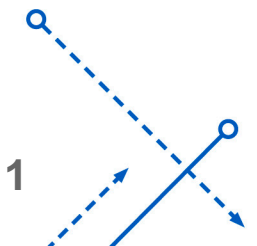
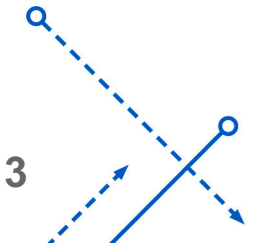


Sasha Costanza-Chock

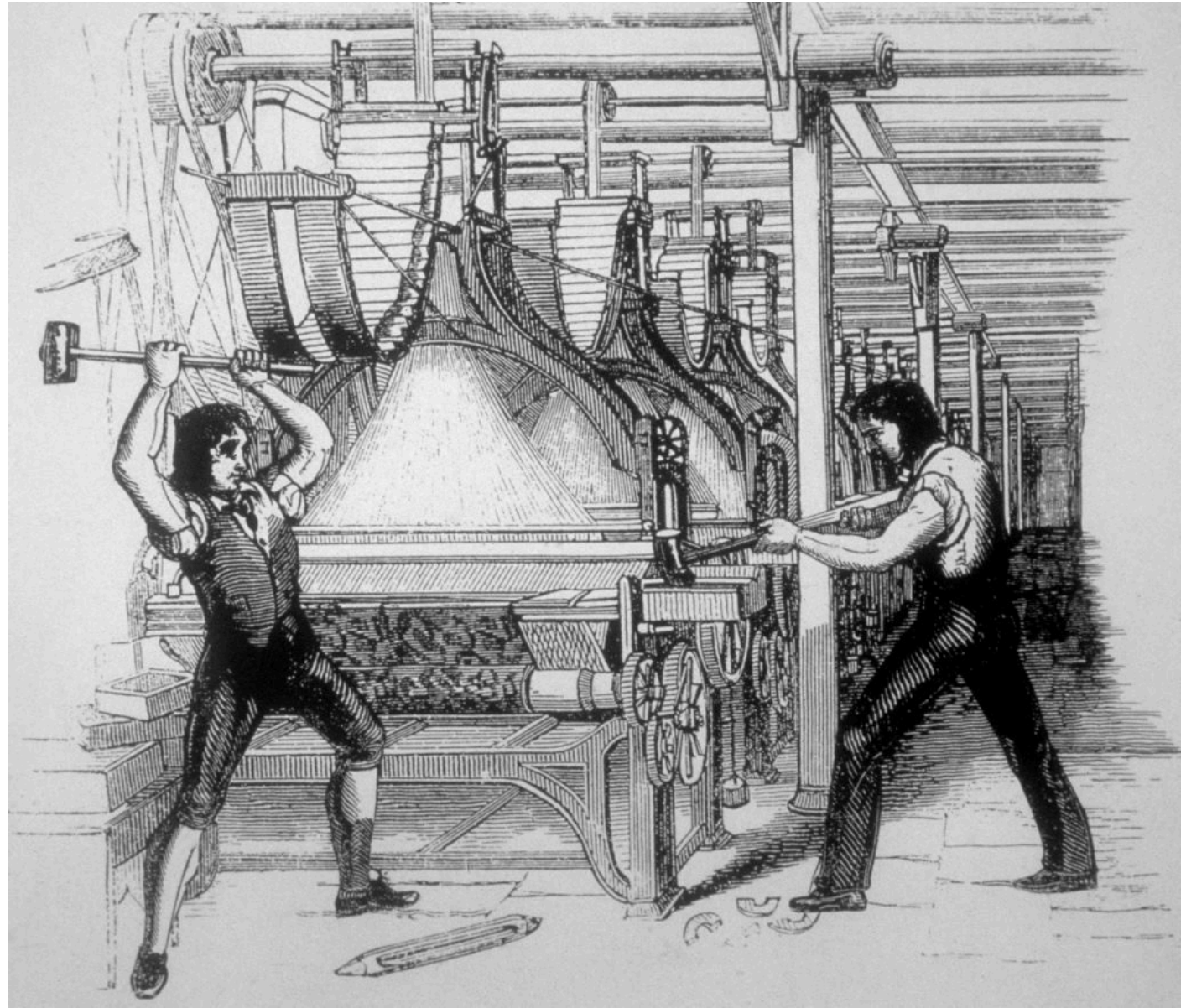


PARTICIPATORY DESIGN AND PARTICIPATORY ACTION RESEARCH

History and Foundations



Luddites – Do
these radical
smashers have
relevance
today?



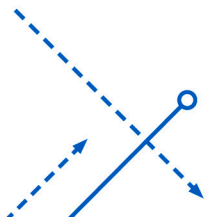
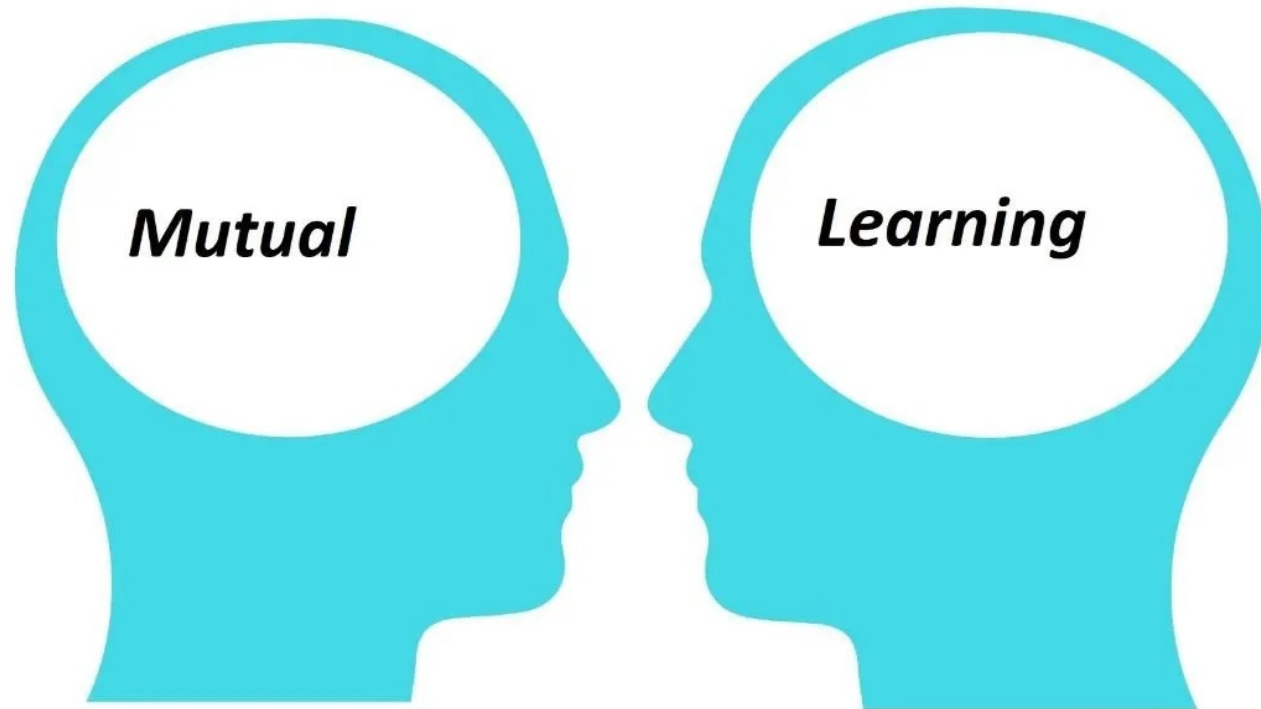
The Scandinavian Approach

- 1970's Scandinavia
 - Growing concerns of deskilling and shift in workplace dynamics due to computerization
 - Foundational work by Kristen Nygaard and the Norwegian Iron and Metal Workers Union
- UTOPIA
 - Utbildning, Teknik Och Produkt I Arbetskvalitetsperspektiv
 - Training, Technology and Product in Work Quality Perspective
 - Ambitious attempt at direct participation in development of computerized systems in the workplace
 - Nordic Graphic Union – newspaper graphic designers



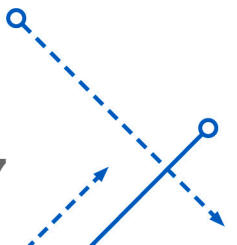
The UTOPIA Project

- UTOPIA activities
 - Mutual learning
 - Common study tours
 - Requirement specification
 - Studying a pilot installation
 - Dissemination



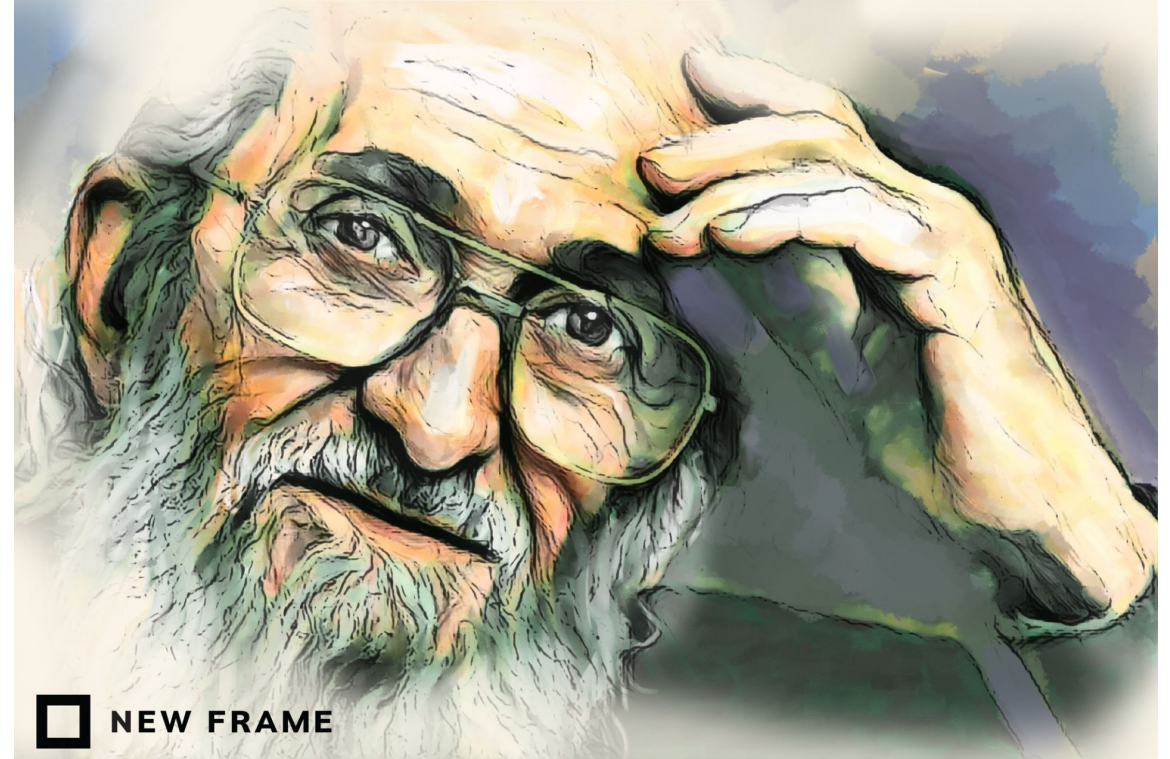
Outcomes – Did they arrive to UTOPIA?

- The final graphic design tool?
- Empowerment of trade workers
- HCI insight
- A promising method that challenges our imagination
- Is this work still relevant today?



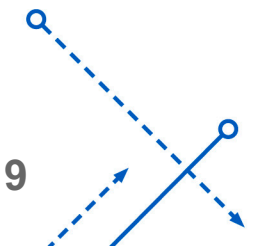
Participatory Action Research: Origins

- 1982: International Participatory Research Network
 - 1960s and 70s, India: Anti-colonialist lens, inspired by social movements
 - 1970s-1980s
 - Tanzania (Hall and Swantz) and Chile (Vio Grossi): restructuring life around new economic policies (e.g., land redistribution) necessitated an understanding of citizens' experiences (e.g., obstacles to subsistence farming on newly held land)
 - Paulo Freire tied it altogether: Adult (popular) education, democratization of research



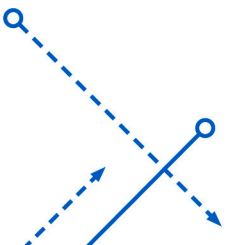
Participatory Action Research: Components

- 1. Participation (*Vivencia*):** Central to components 2 and 3 below and meant to represent the importance of lived experience as a driving, transformative force
- 2. Action (*Praxis*):** The act of transforming one's current lived experience to one that is more collectively just based on a critique of social conditions (see component 3); the focus is on changing structural power relations, both through the research process and the actions driven by the data.
- 3. Research (*Conscientization*):** The point at which the oppressed “begin to question and critique actions they may have once believed were critical to their survival . . . [Conscientization involves] creating new community-based problem-solving processes” through research



What can data-driven activism look like?

- **Public education or awareness-
/consciousness-raising campaigns**
- **Advocacy campaigns** (e.g., meeting with a decision-maker to advocate for policy reform, policy briefs)
- **Mobilization and organizing:** Energizing people to take steps to address a social issue, and then organizing a movement around that issue
- **Mutual aid**



PD

PAR

Engineering
focused

Origins in labor
organizing

Technology
output

Stronger
execution

Vivencia (whole
process approach)

Constraints created
by academic
settings

Antagonism /
challenge to power
and hierarchy

Social science
focused

Origin in anticolonial
practice

Research
output

Stronger
background

Case Studies



Agonistic Participatory Design: Working with Marginalized Social Movements

- The complexity of designing for public space
 - Multiple “publics” created by interaction of diverse entities and perspectives
 - Navigating these interactions through tolerant disputes and challenges to hegemony
- Malmö Living Labs
 - A number of different PD projects
 - Social Innovation Incubator



Malmö Living Labs: Working with Herrgard's Women Association

- Organization of immigrant women in a suburb of Malmö
 - Focused on social innovation – not just technological
 - How to support the organization in leveraging their own skills for their own ends
 - Developed programs to support newly arrived refugees and organize catering services



Malmö Living Labs: Social Innovation Incubator

- Three design workshops conducted with the municipality to investigate the establishment of a social innovation incubator
 - Who should be included? How should the process be conducted?
 - Broad group of stakeholders initially involved: civil servants, local citizens, potential investors, local business owners, etc.
 - Some powerful actors fully dropped out because of challenged hegemony
 - Contested structure – centralized or distributed
 - Ongoing process of *infrastructuring* – when design is focused on spaces and processes rather than final products

PAR Case Study: Youth Participatory Action Research (YPAR) 2.0

- Institute for Sustainable and Economic Educational and Environmental Design (ISEEED) in Oakland, CA: [iseeed](#)
- **Aim:** ‘Ground-truth’ the County health department’s official database on food outlets, which had labeled East Oakland as a food oasis
- Youth and adults worked together to create an app that young people could use to capture information about locations in their environment and conduct interviews and surveys with store owners and residents: [streetwyze](#)
- **Findings:** The county claimed there were 50 grocery stores, but there were only 3. The rest were liquor or corner stores.
- **Action:** Made recommendations to decision makers and convinced them to add a farmers market, food commissary, and urban farm to local school districts
- **Youth outcomes:** Newfound of their social locations within systems of race and class

Lessons Learned and Final Thoughts

- Fundamental aspects of participatory design – taken from a systematic literature review
 - Politics
 - People who are affected by a decision should have an opportunity to influence it
 - People
 - People play critical roles in design by being experts in their own lives
 - Context
 - The use situation is the fundamental starting point for the design situation
 - Methods
 - Methods are means for users to gain influence in design processes
 - Product
 - The goal of participation is to design alternatives, improving quality of life

Lessons Learned and Final Thoughts

- Real participatory design is challenging!
 - Uncertain outcomes
 - Long timelines
 - Interpersonal dynamics of participation
 - Buy-in from investors
- Real participatory design is important!
 - Democratic development of public good – rather than tech for tech's sake
 - Not just inclusion – empowerment
 - Genuinely novel design insight generated by jumping far out of the box
 - Projects with longevity that can thrive well after you have left the space



Activity

UB CSE has a massive number of applications for its CSE Masters program, several thousand for Fall 2023 alone. Administrators at UB and within the department have been considering the development of an automated system to make decisions about the admissions process. They have tasked you with developing that system. Your task:

- Define the set of stakeholders who should have a say in this system, and why
- Describe a participatory process by which you will design the system. Determine who will have “final say” on what, and how “final say” will be determined
- Describe any feedback mechanisms that will be put into place for future changes to the system.

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