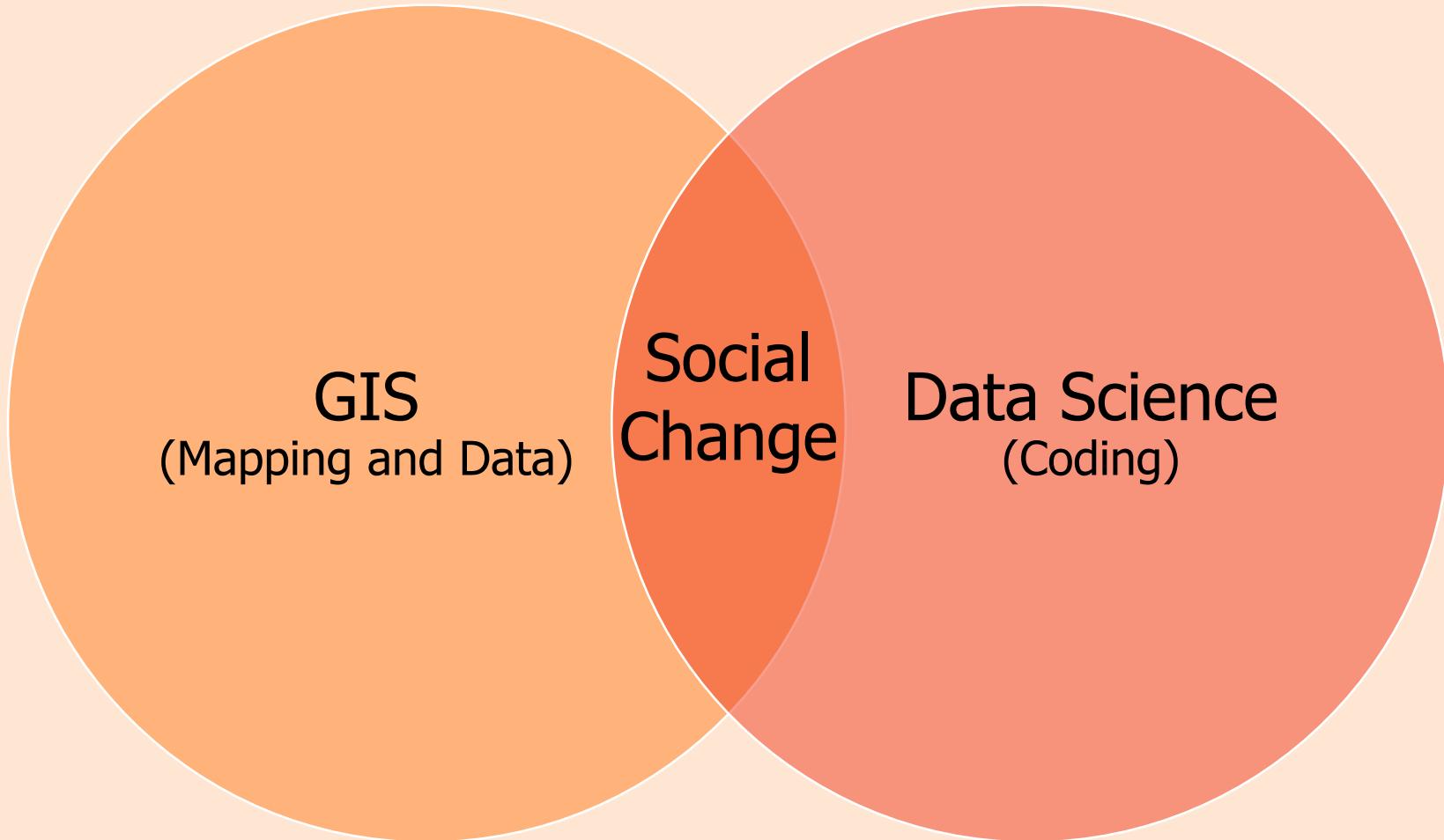


# **Mapping the connection between technology and ethics**

**Albert S. Kochaphum**

**Week 8 | May 17<sup>th</sup>, 2021**

# Where I fit in:





## Thoughts about technology and social change?

002

It can harm movements through surveillance or empower people to challenge power. Yes they've been targeting journalists for years.

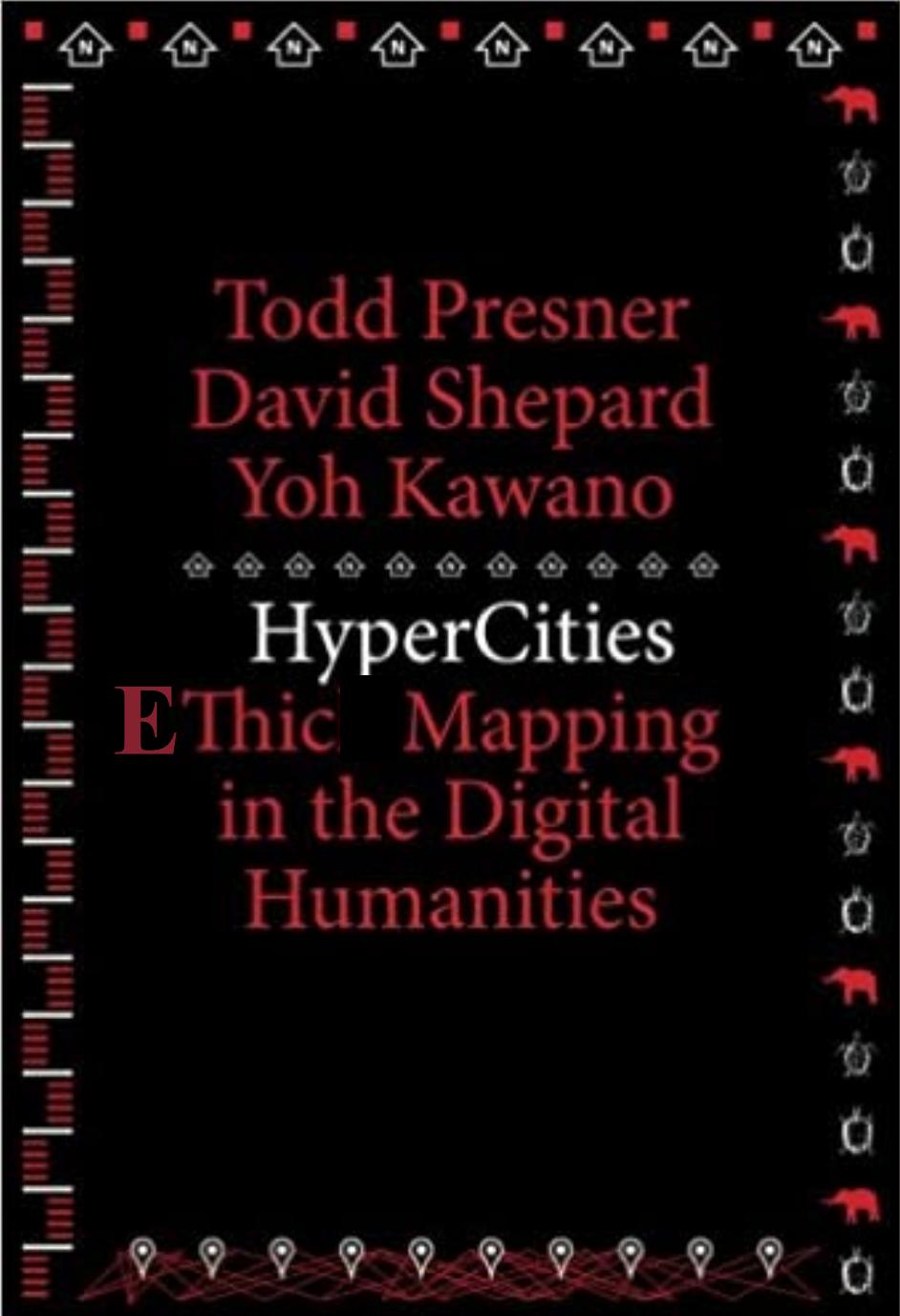
delicate balance

Join at  
**slido.com**  
**#991 372**





Todd Presner  
David Shepard  
Yoh Kawano  
HyperCities  
**E**thic Mapping  
in the Digital  
Humanities



**Going from “thick mapping” to... Ethic mapping**

**First off.. Why is ethics important?**



JASON FRIED

April 26, 2021

# Changes at Basecamp

At Basecamp, we treat our company as a product. It's not a rigid thing that exists, it's a flexible, malleable idea that evolves. We aren't stuck with what we have, we can create what we want. Just as we improve products through iteration, we iterate on our company too.

Recently, we've made some internal company changes, which, taken in total, collectively feel like a full version change. It deserves an announcement.

<https://world.hey.com/jason/changes-at-basecamp-7f32afc5>

**1. No more societal and political discussions on our company Basecamp account.** Today's social and political waters are especially choppy. Sensitivities are at 11, and every discussion remotely related to politics, advocacy, or society at large quickly spins away from pleasant. You shouldn't have to wonder if staying out of it means you're complicit, or wading into it means you're a target. These are difficult enough waters to navigate in life, but significantly more so at work. It's become too much. **It's a major distraction.** It saps our energy, and redirects our dialog towards dark places. It's not healthy, it hasn't served us well. And we're done with it on our company Basecamp account where the work happens. People can take the conversations with willing co-workers to Signal, Whatsapp, or even a personal Basecamp account, but it can't happen where the work happens anymore. *Update: David has shared some more details and more of the internal announcement on his HEY World blog.*

**6. No forgetting what we do here.** We make project management, team communication, and email software. **We are not a social impact company.** Our impact is contained to what we do and how we do it. We write business books, blog a ton, speak regularly, we open source software, we give back an inordinate amount to our industry given our size. And we're damn proud of it. Our work, plus that kind of giving, should occupy our full attention. **We don't have to solve deep social problems,** chime in publicly whenever the world requests our opinion on the major issues of the day, or get behind one movement or another with time or treasure. These are all important topics, but they're not our topics at work — they're not what we collectively do here. Employees are free to take up whatever cause they want, support whatever movements they'd like, and speak out on whatever horrible injustices are being perpetrated on this group or that (and, unfortunately, there are far too many to choose from). But that's their business, not ours. We're in the business of making software, and a few tangential things that touch that edge. **We're responsible for ourselves.** That's more than enough for us.

April 26, 2021

## Changes at Basecamp

At Basecamp, we treat our company as a product. It's not a rigid thing that exists, it's a flexible, malleable idea that evolves. We aren't stuck with what we have, we can create what we want. Just as we improve products through iteration, we iterate on our company too. Recently, we've made some internal company changes, which, taken i...

[Read more](#)

April 24, 2021

## I bought a sauna

I bought a sauna. Which one doesn't matter. I barely know. I don't even care. Model number? I couldn't tell you. Maker? I'd pronounce it wrong. I just know it goes up to about 184 degrees Fahrenheit. I bought a sauna on a second-hand recommendation from someone I don't know, but do respect. I bought a sauna sight unseen, heat unfelt. I...

# S.F. billionaire funds controversial plan to create surveillance camera network in Castro



**Steve Rubenstein**

May 2, 2021 5:11 p.m.



Additional security cameras could be installed in the Castro district as part of a controversial crime-fighting proposal.

Yalonda M. James / The Chronicle 2020

<https://www.sfchronicle.com/local/article/Proposal-to-add-more-cameras-in-S-F-s-Castro-16139770.php>

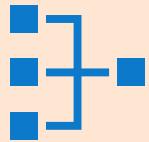
**Technology is only one piece of the puzzle**

**Analyzing all this looks like a job for...**

# Ethic



# Ethics is about:



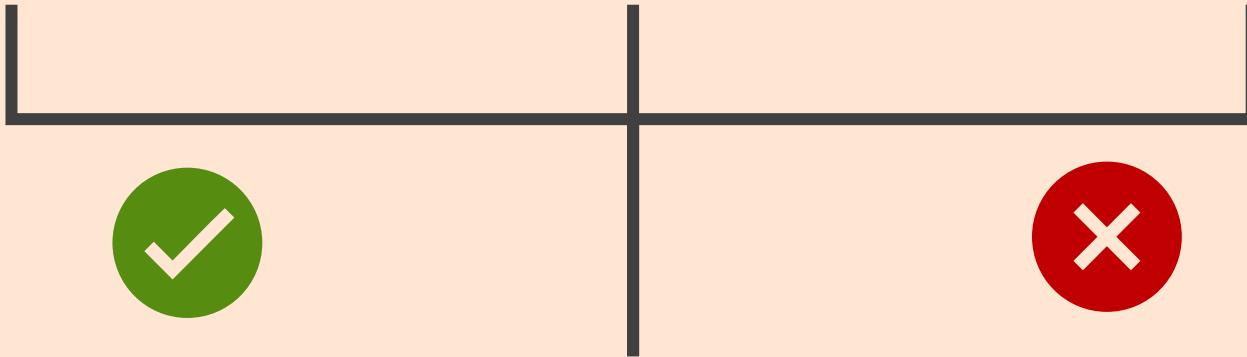
**Systemizing**



**Defending**



**Recommending**



**Right  
Behaviors**



**Wrong  
Behaviors**

# Ethics is about:

**Understanding why we should be doing a certain action.**

**There are no “right” answers...**

**BUT!!!!!!**

**We should be able to *systemize*, *defend*, and  
*recommend* what is *right* or *wrong* for ourselves.**

# Three ethical terms to walk away with:



**Technological Determinism**

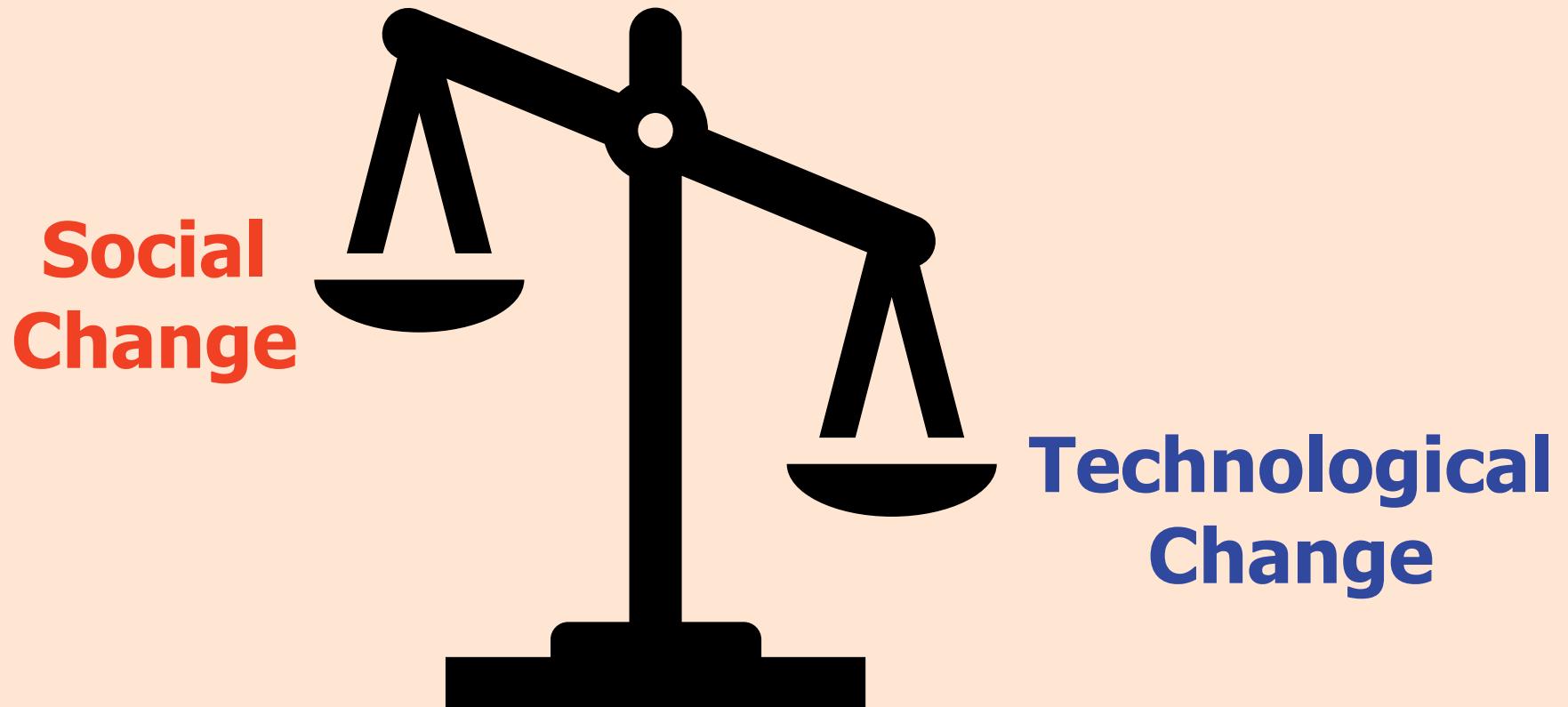


**Techno-facism**



**Holism**

# As a society where we are at:



# Where we need to be:



# Why?

# We have tools to solve social issues like:

- Hunger
- Climate change
- Police brutality
- Houselessness

**But....**

**We spend resources on trying to find “new”  
bigger and better technical solutions instead of  
addressing root causes.**

**Case in point:**

**Greenhouse gas emissions**

# Half of emissions cuts will come from future tech, says John Kerry

**US climate envoy says people will not have to give up quality of life to achieve some of net zero goals**

**Jessica Murray**

Sun 16 May 2021 07.01 EDT



235





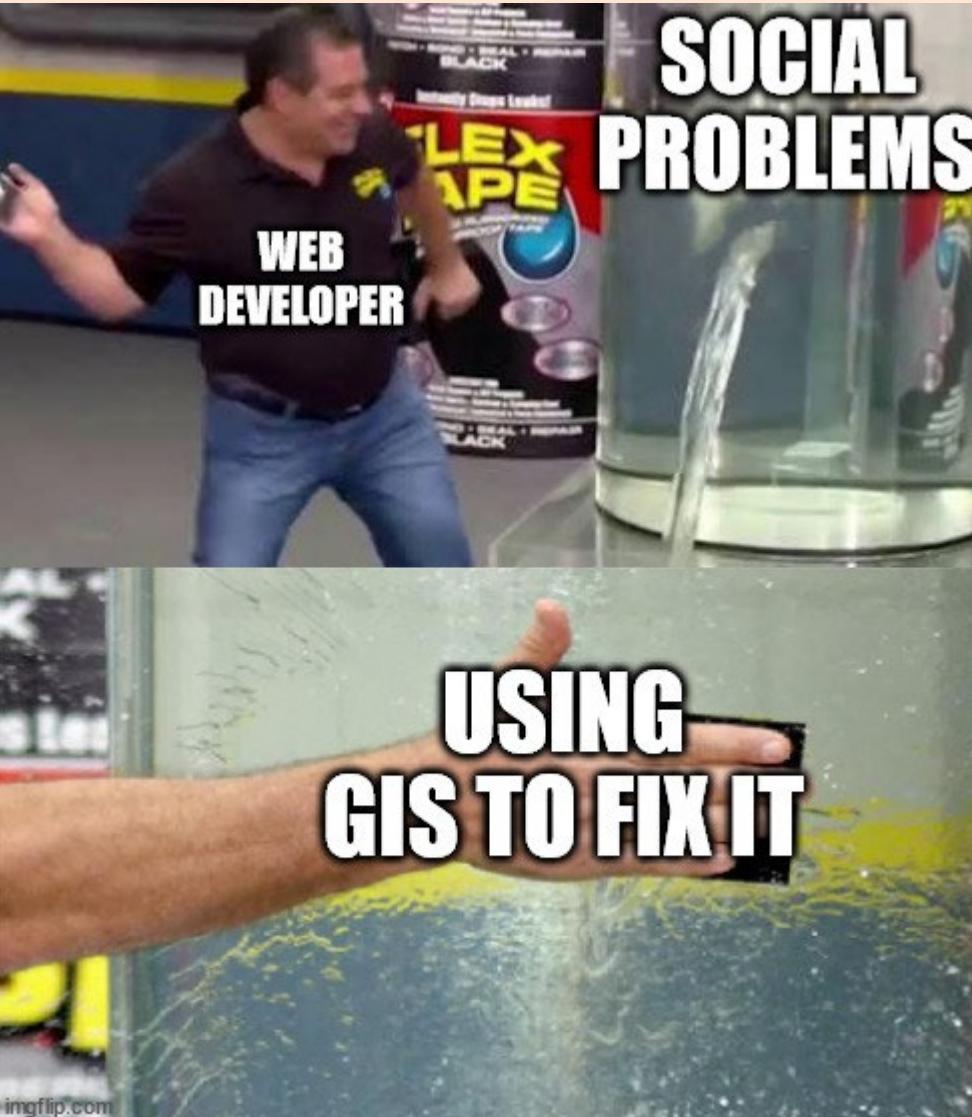
# Why?

**It's easier to invest in new technology than to face the causes of social problems.**

# **Today's main point:**

**You cannot solve **social problems** with just technology.**

# Don't be this type of mapper:



# **Technological Determinism**

**The idea that technology will solve all social problems.**

**Example: We can “invent” our way out of climate change.**

# Technological Determinism

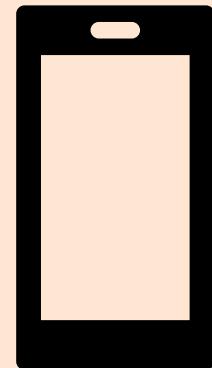


**THE WORLD IF...**

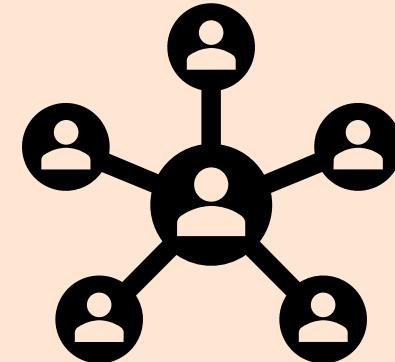
**WE ONLY HAD THE RIGHT TECHNOLOGY**

# Technological Determinism

Technology



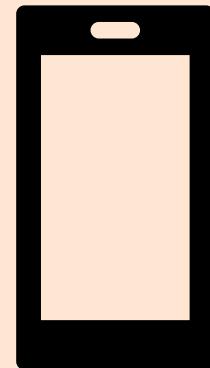
Society



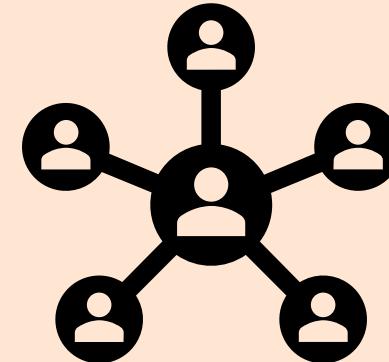
Technology is the force that changes society

# Technological Determinism

Technology



Society

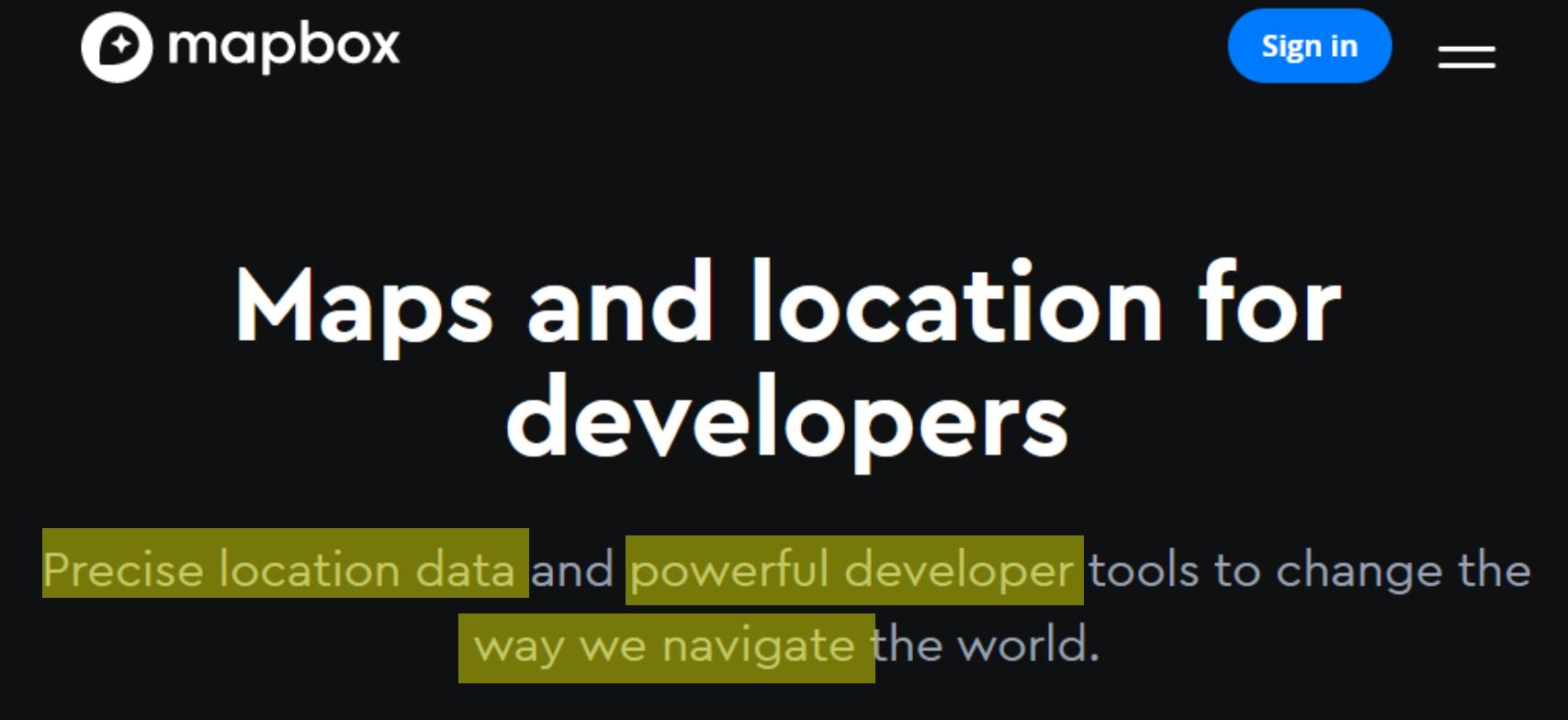


**“Phones will improve people’s life.”**

# Let's apply this to mapping:



# Mapping Technologies



The screenshot shows the Mapbox website homepage. At the top left is the Mapbox logo (a white circle with a black star). To its right are a "Sign in" button and a user icon. The main title "Maps and location for developers" is centered in large, bold, white font. Below it is a subtitle in smaller white font: "Precise location data and powerful developer tools to change the way we navigate the world." The background of the page is black.

## Maps and location for developers

Precise location data and powerful developer tools to change the way we navigate the world.

# Mapping Technologies

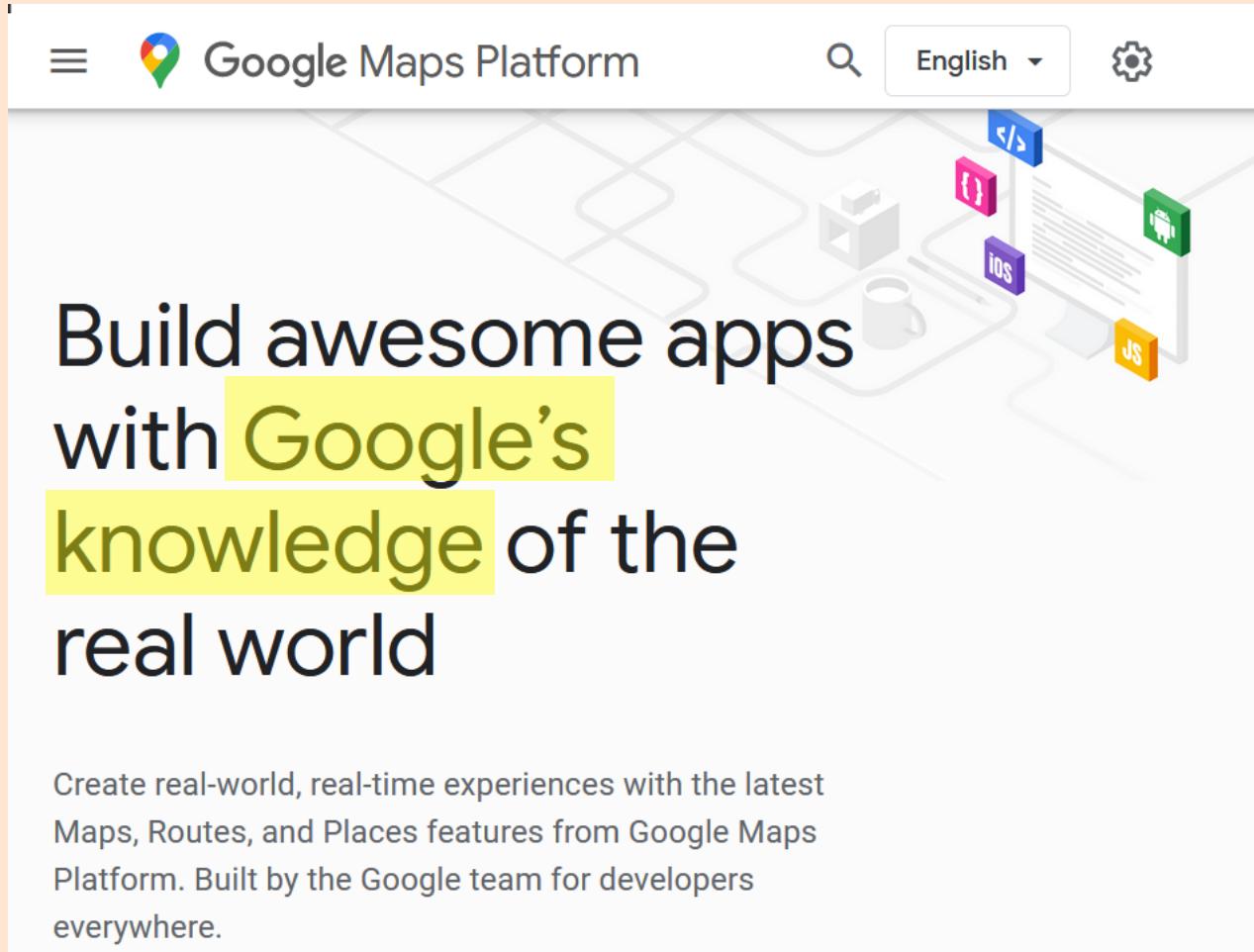
The logo consists of the word "CARTO" in white capital letters inside a red rounded square. A small white circle is positioned to the right of the letter "O".A white three-line hamburger menu icon is located in the top right corner of the red box.

Unlock the **power** of  
spatial analysis

The only cloud-native Location Intelligence platform

A large red rectangular box contains the Carto logo, the main headline, and a descriptive subtitle. The background of the slide is a light beige color.

# Mapping Technologies

The image shows a screenshot of the Google Maps Platform website. At the top, there is a navigation bar with a menu icon, the "Google Maps Platform" logo, a search bar, a language dropdown set to "English", and a settings gear icon. Below the navigation bar, there is a large, semi-transparent graphic of a smartphone displaying a map. Overlaid on this graphic is the main headline text: "Build awesome apps with Google's knowledge of the real world". The word "with" and "knowledge" are highlighted with yellow rectangular boxes. At the bottom of the page, there is a descriptive paragraph: "Create real-world, real-time experiences with the latest Maps, Routes, and Places features from Google Maps Platform. Built by the Google team for developers everywhere."

Build awesome apps  
with Google's  
knowledge of the  
real world

Create real-world, real-time experiences with the latest Maps, Routes, and Places features from Google Maps Platform. Built by the Google team for developers everywhere.

# Mapping Technologies



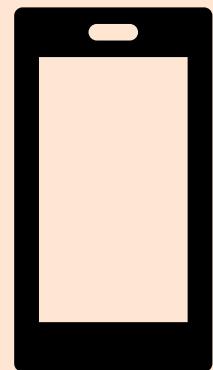
**Why are these examples problematic?**

**Separates society's role in creating the technologies.**

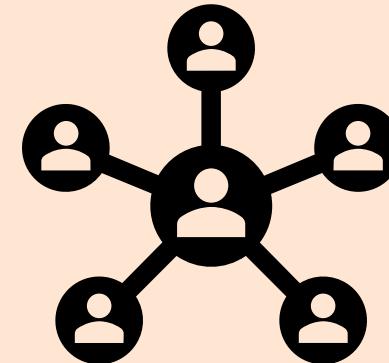
# **Social Determinism**

# Social Determinism

Technology



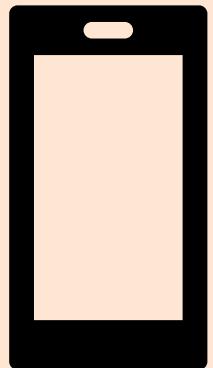
Society



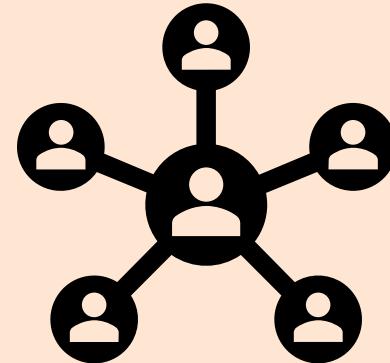
Technology is a result of the society

# Social Determinism

Technology



Society

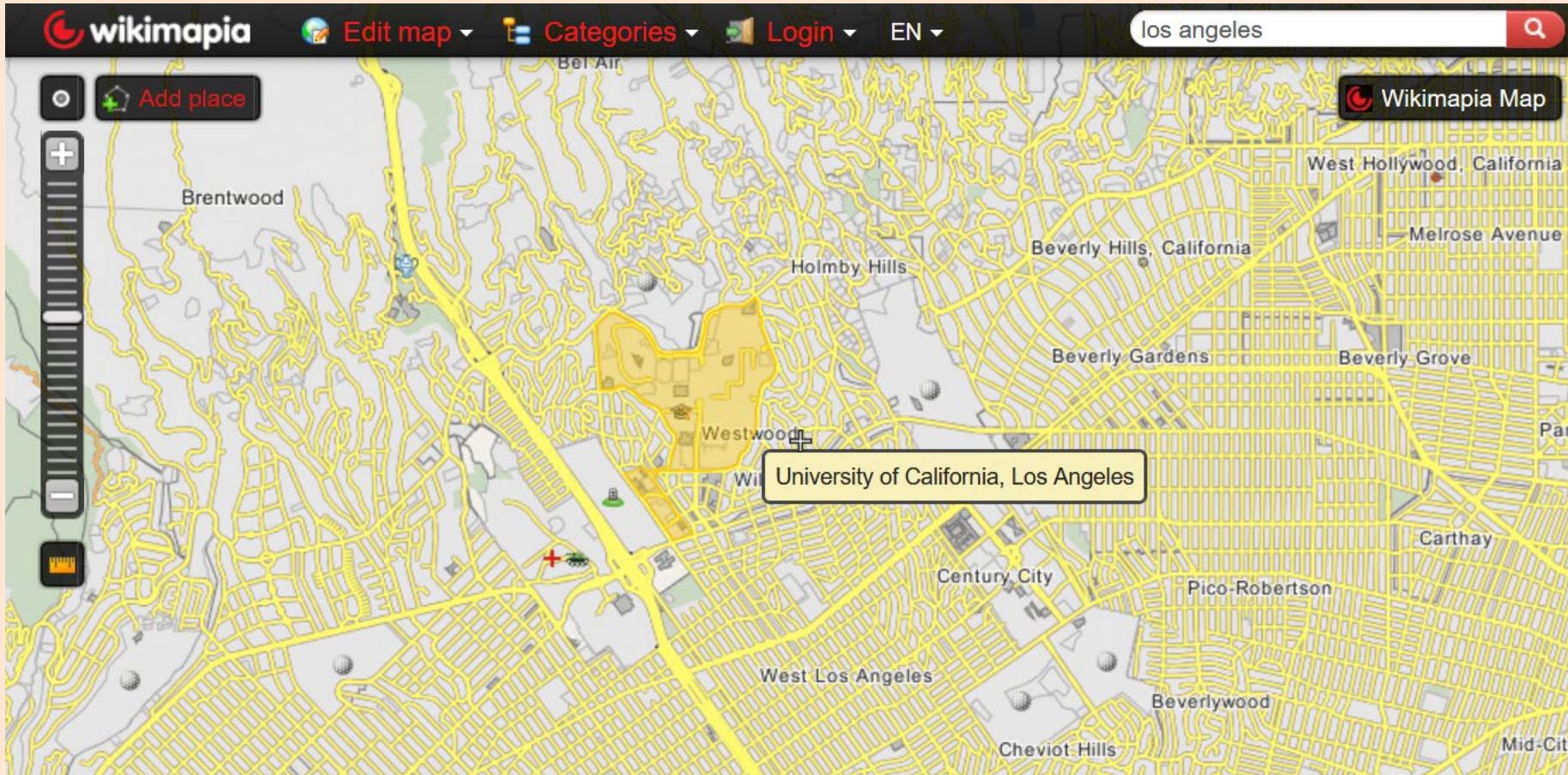


**“People created phones to talk easier.”**

# Examples



# Examples



# Main takeaway:

**Reductionism is problematic because it only  
re-aligns the balance in one direction.**

**Social  
Change**



**Technological  
Change**

**Wait.. This is a technology skills class..  
Shouldn't we focus on technology solutions?**

**No, because.. It leads to...**

# Techno-Fascism



# **Technocracy/Techno-Fascism**

**Fascism – Oppression of opposing thoughts**

**Technocracy – Rule by only those with expertise**

**Techno-Fascism = Fascism + Technocracy**

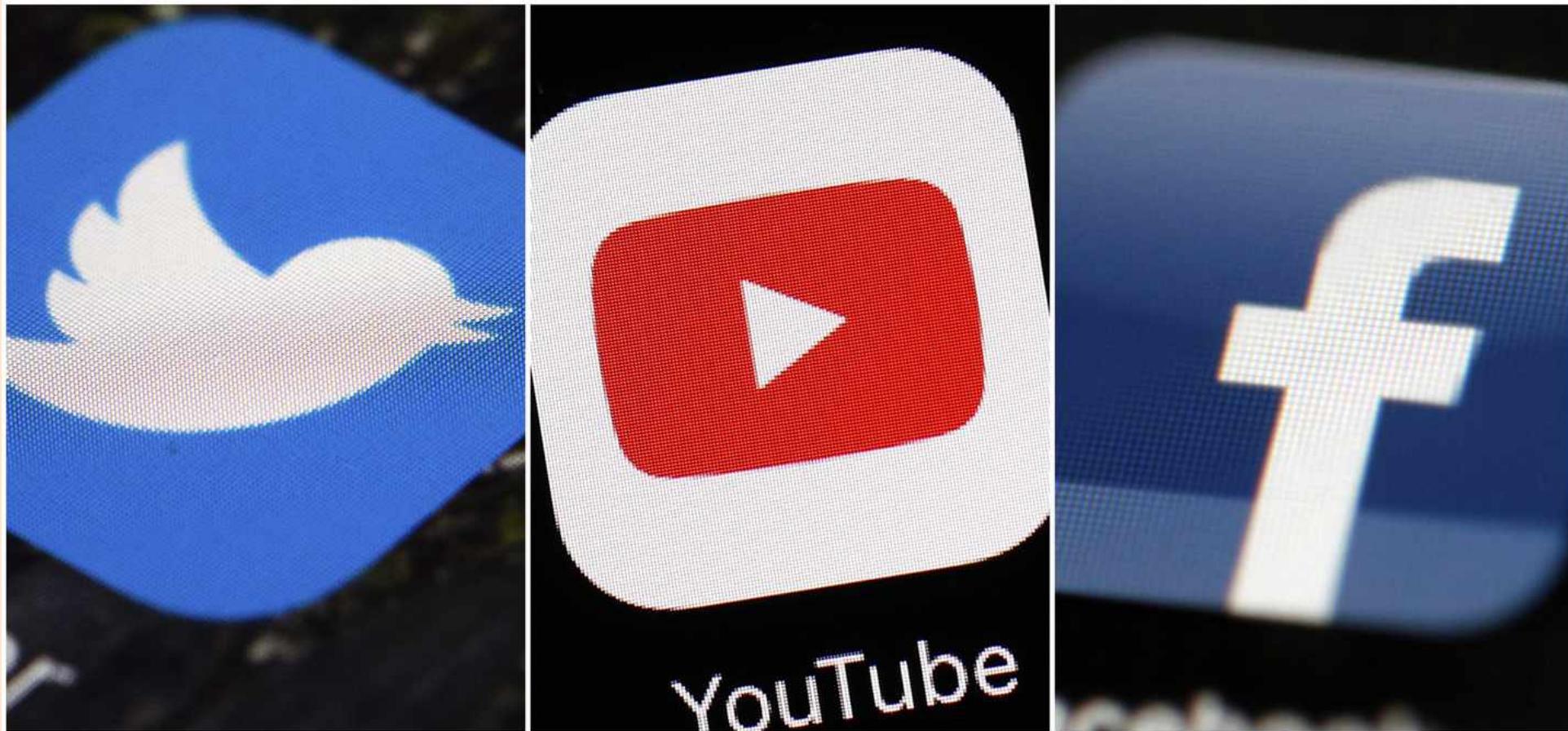
# **Technocracy/Techno-Fascism**

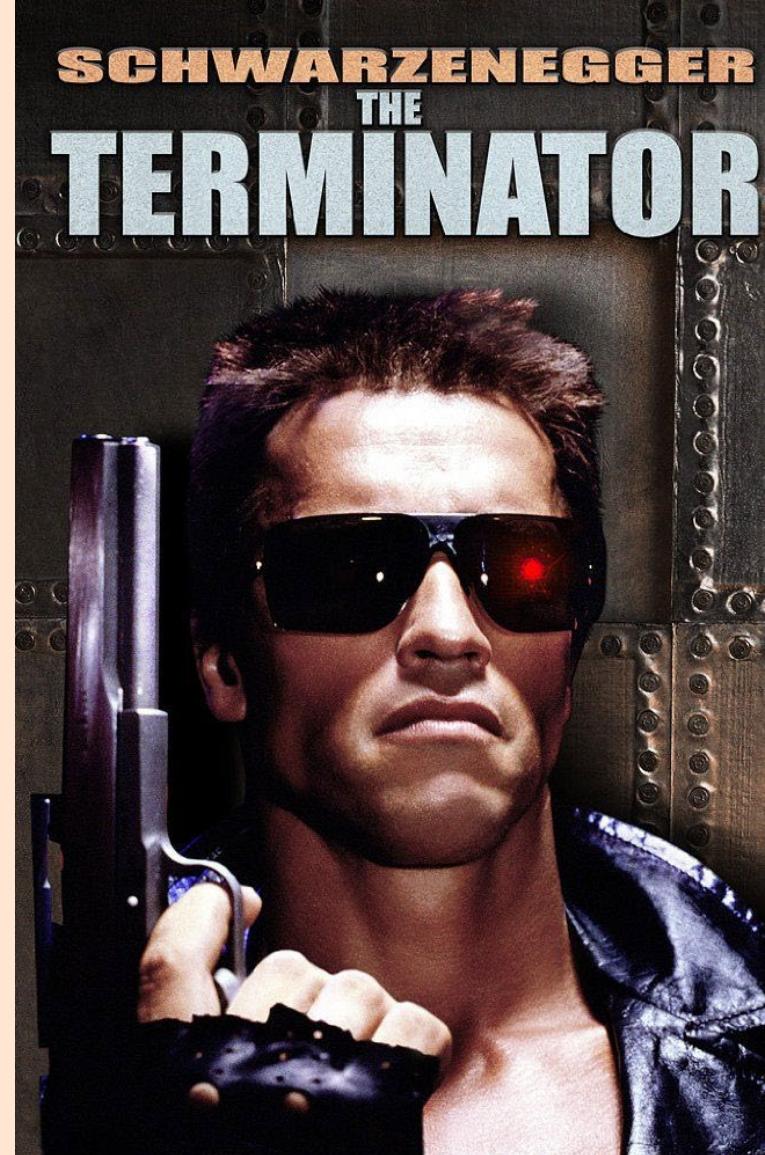
**Techno-Fascism – Rule by those with  
expertise that oppresses opposing thoughts**

# **Techno-Fascism:**

**“Big tech, machine learning, AI is too big,  
people cannot stand up against it.”**

# Techno-Fascism:





Hasta la vista freedom

# **What it really means is:**

**“I have more ‘technical’ skills and know more than you, so I am better than you, do not resist.”**

**-Every Big Tech CEO**



**Resistance is futile.**

**What it really means is:**

**Commodification of humans as data points.**

**Fetishism of knowledge and technology.**

**Decouples the impacts of society on technology  
and vice-versa.**

**How to avoid all this?**

# Holism

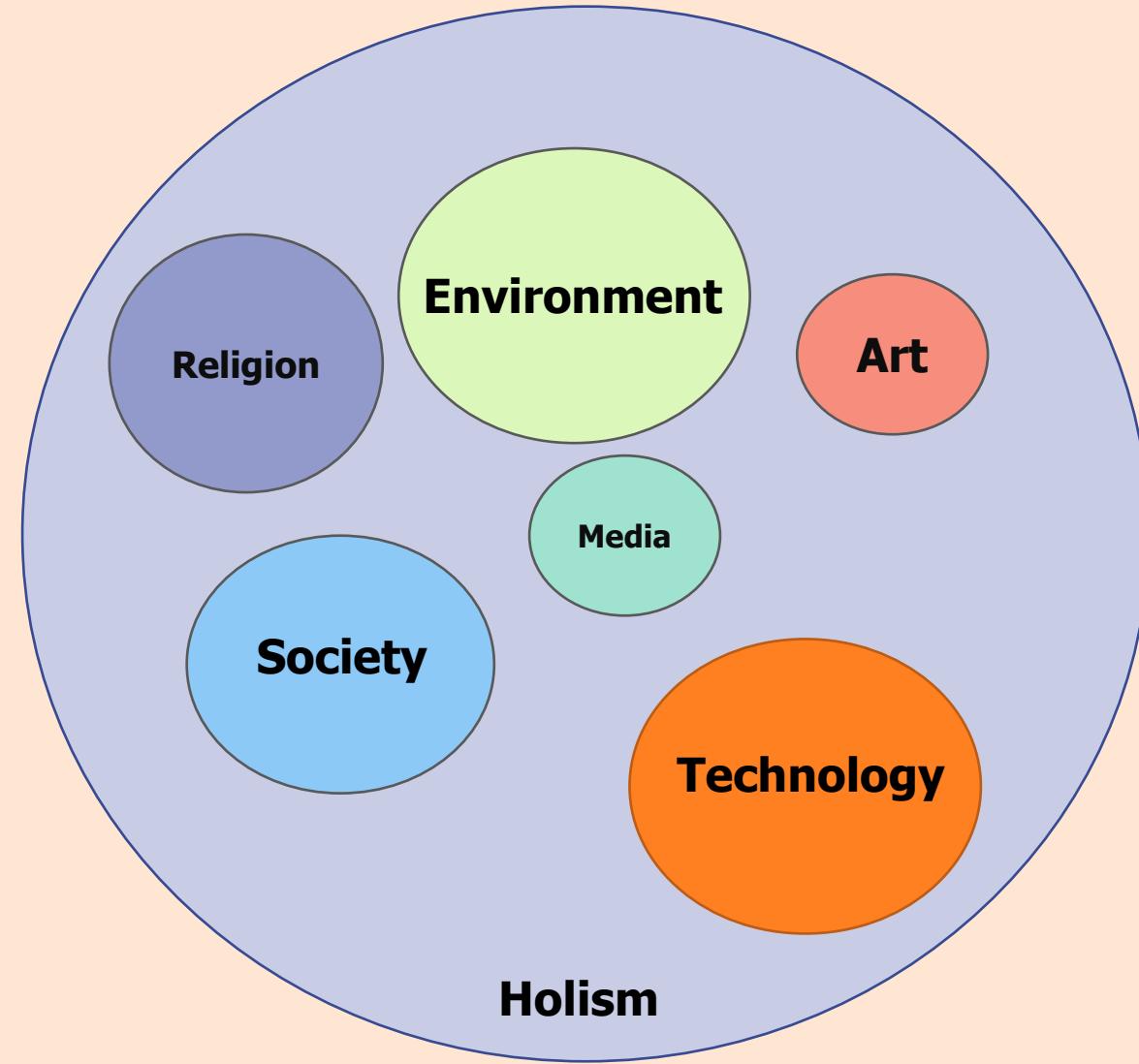
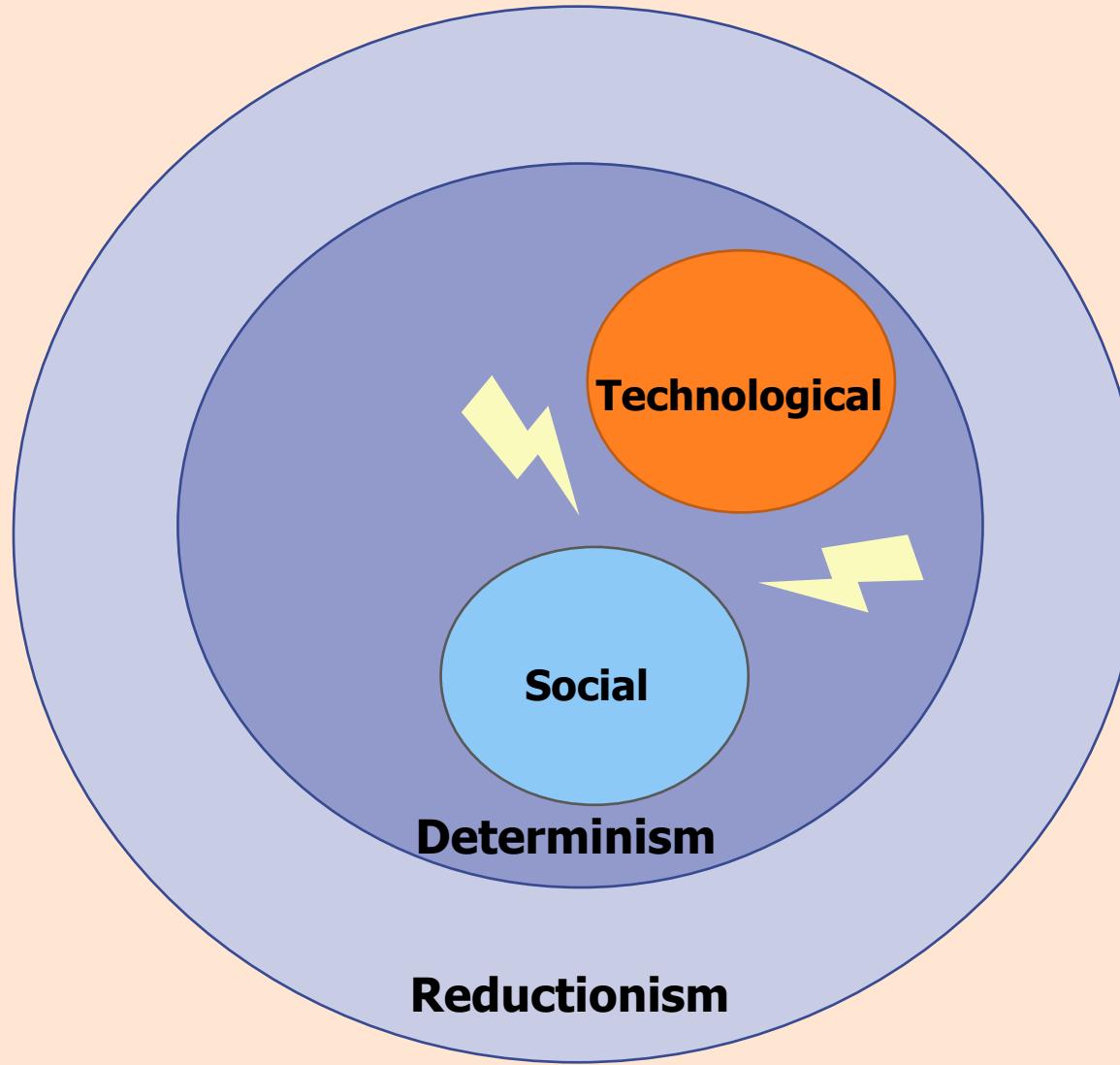


**“Some process or phenomenon cannot be broken into parts, and can only be understood as a whole”**

<https://cseweb.ucsd.edu/~goguen/courses/275f00/s2.html>

**Reinforces the direct connection between of technology and society.**

# Reductionism vs Holism

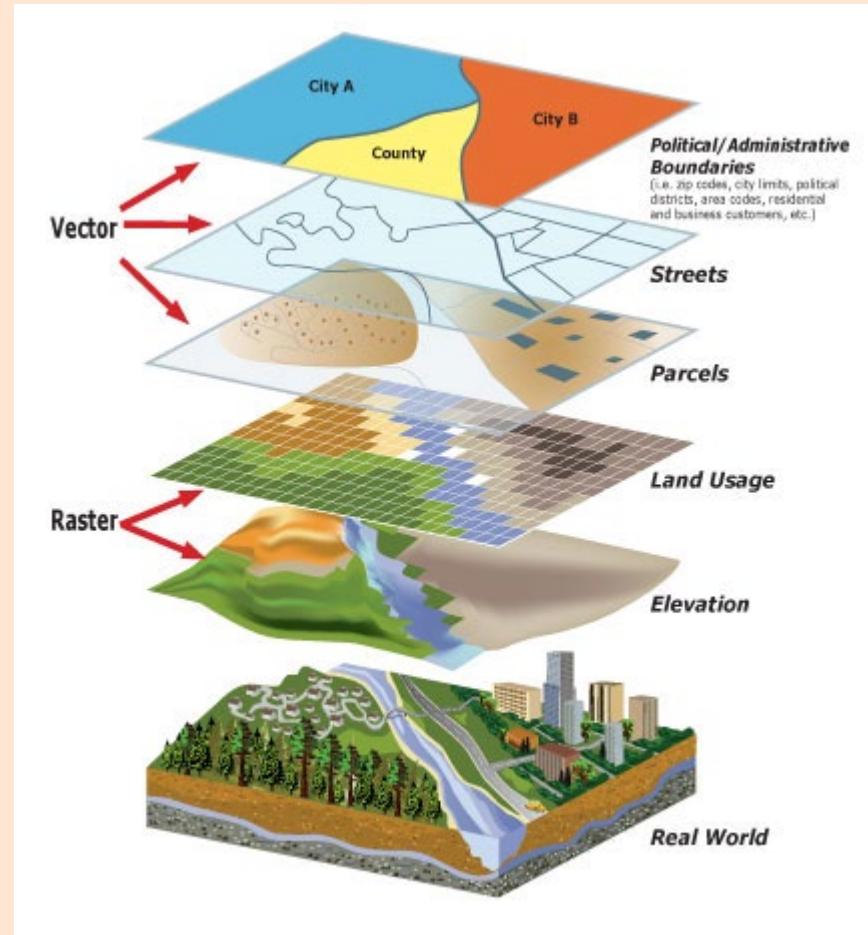


# Eastern perspectives

**Buddhism and Hinduism believe in a middle path to describing our decision-making by connecting it to consequence of our actions.**



# Reductionism vs Holism



**Reductionism**

esri Charging Up: Lifecycle of a Battery

Raw Materials Cobalt A Story Map

Huayou then sells the cobalt to cathode manufacturers. Some of the largest cathode producing companies include Toda Hunan Shanshan, Pulead Technology Industry, Tianjin Bambo Science and Technology, and L&F Material.

Cobalt is processed by CDM

Pulead Technology Industry Co., Ltd.  
Tianjin Bambo Science and Technology Co., Ltd.  
L&F Material Co., Ltd.  
Toda Hunan Shanshan New Material Co., Ltd.

A world map shows the flow of cobalt from mining sites in the Congo to processing facilities in China and other countries.

**Holism**

<http://storymaps.esri.com/stories/2017/batteries/index.html>

# **Design Justice: A holistic framework**

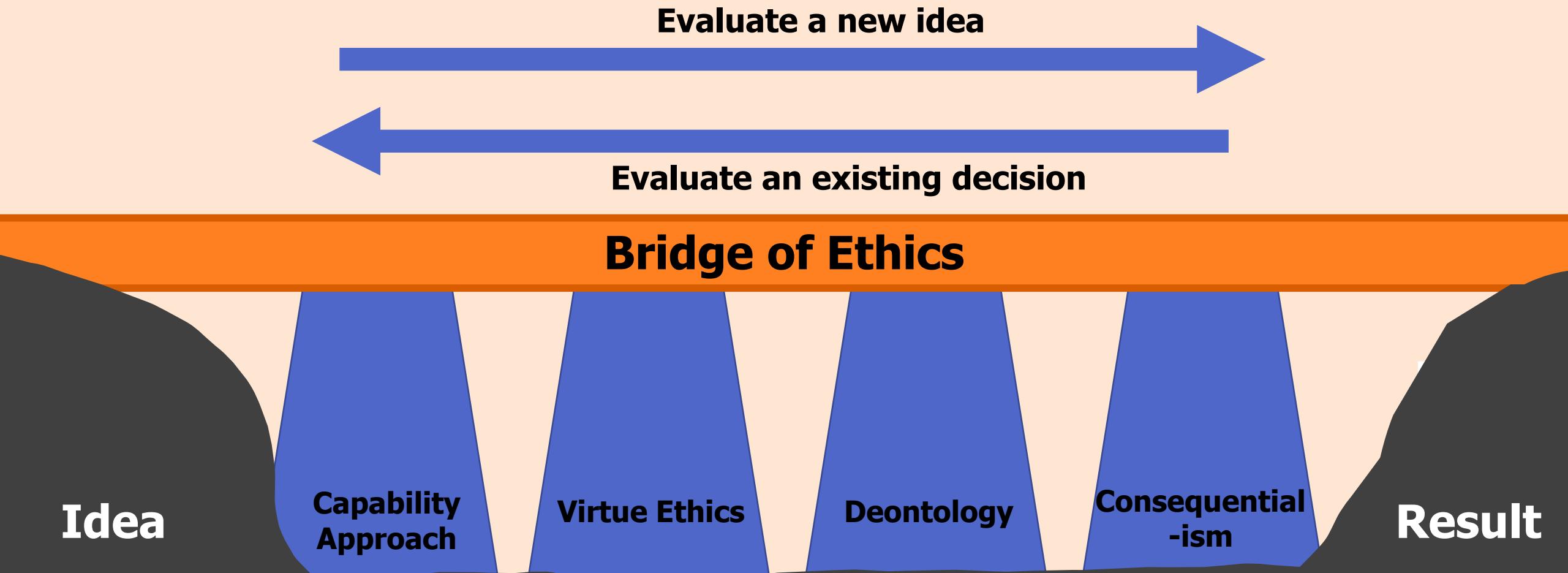
**DESIGN  
JUSTICE**



COMMUNITY-LED PRACTICES  
TO BUILD THE WORLDS WE NEED

SASHA COSTANZA-CHOCK

# Bridge of Ethics for Web Design



# Consequentialism

**“The ends justify the means”**

- What are the consequences of your decision?
- Do they improve the common good of those affected?

# **Utilitarianism**

**“Do the benefits outweigh the costs?”**

**Utilitarianism**

**Consequentialism**

# Deontology

**“Every time you do something, do the thing every person should do in the same situation.”**

- What norms and expectations are you establishing?
- Are you upholding your duties of care?

# Virtue Ethics

**“Are you living a good life true to yourself by doing this action?”**

- What type of person do you become in the process?

# Capability Approach

**“What is the actual capability for a person to achieve their own well-being?**

- What world are you building for the end-user?
- What capabilities are you granting or enabling?

# Summary:



# What is Design Justice?

**Design** should be led by **marginalized communities** that aims explicitly to challenge, rather than reproduce, structural inequalities.

# Design Justice

The collage consists of five distinct panels:

- ANALYZING DESIGN NARRATIVES:** A Venn diagram with three overlapping circles. The top circle contains the text "Who participated in the design process?". The bottom-left circle contains "Who benefited from the design?". The bottom-right circle contains "Who was harmed by the design?".
- DESIGN JUSTICE WORKSHOP ACTIVITIES:** A black banner with white text listing activities for a workshop, including group analysis of Detroit stories and individual responses to prompts about design justice.
- DETROIT DIGITAL JUSTICE COALITION DISCO TECH:** A graphic featuring the word "DISCOTECH" in large, stylized letters. Surrounding the text are various icons and labels: "ELECTRONICS", "INTERNET", "MEDIA", "COMMUNITY", "PUBLIC POLICY", and "DETROIT DIGITAL JUSTICE COALITION". A red circular badge in the top left corner contains the number "4".
- We ALL Belong Here We Will DEFEND each other:** A painting of three diverse women smiling. The text above them reads "We ALL Belong Here We Will DEFEND each other".
- NO TECH for ICE:** An illustration showing a person holding a power cord, a figure in a "ICE" uniform running away, and a group of people holding a banner that says "NOTHING ABOUT US WITHOUT US". Below this is a diagram of a body being scanned by a machine with "Scan" and "Clear" buttons.

<https://design-justice.pubpub.org/pub/ev26fjji/release/1>

# Design Justice Principles:

- 1. Use design to sustain, heal, and empower communities**
- 2. Center voices directly impacted by design**
- 3. Prioritize design's impact on the community instead of designer's intentions**
- 4. Change comes from an accountable, accessible, and collaborative process.**
- 5. EVERYONE is an expert based on their own lived experiences**
- 6. Share design knowledge and tools with communities**
- 7. Work towards sustainable, community-led and community-controlled outcomes**
- 8. Work towards non-exploitative solutions**
- 9. Before seeking new solutions, look for what is already working**

# PRINCIPLES & FRAMEWORK

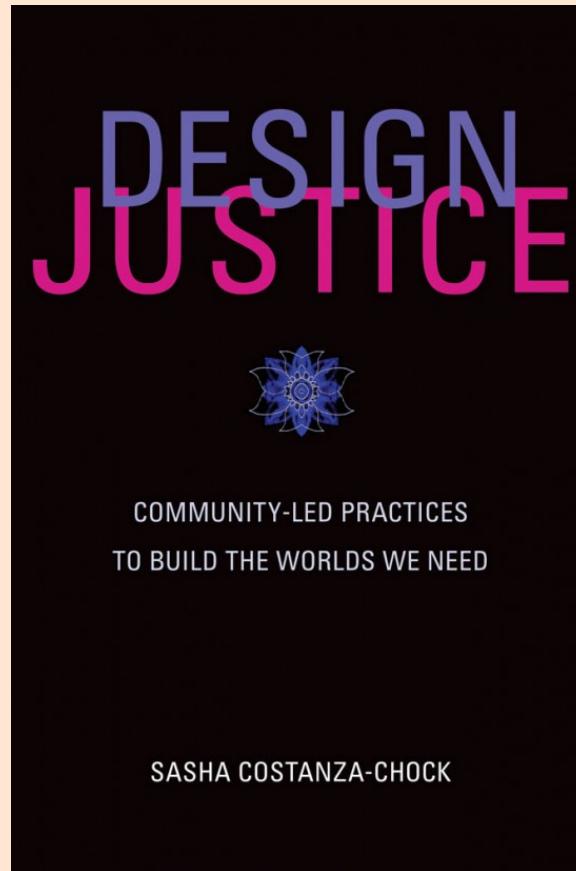


# For more information



<https://designjustice.org/>

# For more information



<https://design-justice.pubpub.org/pub/ev26fjji/release/1>

# When do you stand up to corporations with powerful influence?

The New York Times

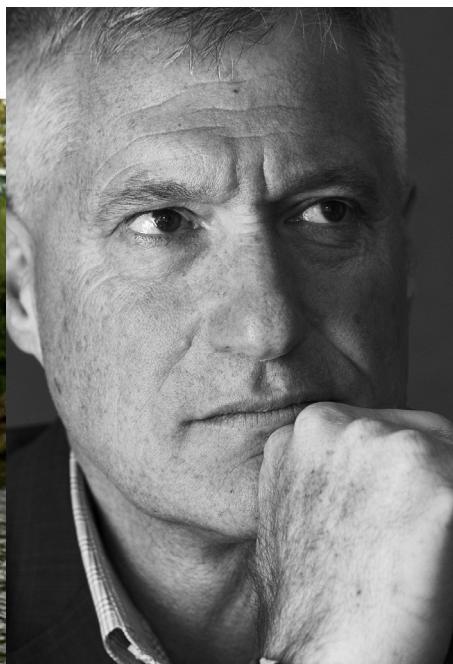
## *Ecuador Judge Orders Chevron to Pay \$9 Billion*

Local residents washed in the contaminated Santa Fe River, in the oil producing Amazon region of Ecuador. Moises Saman for The New York Times



Crime & Justice

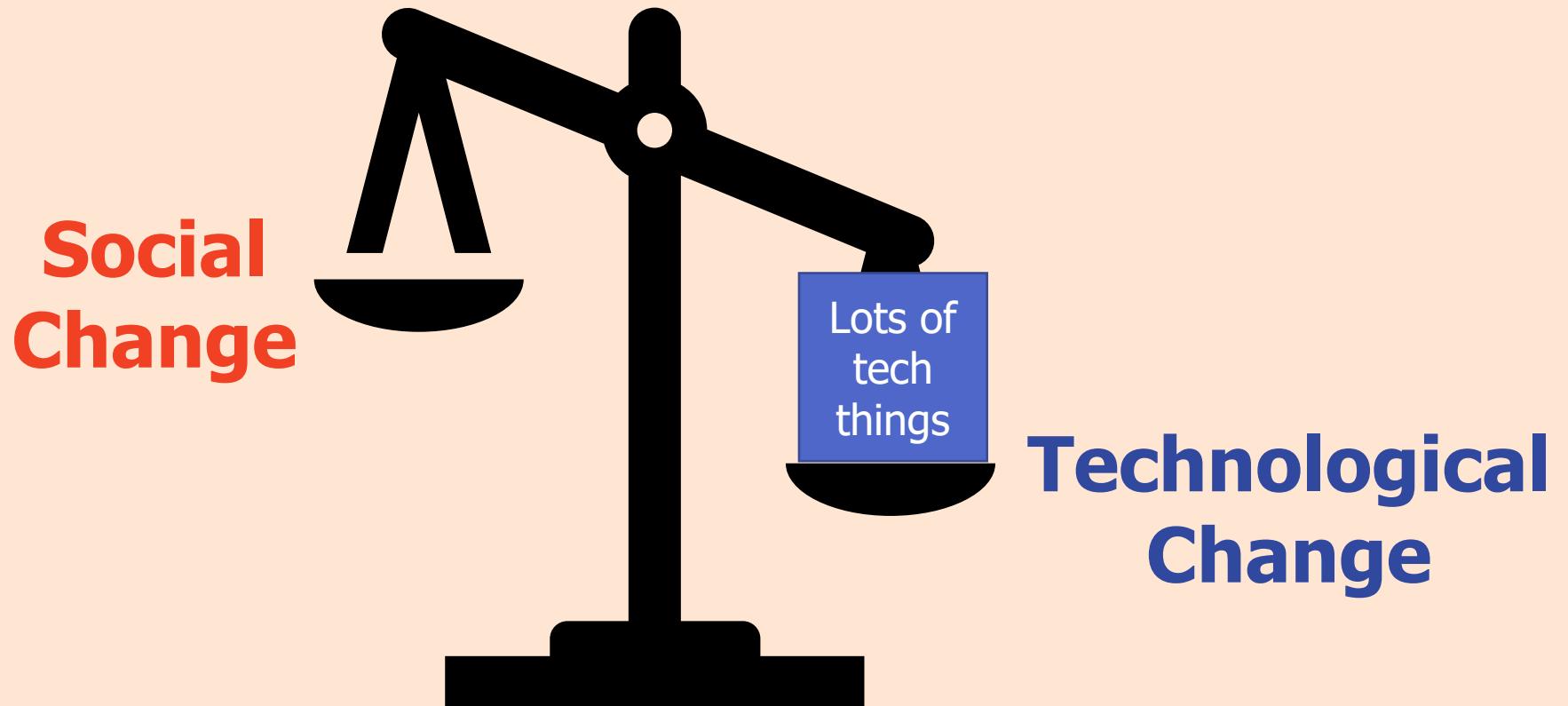
## Lawyer on trial a decade after winning huge Ecuador verdict against Chevron



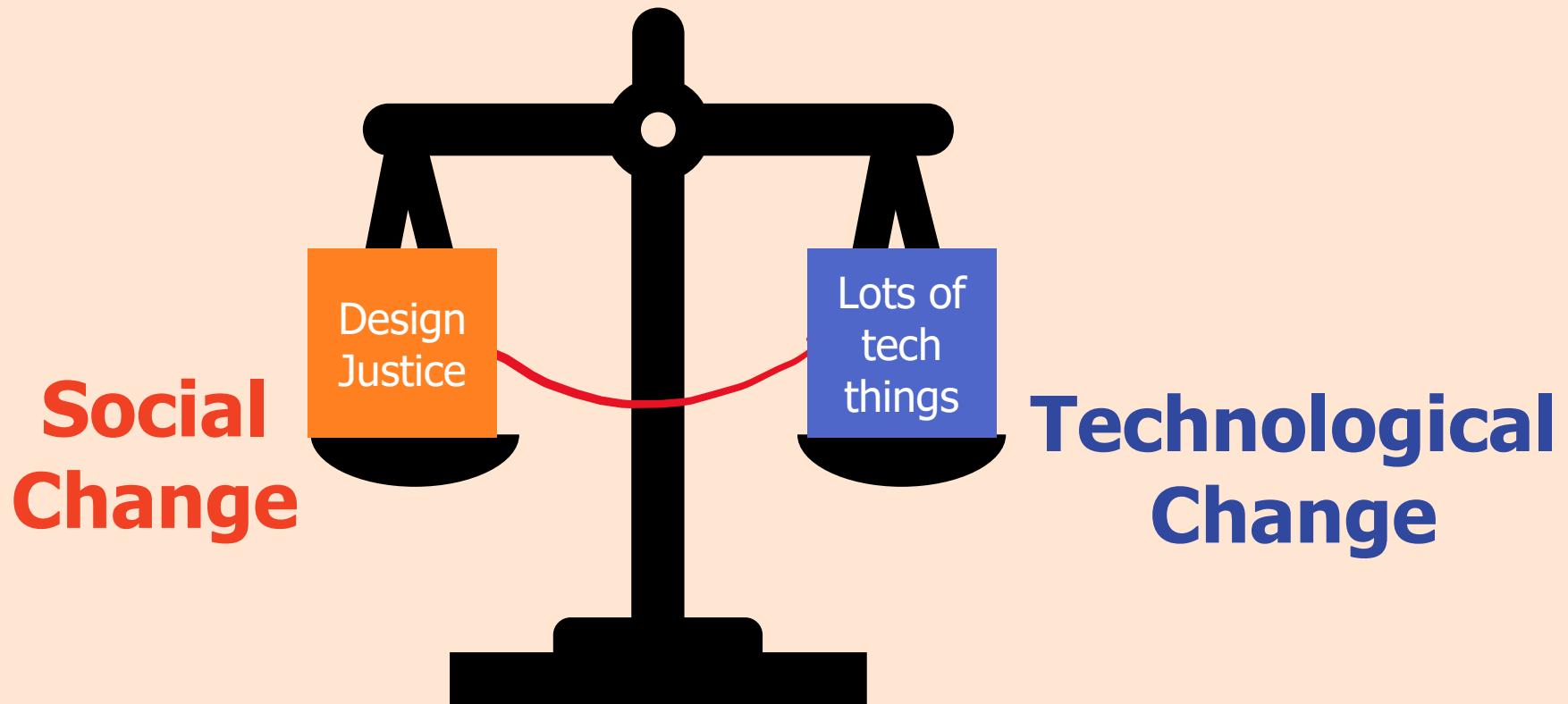
**Design is relatively easy**

**Justice is hard**

# Recall, as a society this is where we are at:

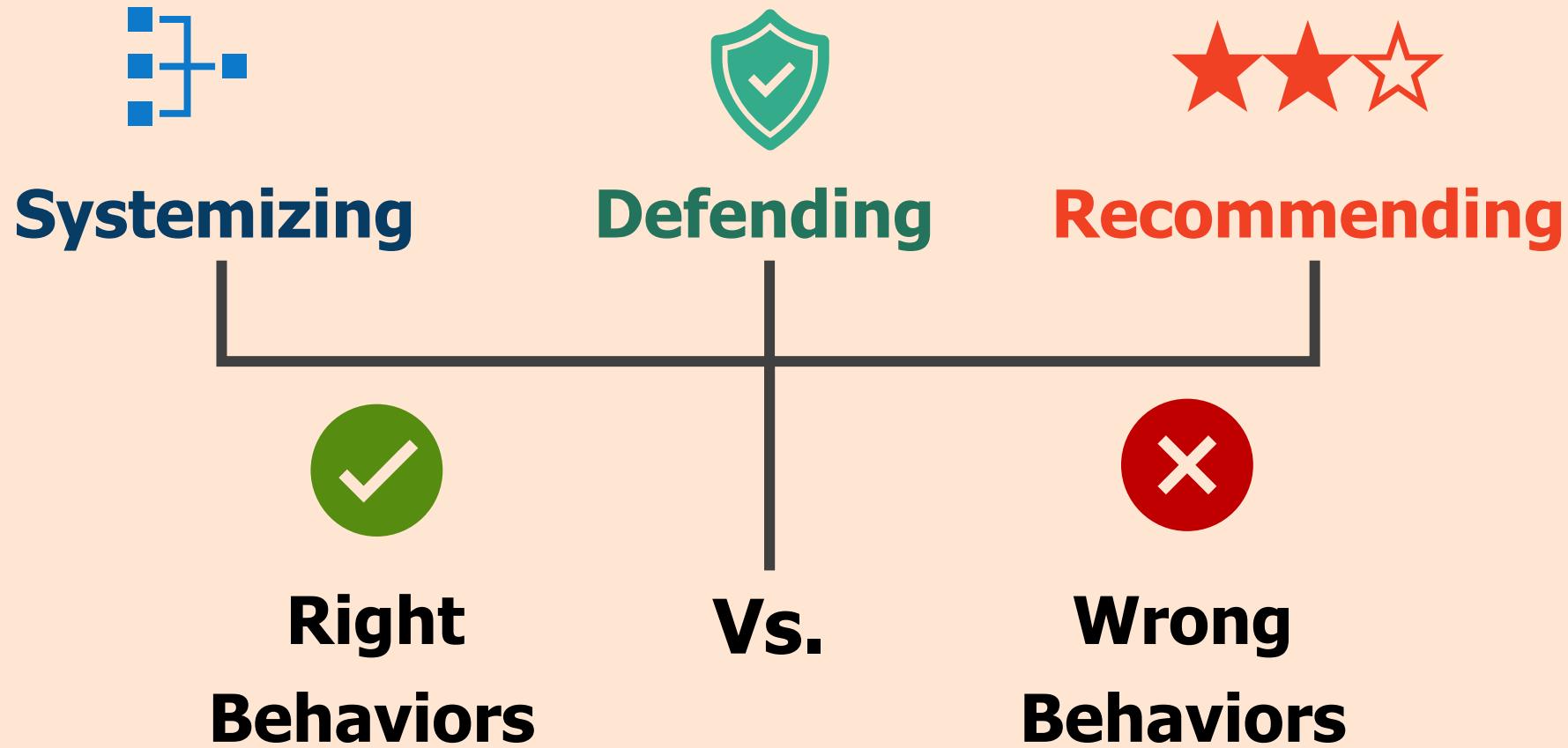


# This is where design justice framework comes in:



**Sure, design justice not the answer to everything,  
but it is a helpful approach to rebalancing.**

# Remember, ethics is about:



# Key Takeaway:

Design Justice



How does your application fit into the larger context of empowering civil society?



Design Justice is a framework for **systemizing** and **defending** your decisions

**Data is not objective.  
Our applications are not objective.  
What is objective then?**

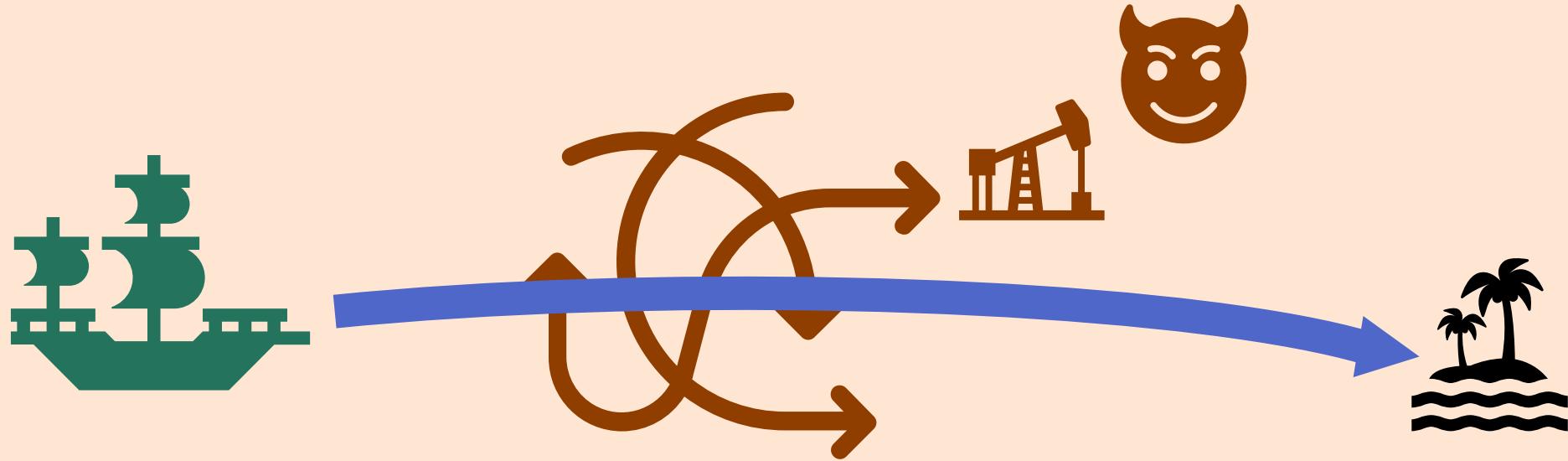
**Our experiences and the communities we empower.**

We **must** focus our applications with ethical frameworks to avoid misconceptions.

**Why?**

# **Key: Be intentional and thoughtful**

**If your designs and data intentions are not clear,  
it will be easy for others to turn your intentions  
against you and the community.**



**Decide where you want to be going with your mapplication.**

**Or external forces will decide that for you.**

**Be intentional and thoughtful**

**Ok, seriously, why is this important to mapping?**



# COVID-19 Dashboard

Cases and Deaths by  
Country/Region  
/Sovereignty

32,940,470 | 585,  
967  
US

24,684,077 | 270,  
284  
India

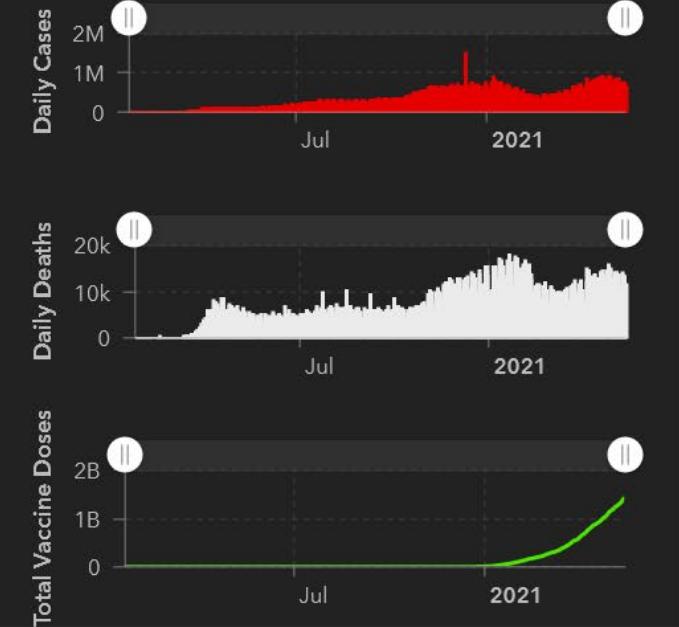
15,627,243 | 435,  
751

Admin0

162,778,861

3,374,775

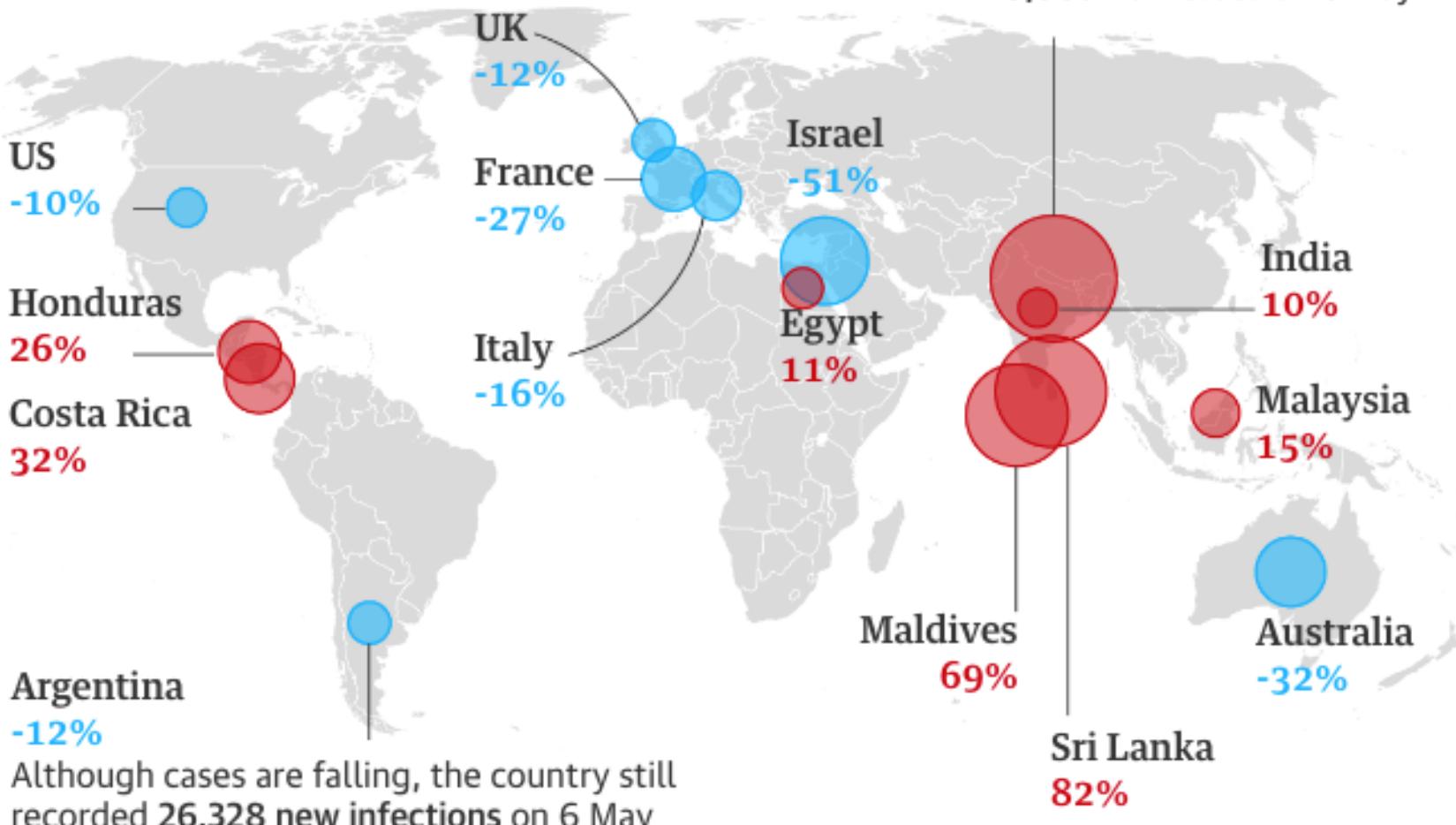
1,460,698,425



<https://coronavirus.jhu.edu/map.html>

# Rising and falling Covid-19 cases

The past week has highlighted disparities between richer and poorer nations when tackling the pandemic



Guardian graphic. Source: WHO Covid-19 dashboard

**Design is relatively easy**

**Justice is hard**

**But...**

**The arc of the moral universe is long, but it bends towards justice.**

**-Martin Luther King Jr.**

**So let's fight on the side of the moral arc.**

# **Questions?**

# Contact



[albertkun@oarc.ucla.edu](mailto:albertkun@oarc.ucla.edu)



**@albertkun**

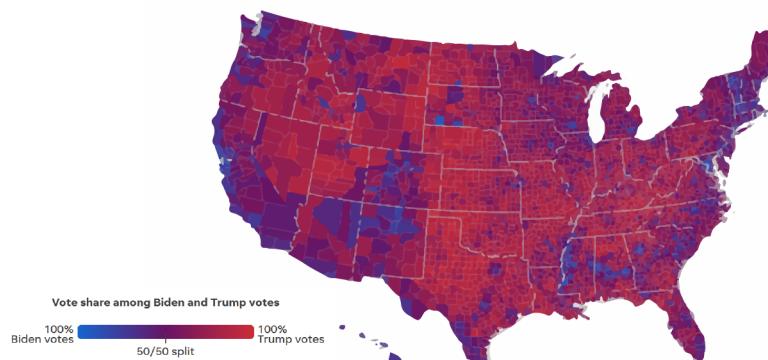
**UCLA 2021 | Summer Session A**

**Asia Am191: Web Development and GIS  
for Social Change: Critical Data for  
Transforming Civil Society**

***Mondays, Wednesdays, Fridays 1:00p - 2:20p - Online***

- 📍 Explore intersections of maps, data, ethics, and power
- 📍 Learn open-source web mapping: HTML, CSS, and JavaScript
- 📍 Reclaim and maps and leverage data as tools for activism
- 📍 Unlearn and decolonize technology from authoritative paradigms
- 📍 Open to all majors and fulfills upper division elective

For more information email:  
[albertkun@idre.ucla.edu](mailto:albertkun@idre.ucla.edu)



slido

## Audience Q&A Session

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