Social Responsibility and Space for Dialogue

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Content: Presentation

- What can we learn from bridges, plants, machines et al
  - Relevancy of technical code
- Dialogue among the deaf: The pro-contra debate
  - Neglecting technical code
- Technical code of the Agro-industrial biotechnology
  - Scientific analysis of technical code
- Recodification and the emergence of tailor-made biotechnology
  - Social responsible innovation
- Dialogue among the hearing through multistakeholder platforms
  - Process of broadening innovation trajectories

Code and Exclusion?

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I. What can we learn from bridges, plants, machines, plants

- Long Island Beach Bridge: Artefacts do have politics (codes)
- Toilets: Cultural assumptions (Horizon)
- High Yielding Varieties: Artefacts strengthen unequal relations
- Textile machines 19th century: Codes can be changed
- Agro-industrial biotechnology: Separation processes
- TMBT: Opportunities for re-codification

- **Conclusion: Presence of technical code in artefacts, in food products**

II. Dialogue among the deaf: Pro-contra Biotech Debate; Neglection of the code

Society

Technology

Separated entities; technology as instrument

Splitters

Society and Technology are Interrelated; co-creation

Weavers

Co-creation is arena of social struggles and opportunities

Re-designers

III.1 From neglecting to unravelling the technical code of the Agro-Industrial biotechnology

- Scientific analysis of the introduction of (the Code of) biotechnology in agro-industrial food chain

Context

Biotechnology

Plant biotechnology

New System

Biopower

Enzyme and fermentation-technology

Agro-industrial Production chain

Biotechnology

Inputs

Plant biotechnology

Agriculture

Enzyme and fermentation technology

Food products

Consumption

Agriculture
Natural Environment

De-coupling natural environment

Coupling scientific information

Natural Environment

New Seeds

Biopower in Food Chains

Agriculture
Food Production

De-coupling Local Food Production

Food Production

Enzymes

Coupling Scientific information

Agriculture
Food Quality

Decoupling Food Quality

Food Quality

Bioethanol

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III.2.Technical code of the agro-industrial biotechnology

- Strengthening Separation Agriculture and Environment through informationalized seeds with a specific combination of scientific/immaterial and material content
- Separation Agricultural products and Food products through informationalized enzymes
- Separation Agricultural Products and Food Qualities through specific non-food products and components

- Separation Agriculture and Health through specific additives and ingredients

Politicizing Products (Biopolitics)

Informationalized seeds

Remote Control

Informationalized Enzymes and Fermentations

Interchangeability

Patents

Relocation of Power: From Regulation through Policy towards Design of Politicizing Products

IV Recodification and the emergence of tailor-made biotechnology

- Connect what A-I Biotechnology separates
  - Connecting agriculture and environment
  - Connecting agricultural and food products
  - Connecting agricultural food products and its food quality
- Strengthen location-specific developments
- Recodification of politicizing products
- Broaden innovation trajectories

IV. Recodification and the emergence of tailor-made biotechnology (from separation to reconnection)

- Reconnecting agriculture and environment
  - Empowering local varieties as actants
- Reconnecting agriculture and food production
  - Empowering location-specific food products as actants
- Reconnecting agricultural products and food qualities
- Governing actants
- Democratizing innovation trajectories

V.1 Starting points for social responsible innovation trajectories

- **Ideologically**: Beyond pro-contra debate
- **Strategic actions**: Changing the **social relations/organization** from which agrofood biotechnological artefacts emerge *(Re-coupling what Agro- Industrial Biotech de-couples)*

- **Tactical actions**: Changing the immaterial content of the politicized artefacts and strengthening location specific resources for **endogenous developments** *(Food products as levers for development; as re-connectors)*
- **Organizational**: Changing the s**ocial organization of knowledge production** from which technology development emerges (*Commons and open source knowledge development)*

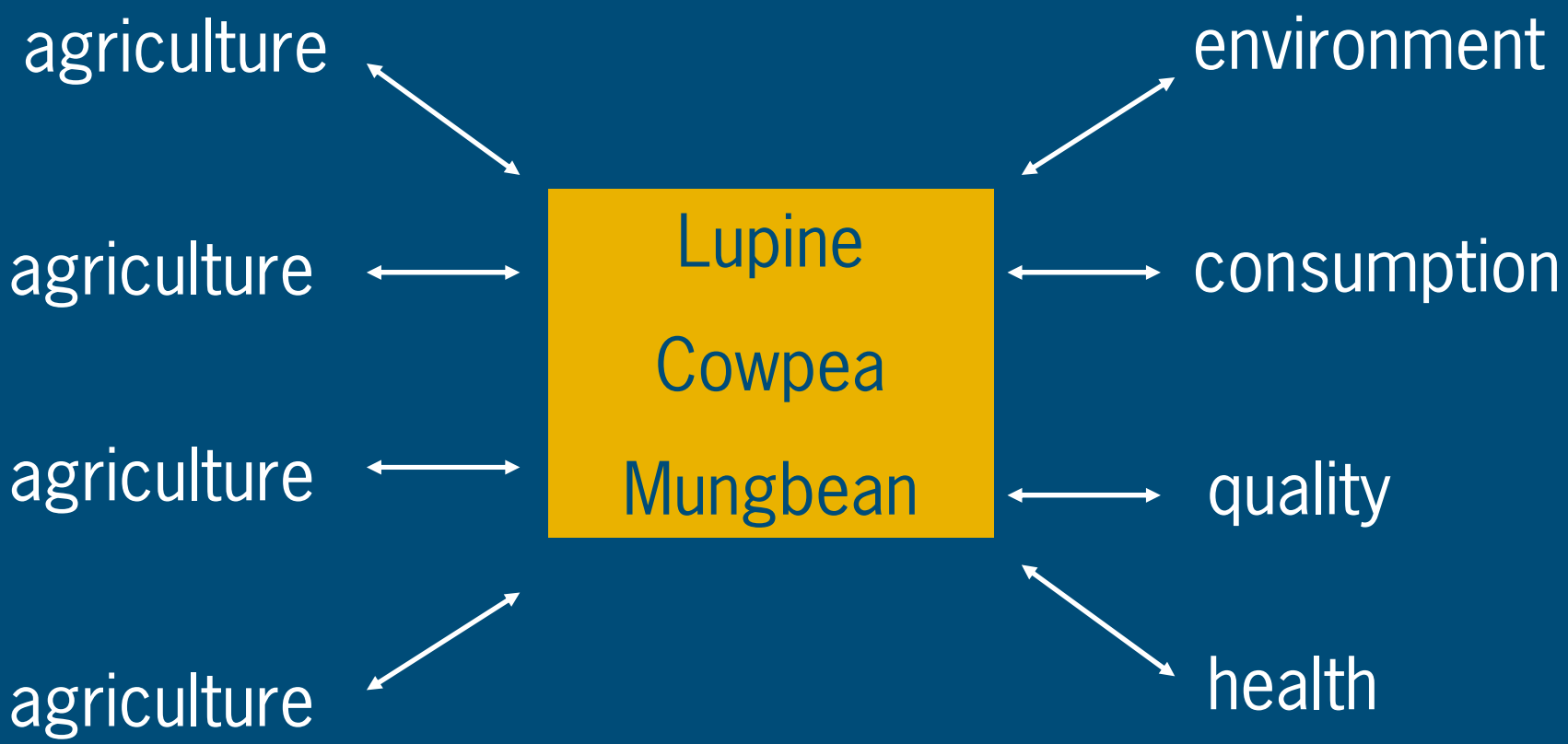
V.2. Dialogue among the hearing through multistakeholder platforms

- Multistakeholder Platforms to organize strategic and tactical actions to broaden processes of social responsible innovation trajectories

V. 3. Concrete examples of social responsible innovation trajectories

- Recoupling farming to social/natural environment *(early maturing, dual purpose sorghum seeds)*
- Recoupling agriculture and food production by developing food products as levers for local developments *(Waache Ghana, Lupine Streetfoods, Ecuador)*
- Recoupling agriculture and health by developing products zinc/iron enriched crops (*Obatampa mais Ghana)*
- Informationalized seeds/crops as mediators for sustainable development (*Carolus potato, Greenpeace)*

III. Food Products as Reconnectors



V Perspective for social responsible innovation trajectories

- What human beings are and will become is decided in the shape of our tools no less than in the action of statesmen and political movements. The design of technology contains political consequences The exclusion of the vast majority from participation in the decision-making process of the design of our tools is profoundly undemocratic (Feenberg).

- Multistakeholder platforms may open a trajectory towards societal embedded technological innovations (Ruivenkamp)

- Thanks for your attention

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