From Rocks to Laptops

A Tech Mining Tour and Discussion

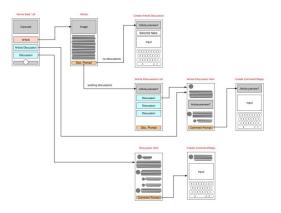
Melissa Hsiung Prepared for LOCOS Seminar March 2023



- 1. Tech mining tour
- 2. Bauxite mining in Guinea, Lynnette Widder
- 3. Discussion
- 4. Framing & action



- 1. Former product manager
- 2. ClimateAction.tech (CAT) organizer
- 3. Green Web Foundation Fellow





GREEN WEB FELLOWSHIP

For Digital Rights and Climate Justice





What is a just, sustainable internet?





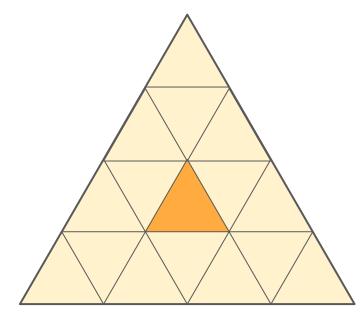
Earth satellite image by DATA SIO, NOAA, US Navy, et. al.

Google Earth Tour

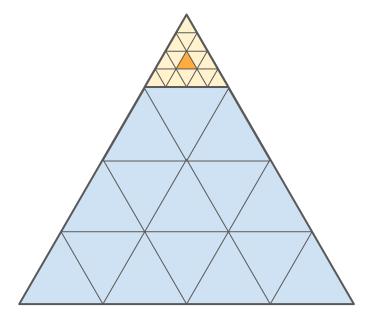
https://earth.google.com/web/data=MkEKPwo9CiExeEl qQ1FhVUxQcnJmQ2JYMHRiLUY2R1NmZUpfcHh1a1US FgoUMEI4Q0ZBRTE2RDIyNTYzQURFOUQgAQ

What we do matters

Where we think we are:

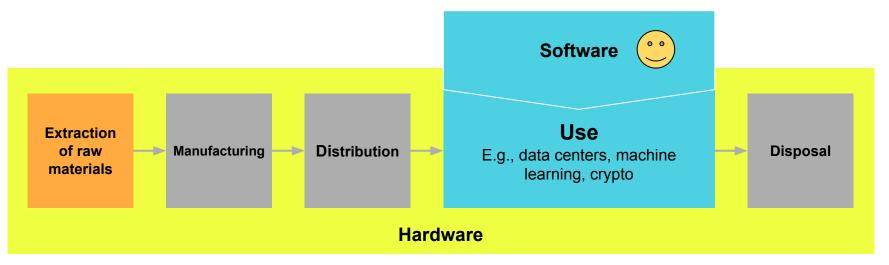


Where we actually are:





Software support & performance often determines when a user needs to replace a device



What next? (for those in tech)

For software: Learn more about software updates, obsolescence and backwards compatibility:

- <u>Repair and Software: Updates, Obsolescence,</u> and Mobile Culture's Operating Systems, Discard Studies
- <u>Device sustainability through long-term</u> <u>software support</u>, Privacy International
- <u>Sustainable software products—Towards</u> <u>assessment criteria for resource and energy</u> <u>efficiency</u>, Future Generation Computer Systems
- Green Mode Design & Graceful Degradation, <u>LOCOS Seminar #16</u>

Software considerations: Software support and performance affects the obsolescence of hardware.

- How long software should last? How long should hardware last?
- What types of devices do our users have? How will the software perform?
- How do we code and test for backwards compatibility?

For hardware: Look into clean supply chain initiatives, e-waste, and e-waste recycling:

- GoodElectronics
- <u>Responsible Sourcing Network</u>, minerals program

What next? (for everyone)

Civic action:

Participate in the right to repair movement so that we can make our devices last as long as possible:

- <u>Repair Association</u> (US)
- <u>Right to Repair</u> (EU)

Local action:

Find out if there are any mines near you and community groups that you can join.

Get involved with projects that support citizen science, like <u>KoboToolbox</u>.

Consumer action:

If repairing isn't an option, buy refurbished or second-hand when possible.

When shopping for a new device, ask customer service if the device is ethically produced and free from conflict minerals. They may not be able to answer, but it will send a signal to the company that customers are aware of unfair practices in the supply chain.



How to take action (as a tech worker)

How about high-quality carbon offsets? With blockchain!



"Climate action is commendable, but it must not cause us to overlook the circumstances of social and economic injustice which make climate action necessary."

> —Applying Martin Luther King, Jr.'s critique of philanthropy* to climate





Step 1: Get oriented

Where are we, what are we talking about, and "Whose footprint is this?"



Our unjust, unsustainable internet

Step 2: Reskill and upgrade your view

Climate is a complex social/power/economics problem, not a complicated input-output problem:



Reskilling for climate justice



Switching lenses

Step 3: Connect IRL

Start with what's close to you:



Tech Materials Tour

Finding Community

Worksheets for getting started in climate justice



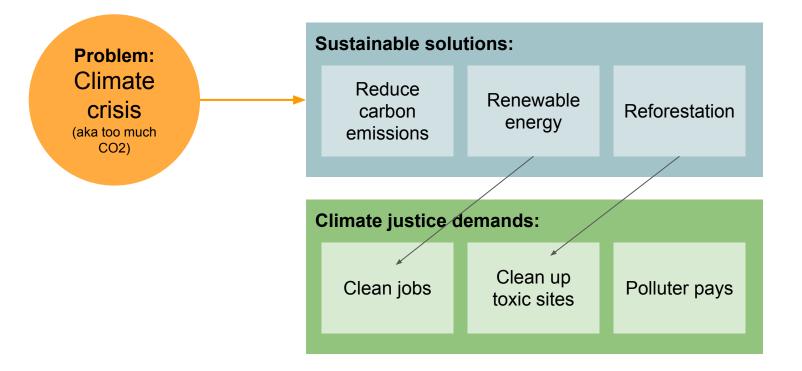


Finding Community

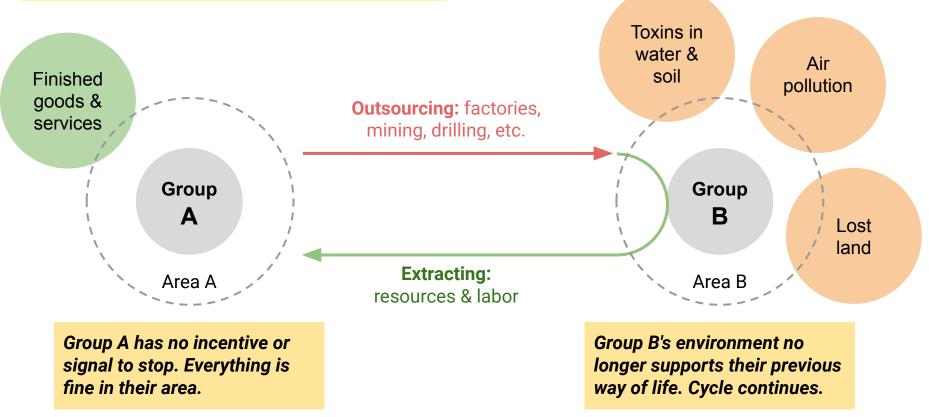
Take Good Care of Life 🤎

TA'U TAMA, Small Island Big Song

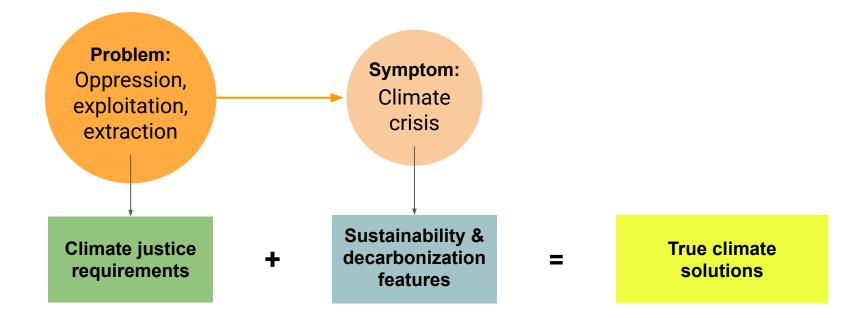
How I used to think about climate justice: Morally important extra features



How I think about climate justice now: Defining a greater problem...



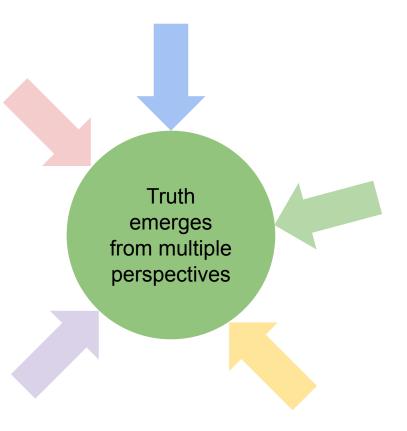
How I now think about climate justice: ...and core functionality & design principles



Climate justice is worth it

Disclaimer

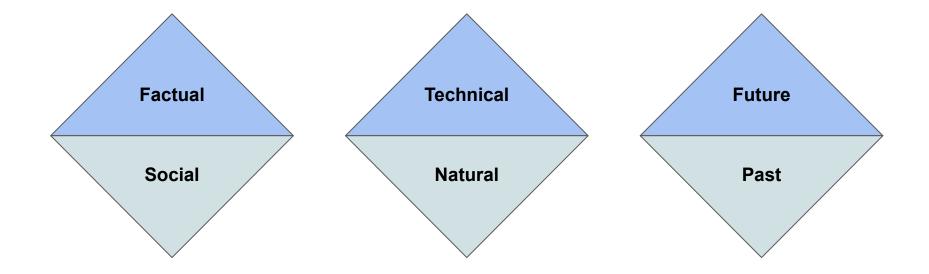
Single source of "truth"



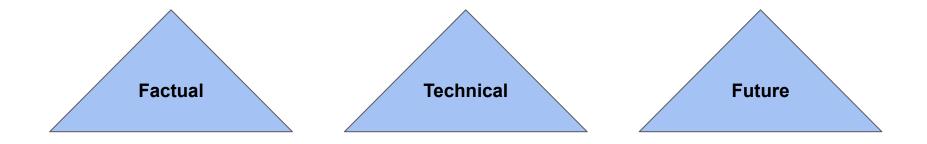
It is difficult to understand something when your identity depends on not understanding it.

bastardized Upton Sinclair

What is a tech worker identity?



How do tech workers view the climate crisis?



How does climate justice view the climate crisis?

