



November 2024, Munin Conference

Mechanisms for Transdisciplinary Co-Production

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Public Science Lab

Framing the need for transdisciplinary co-production in the age of climate emergency

- Environmental crisis deeply intertwined to social crisis
 - Land use and agricultural production
 - Water shortages
 - Urban design
 - Labor policies and job/economic security
 - Decline of medical services
 - Technology and Artificial Intelligence
- Far too little awareness of this interdependence and related research, especially among youth and vulnerable population (Leonelli under review, “Environmental Intelligence”, *Harvard Data Science Review*)
- What role for research-facing institutions and public services?

Open Science alone is not enough (depending on what one means by OS..)

- Sharing information does not work in and by itself (see climate policy wars!)
- Democratic deficit – representation in tension with misinformation and disinformation [Boumans, Goldenberg and Leonelli in preparation, *Misinformation*. Elements: Cambridge University Press]
- Engagement on social media and related tech has huge influence on public discourse and policy – often fueled by emotions and social circles / bubbles
- Crucial to engage citizens, communities and policy-makers in ongoing evidence-based debate, and re-appropriate AI and social/digital spaces towards adequate information and emotive engagement
- OS tools, infrastructures and library services could play a crucial role

Building on strong foundations

- Long tradition in social studies of science and technology in building up engagement:
 - Co-production (Jasanoff 2004): “the ways in which we know and represent the world (both nature and society) are inseparable from the ways in which we chose to live in”
- Environmental Intelligence: “technologies developed in full awareness of their interdependence with the natural world and the severe limits in human understandings of such interdependence - and thus of possible effects of technological change on the planet as a whole, particularly under conditions of climate emergency and growing social inequities”
 - “EI can respond to such conditions by prioritizing innovation that bolsters biological, social and scientific diversity, and explicitly designing interventions to enhance agency and representation of the most vulnerable in human societies and to provide safeguards for non-human forms of life” (Leonelli under review)
- Far too little connection to
 - Open Science and citizen science movement
 - Existing social and policy institutions and movements deeply engaged at the local level
 - International networks and top-down activities to support engagement
 - Mass media and journalism



Local engagement case: Pianeta on water politics

- Pianeta as mediating organization
- Focus: Emilia-Romagna Flooding, Po drought, Flooded land consumption
- Citizens engagement:
 - participatory process to redevelop a lake in urban areas
 - walking seminars on water and biodiversity, documentary nights
 - workshops targeting adolescents and students to raise sustainability and climate change
- Reframing relevant expertise: promoting and showcasing debate among policy-makers, academics, third sector, youth representatives and NGOs
- Impact: volunteering in local elections, emergence of young candidates committed to socio-environmental causes





TO SEE PIANETA PROJECTS:
WWW.PIANETA.ORG


**EUROPEAN
CLIMATE
PACT**



**FACCIAMO NOI
LA DIFFERENZA**

**SCUOLA E QUARTIERE UNITI
PER L'AMBIENTE**

"INIZIATIVA RIENTRANTE NEL
PROGETTO ERBACCE"



PARCO XXII APRILE DI MODENA
SABATO 20 APRILE 2024
DALLE ORE 15:30 ALLE 18:00



PASSEGGIATA SUL VECCHIO NAVIGLIO
Partenza alle 15:00 sul retro del palazzo
Ducale in Corso Vittorio, arrivo al parco XXII aprile
a cura di **Amici della Darsena, Gavci e Pianeta.**



BRICKS4TRANSFORMATION
Laboratorio per ragazzi dagli 11 ai 15 anni per esplorare
e tematiche legate all'ambiente, clima e sostenibilità a
cura di **InEuropa.**



Finanziato da  **Regione Emilia-Romagna** 

Progetto Modena per il Clima - ERBACCE

INTELLIGENZA AMBIENTALE

LA TECNOLOGIA SALVERÀ IL PIANETA?

16 MAGGIO
CORTILE DEL LECCIO
VIA FRANCESCO SELMI 67 - MODENA
DALLE 18.30

PROGRAMMA:

18.30 - Aperitivo
19.15 - Inizio Tavola Rotonda
20.30 - Live Music

Saluti introduttivi: **Stefano Rimini**, ambasciatore patto per il clima, presidente Pianeta.

pianeta
www.pianeta.org



Moderatrice: **Laura Ferrari** Policy Expert in ambito IA per The Good Lobby, Socia di Pianeta



Lara Maistrello: Prof.ssa Associata di Entomologia, DSV e BIOGEST-SITEIA, UNIMORE.



Simone Calderara: Prof. Ordinario di Machine e Deep Learning, Referente AIAcademy UNIMORE.



Sabina Leonelli: Prof. di Tecnologia e Societa' (USA Libreria del Congresso), advisor di Pianeta.



Fabio Ferrari: fondatore e CEO di Ammagamma, azienda leader in campo IA di Modena.



International networks at the service of local debates: UNICEF Youth Policy Advice and Climate Pact Ambassadors

- European Youth Advisory Board
 - Focus: Involving children in designing public policies on childhood
 - Citizen engagement: Regional and Local YAB in cities and regions across Italy: 20 adolescents
 - Reframing relevant expertise: youth input at the centre, facilitated by policy experts, psychologists, UNICEF officials
 - Impact: shaping Government investment on children aggregations centers (250 mln euro, 60 centers in Italy)
- Climate Pact Ambassadors network:
 - Focus: local action and citizen engagement
 - Citizen engagement: European green deal at local level – Push the local and national institution to approve Mitigation and Climate Adaption Plans (PNACC) with events, advocacy, public opinion
 - Reframing relevant expertise:: involving associations, political parties, citizens in the elaborations of local climate plans:
 - Impact:: increased attention on climate change, local and national mitigations plans, citizen engagement



Project Erbacce ("weeds")

See: <https://www.pianeta.org/en/homepage/>



A film collaboration with philosopher and data scientist Sabina Leonelli examining notions of *Data Shadows*.

Art film Data Shadows

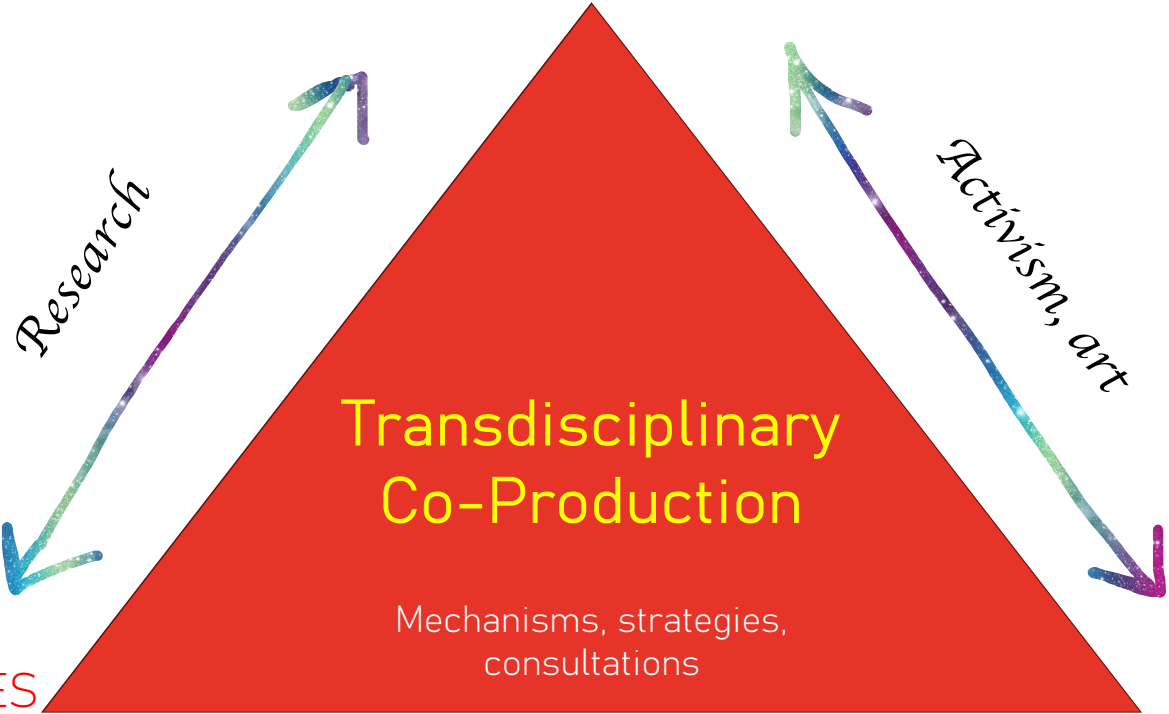
See: <https://opensciencestudies.eu/data-shadows-a-film-by-jacob-van-der-beugel/>

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*Key assumption:
Environment =
Social + Natural!*

Social studies of science and technology
Scientific evidence
Responsible and sustainable AI
Social and environmental impact

ENVIRONMENTAL INTELLIGENCE



CLIMATE AND SOCIAL POLICIES

Local projects
Transnational organisations
Industrial investments
National investments
National and international policies

PUBLIC PARTICIPATION

Youth involvement
Ambassador programs
Citizen assemblies and engagement
Experience and expertise of relevant publics

Bringing this to our own doorsteps: Break-out groups

- PART 1: Useful examples of relevant activities (10')
- PART 2: Challenges and possible solutions (10')
- PART 3: Plenary brief reports and discussion (20')



Abstract

In the age of climate emergency, there continues to be a deep disconnection between people's perception of social concerns (e.g. job and economic security, urban design and uses of technology) and environmental concerns (e.g. weather-related disasters, pollution, loss of green spaces, ecoanxiety). This fuels what many call a 'democratic deficit', where representative democracies are struggling to foster and support evidence-based decision-making in the face of extensive misinformation and disinformation campaigns. This is particularly concerning among youth and vulnerable parts of the population, such as immigrant communities and the elderly. This workshop proposes transdisciplinary engagement as a way to engage and inform around those issues, while building and extending Open Science efforts to provide an alternative to bubble chambers created by digital media and some forms of Artificial intelligence. The workshop aims to explore, together with delegates and through break-out groups, experiences of engaging local communities in developing environmental/social interventions together with policy-makers as well as researchers, thinking about challenges and learning from each other's solutions. Some of the examples will include water research and policy engagement in Italy, youth engagement around environmental themes across European organisations, and the development of the Climate Pact Ambassador network.