

Haiti's Grid Isn't Smart, It's Futuristic

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Haiti

- **Haiti had a catastrophic earthquake in 2010**
 - Haiti wasn't in great shape before
 - Haiti hasn't recovered
 - This was one in a continual series of difficult challenges
 - Political, Natural, Economic
 - The problems and partial solutions are all layered on each other









U.S.

- **As a result of fossil fuel usage, we are facing**
 - climate change
 - “weather weirding”
 - increasing costs of energy
- **This is going to make it difficult to maintain our infrastructures at the level we currently enjoy**

Water Level at Lake Cachuma



★ 17% capacity

Basic Premise

- **Haiti is a viable field site to explore how people respond to broken infrastructures**
- **We can get ideas for what the future might look like from Haiti**
- **A good response, from our position of wealth, might also end up helping Haiti**

Field Work

- **A short trip in February 2015**
- **Relief work**
- **Studied responses to broken infrastructure**
- **Taught “Global Disruption and IT”**

Field Work



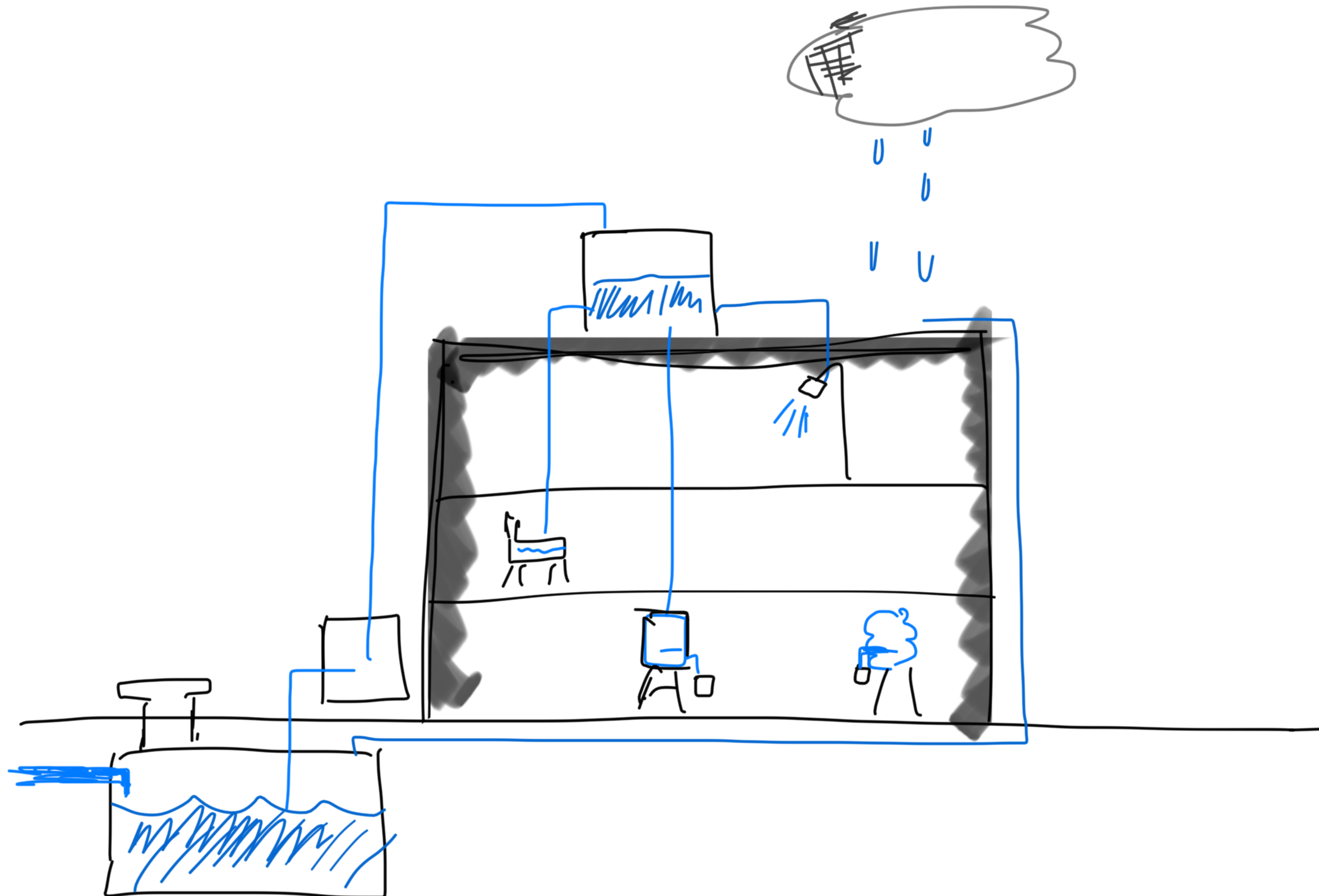
Infrastructures

**“persistent socio-technical systems over
which services are delivered”**

Infrastructures

- **Water**
- **Electricity**
- **Communication**
- **Food**

Infrastructures - Water



Infrastructures - Water



Infrastructures - Water



Infrastructures - Electricity



Infrastructures - Communication

- **Cell Phones**
 - **data very expensive**
- **Omni-Direction WiFi**

Infrastructures - Food



Interconnections

- **You can't get water without electricity**
- **You can't get data without electricity**
- **You can't get electricity without fuel**

Disconnection

- **When it rained, you received water**
 - **but you lost data**
- **When you used data**
 - **you lost electricity**
- **When it rained,**
 - **you couldn't get fuel**

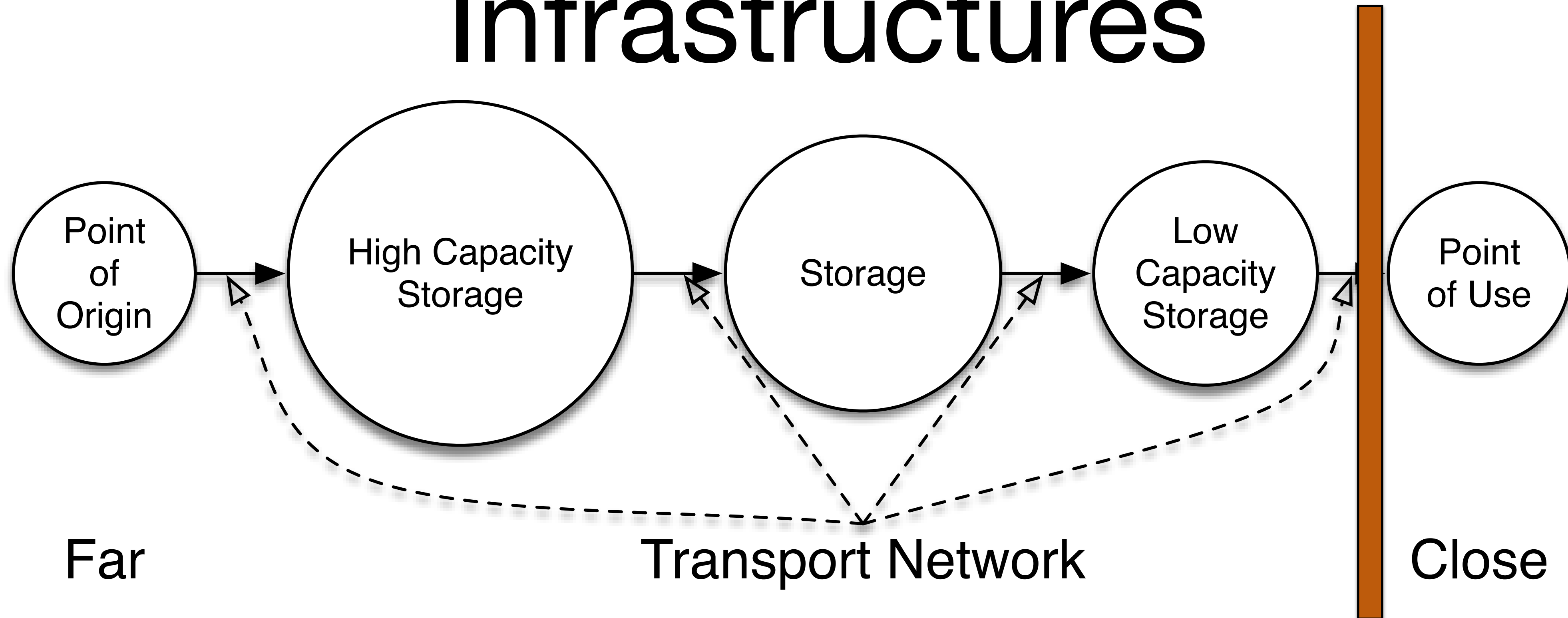
Rhythms

- **People changed their lives in relation to these connections and disconnections**
- You started uploads at night
 - when power was on and people went to sleep
- When it rained you socialized
 - there was no internet and muddy roads

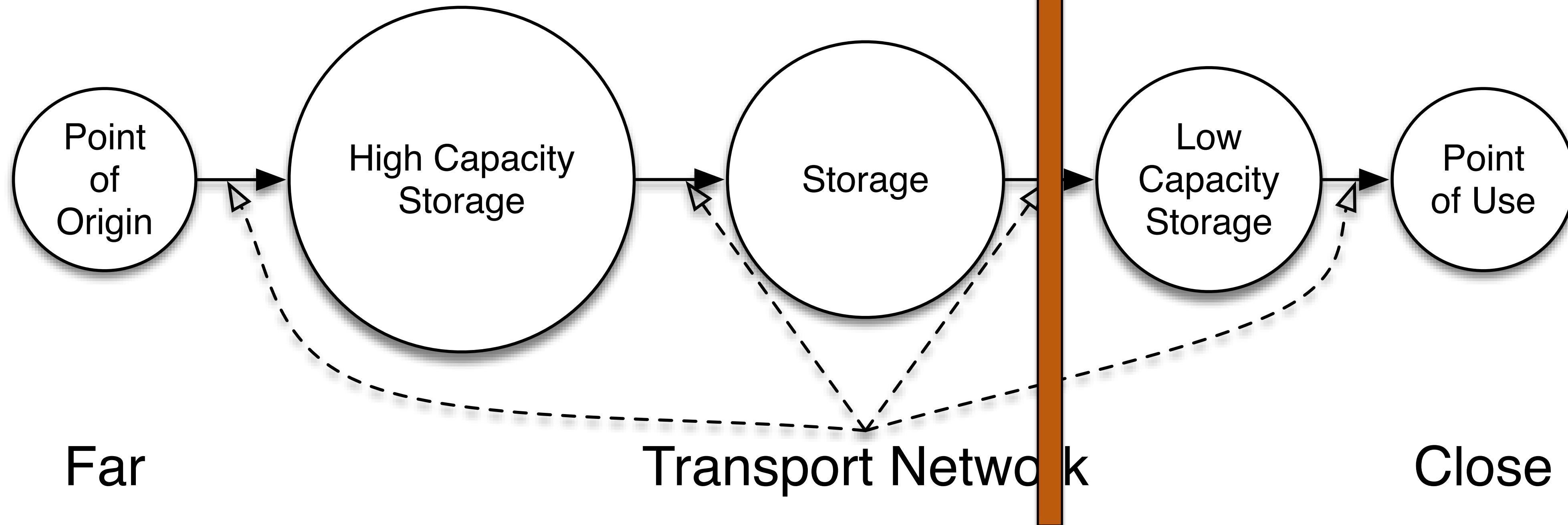
Observation #1

**“intermittent infrastructures change daily
rhythms and local culture”**

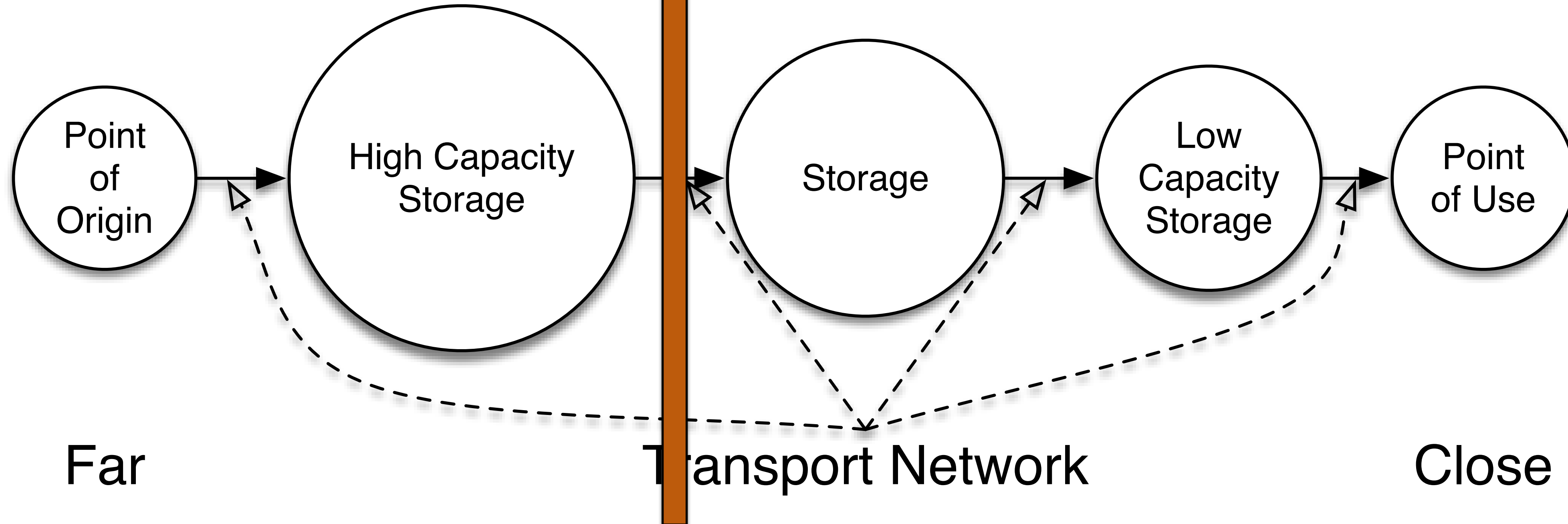
Storage/Buffer Infrastructures



Storage/Buffer Infrastructures



Storage/Buffer Infrastructures



Observation #2

“As infrastructures breakdown, end-users do more labor to ensure services work”

What about computers?

- **In Haiti there were very few or very simple computers that were involved in the infrastructures**
- **People enabled the infrastructures to stay flexible**
- **Our infrastructures are imbued with computers**

Are we **really** facing this?

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Are we **really** facing this?



Provocations

- **The Tesla Home battery**
 - At what point will people start buying these?
- **What would happen if our electric cars powered our homes?**
- **If everyone has electric cars what will happen to our fuel infrastructure? Do we care?**