# **From Rocks to Laptops**

#### **A Tech Mining Tour and Discussion**

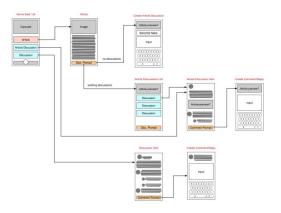
Melissa Hsiung Prepared for LOCOS Seminar March 2023



- 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?





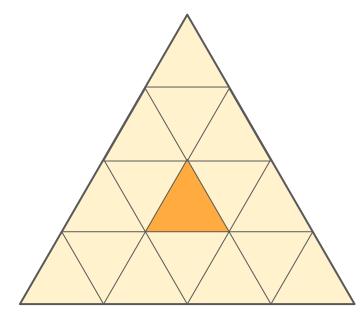
Earth satellite image by DATA SIO, NOAA, US Navy, et. al.

# **Google Earth Tour**

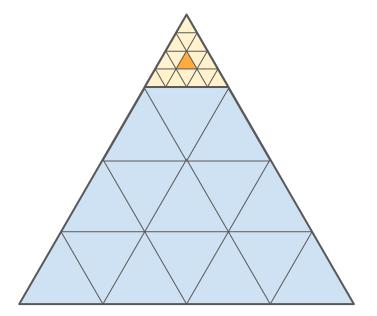
https://earth.google.com/web/data=MkEKPwo9CiExeEl qQ1FhVUxQcnJmQ2JYMHRiLUY2R1NmZUpfcHh1a1US FgoUMEI4Q0ZBRTE2RDIyNTYzQURFOUQgAQ

#### What we do matters

Where we think we are:

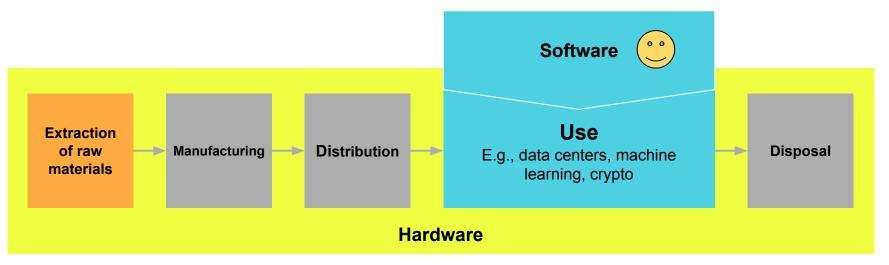


Where we actually are:





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



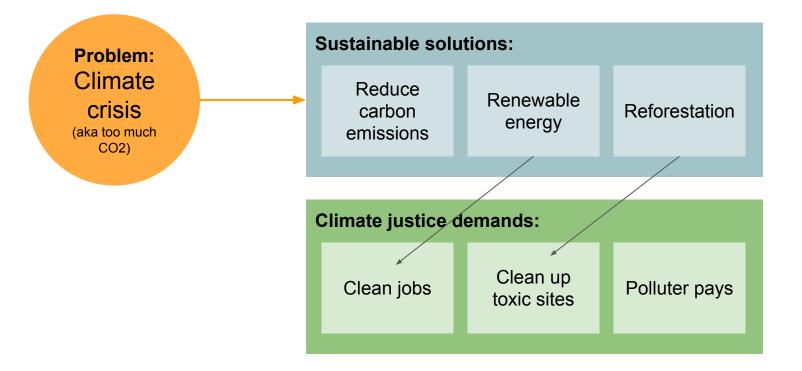


Finding Community

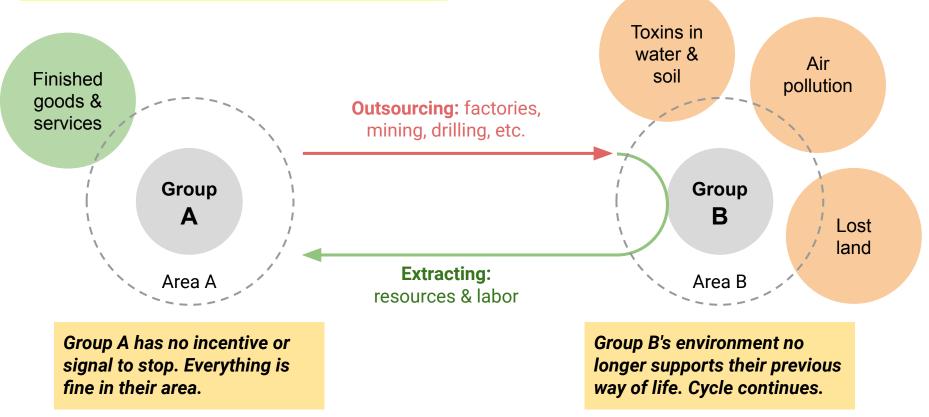
## Take Good Care of Life 🤎

TA'U TAMA, Small Island Big Song

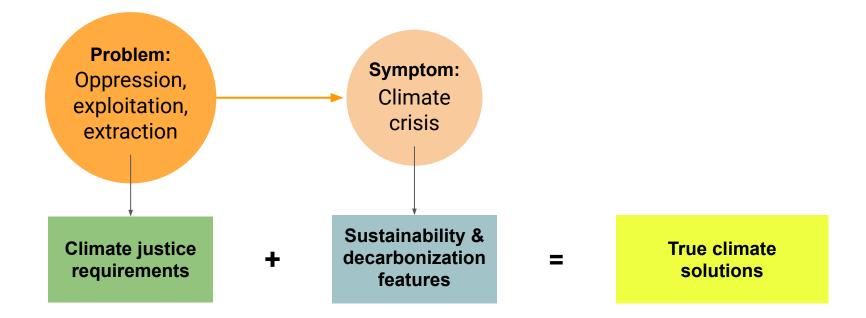
#### How I used to think about climate justice: Morally important extra features



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



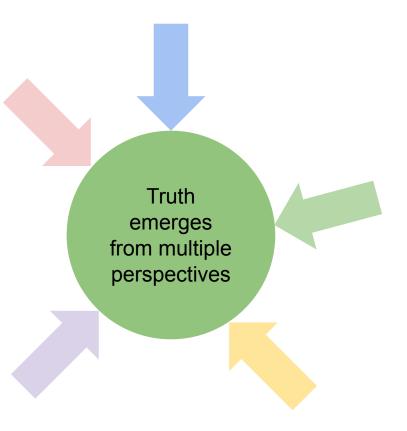
#### How I now think about climate justice: ...and core functionality & design principles



**Climate justice is worth it** 

### **Disclaimer**

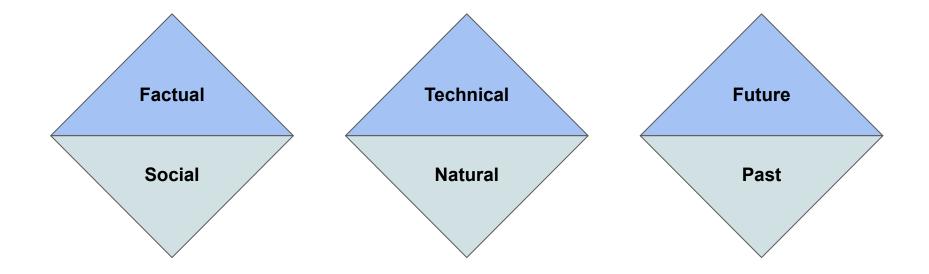
Single source of "truth"



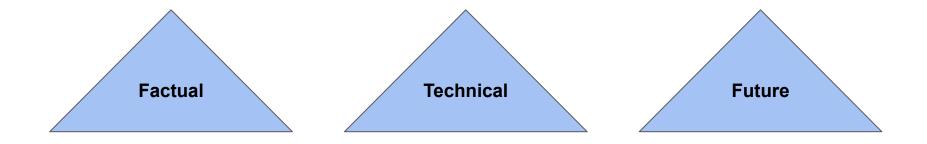
It is difficult to understand something when your identity depends on not understanding it.

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?

