

Investigating the relation between education and societal change in the face of sustainability issues

Exploring methodological possibilities and blind spots

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Introduction

- Radical sustainability concerns & radical pedagogical concerns: a false dichotomy?
- Aim: Taking the **idea of education as a radically transformational practice** out of the realm of theoretical debates and turn it into an object of empirical investigation
- What is needed = **delivering empirically grounded insight** in whether and *how* pedagogical practices can open up a space for radical societal change in the context of sustainability problems

Introduction

- Exploring different modes of investigation:
 - Transactional analytical methodology
 - Cultural Historical Activity Theory
- Possibilities for cross-fertilisation ?
- Challenges?

Transactional analytical
methodology

Theoretical background

- Pragmatist educational theory: **John Dewey**'s work on education in relation to democracy and experience
- **Transactional perspective** (Dewey & Bentley 1949) **on education** (Östman & Öhman 2010):
 - Persons and the world transform simultaneously and reciprocally – *in transaction* – through engaging with problematic situations
 - Learning = process that takes place through encounters between a person and the surrounding world, through a continuous process of doing and undergoing the consequences of acts
 - Learning defined in terms of action: 'meaning making resulting in a more developed and specific repertoire for coordinating activities with the environment'

Method: Practical Epistemology Analysis - PEA

- Transactional perspective: analysing learning requires a focus on
 - the relationships between **human action** and its **context** in which it occurs
 - both the **current situation** and people's **earlier experiences**
- PEA: 'high-resolution' analysis (Östman 2010) of how meaning is created in action
 - creation of **relations** between what **stands fast** for a person – previous experience – and the new situation/**encounter**
 - sometimes, **gaps** are immediately bridged, sometimes this requires an inquiry

Method: Practical Epistemology Analysis - PEA

- PEA allows us to **open-up the black box of learning** processes and to trace the connections between this process and its outcomes
- PEA reveals **factors that influence learning**
- PEA reveals **'privileging' processes** (Wertsch 1998): actions that communicate which knowledge, skills, values etc. are valid and which are not → this affects what is taken into account and what is not (inclusion and exclusion) and governs the learning in a certain direction

Example: Business plan

- Facilitator 1: And another thing we said we needed to keep in mind; er we can't create an extra internet distribution platform... it can't become a separate trade... be in the short term... we'd have to meet. So we shouldn't forget about that either. ...
- Woman 2: I... is rather odd. Do... many think... is that just because the law says so or is it because... couldn't do that?
- Facilitator 1: ...
- Woman 2: ... really what we want to do the core I mean, and our intention... to, but that does maybe... concept.
- Man 5: Yeah there are many more legal regulations... suppliers have to meet much stricter demands and these are also personally checked. ... Then you suddenly become a wholesaler. Do you understand? ... That's what...
- Woman 2: So ... those reduced inspections, that's interesting and that could be a good reason to do it, but... you disregard some other things. But to me that should be clear... what are the pros and cons, because suppose the disadvantages outweigh the benefits ...
- Man 5: Think that makes the difference between er a retail a retailer, basically. Otherwise, you suddenly become a supermarket, right? That's basically what it boils down to. ... And that's not what we're supposed to do. I mean that could not be what we're supposed to do.

Relation: elaborates on regulations mentioned by facilitator

Relation: reaffirms what stands fast for him

Gap: questioning the privileging of the existing law as taken for granted condition

More precise gap

Concerns included in the privileging

More precise gap

Repeats relation

Example: Business

- Facilitator 1: But what if the legislation on short chain no longer applied to you, what would be the disadvantage?
- Man 5: The producers with a lot of extra costs for inspections ... Yeah, you get the same ... inspections as Campina... That's basically what it comes down to
- [several other participants take part in the discussion and use inspections, e.g. who arranges them]
- Facilitator 2: Maybe it's important to explain what's meant by an intermediary. ... what's an intermediary? A shop?
- Man 5: A shop, a wholesaler.
- Man 1: As soon as a an intermediary becomes an owner ... who buys and sells products ...
- Facilitator 2: So if you have a cooperative of farmers ... if they remain the owners ... then it's right?
- Facilitator 2: ... and the consumer to be in the short chain. Now, for food services, so the only permitted intermediary is that one. So we can't add a second one.
- Man 4: But we also discussed stuff like, that the cooperative outsources stuff, so as a matter of fact distribution could be outsourced?
- Man 5: That's an option, yeah. Yes of course. But they remain owners right. So they get someone else to drive around for them that's distribution isn't it. That's an option. Sure.
- Woman 1: Yeah and your legislation for small-scale processing is very flexible, has recently become more flexible, hasn't it. So that's why that's interesting...

Relation: no short chain – a lot of extra costs

Paraphrases the gap

Gap is lingering

Formulating new gap

Relation: intermediary - ownership

Relation (prior meeting): outsourcing – distribution

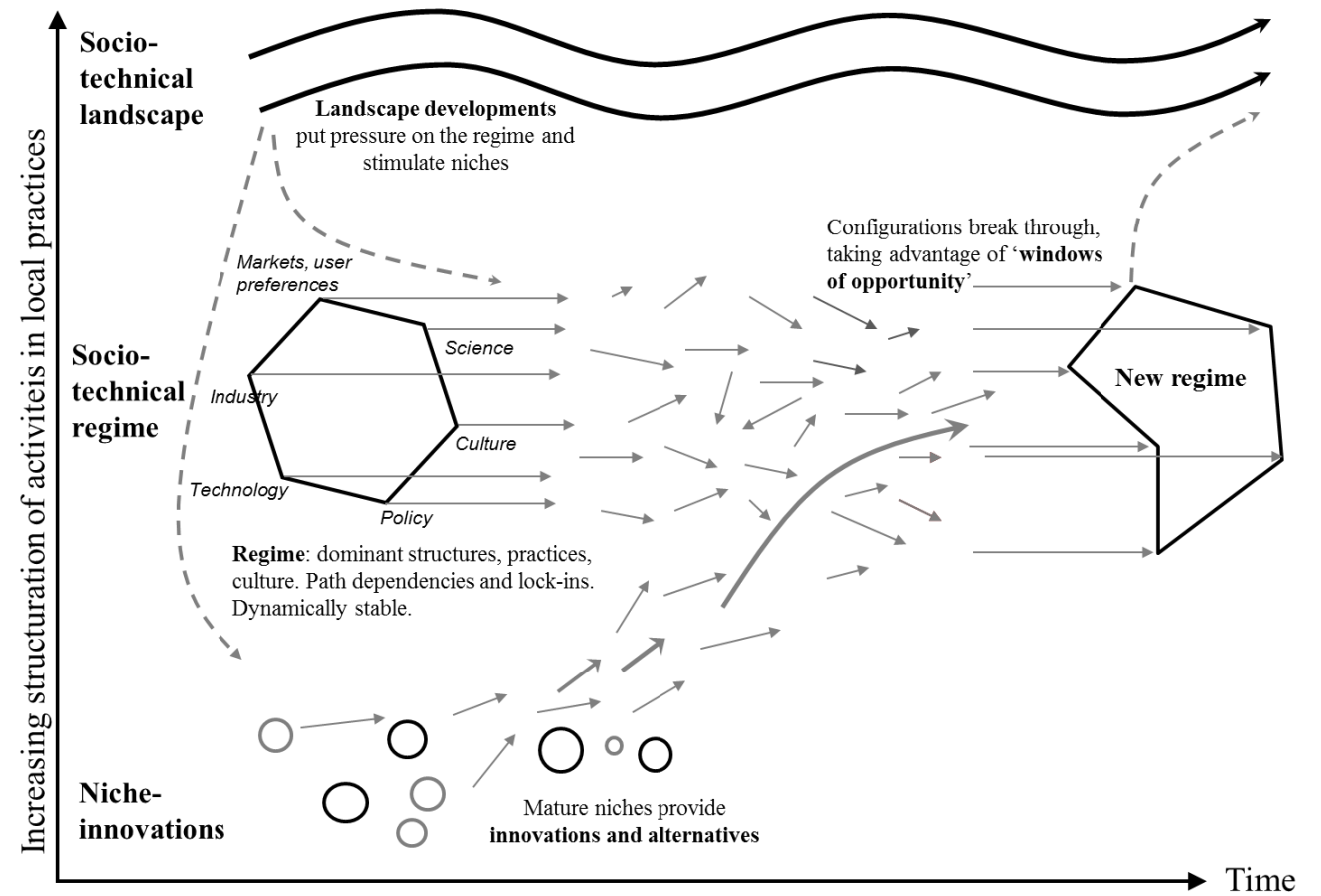
Included in privileging: new option emerges

Outcomes of this co-construction

Woman 2 created a **disturbance** by refusing to treat the presently existing law on SFSC as something that should be taken for granted as a limiting condition for creating a proposal in view of a desired change in the future. By **unsettling the taken for granted**, she initiated (and insisted on maintaining) an **inquiry** that resulted in an **expanded repertoire of possibilities for the future**. The participants co-constructed a deeper understanding of what the existing law involves and alternative ways to deal with it. Thus, the inquiry resulted in a (potential) re-creation of existing habits

Sustainability transition perspective

SUSTAINABILITY TRANSITION STUDIES: MULTI-LEVEL PERSPECTIVE ANALYSIS



RESULTS
PEA ANALYSIS

Sustainability transition perspective

- How to deal with **regulations** belonging to the **current regime**?
- **MLP analysis**: existing juridical definition of SFSC has a relatively limited impact on a more sustainable food regime if not embedded in a broader strategy with additional sustainability criteria - might even strengthen regime players (lock-in – consolidation regime stability)
- Interventions of Woman 2: attempt to **open up a space in which the regime regulations can be questioned** (inquiry)
- Here: limited impact in terms of breaking with potential lock-ins
- However: Woman 2 repeatedly stages this kind of critical inquiries → prevents that equating SFSC (as a sole criterion) with a sustainable food system becomes something that is taken for granted

Example: Matching supply & demand side

- Man B: You need an intermediary. And that's sort of... distribution right? For example, you need that. For example we buy... my kitchen where I can peel potatoes. I don't have that anymore. I no longer have a space for vegetables. I did have that 20 years ago.
- Man A: Yes yes yes yes I understand that.
- Man B: For example, 20 years ago apples were peeled with four people sitting at the table, outside in the sun, with a cup of coffee and... the sauce. Now this would cost 1000 francs [= €25] per liter. That is no longer possible. That is what I mean by stepping back in time. If you only...
- Man A: Yes, that is what I mean by stepping back in time. If you only...
- Man B: But you can't do that anymore, you can't reverse that. Well, certainly not on, on, on... mass distribution. That's not possible.
- Man C: Not entirely, but there are a number of opportunities.
- Man B: There are certainly a number of opportunities. There are a number of products that are certainly not a problem. For example lettuce, chicory and so on. That's not too much work. But it's about those other things.
- Facilitator: And what opportunities do you see in it? In, in... wholesale distribution?
- Man C: I know a farmer who says: let everyone drive about the prices... those that are u... agreement with two hospitals that I deliver to and all my harvest goes there and I have a...
- Man A: But is that also processed in the hospital, that entire harvest?
- Man C: He works with a factory to peel it. There he has for example... but I am just saying: that peeling could for example be included in that distribution platform.

Regime policies and regulations

Path dependency: regime infrastructure

Lock-in

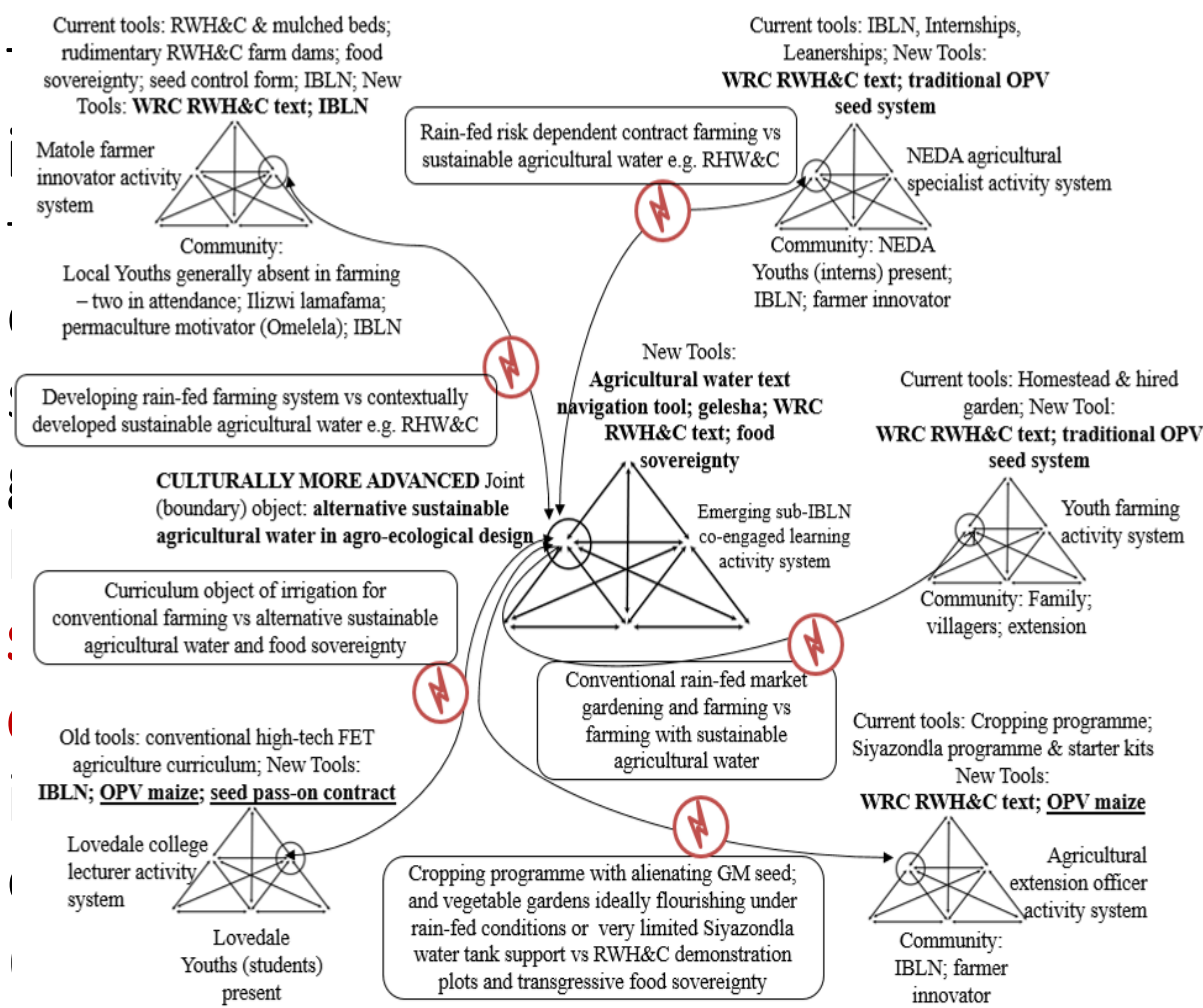
Proposal adjusted to the existing regime

Or: potential lever to bypass the path-dependency?
Radical alternatives >< fully-fledged, legitimate and mature alternatives with sufficient scale

Cultural Historical Activity Theory

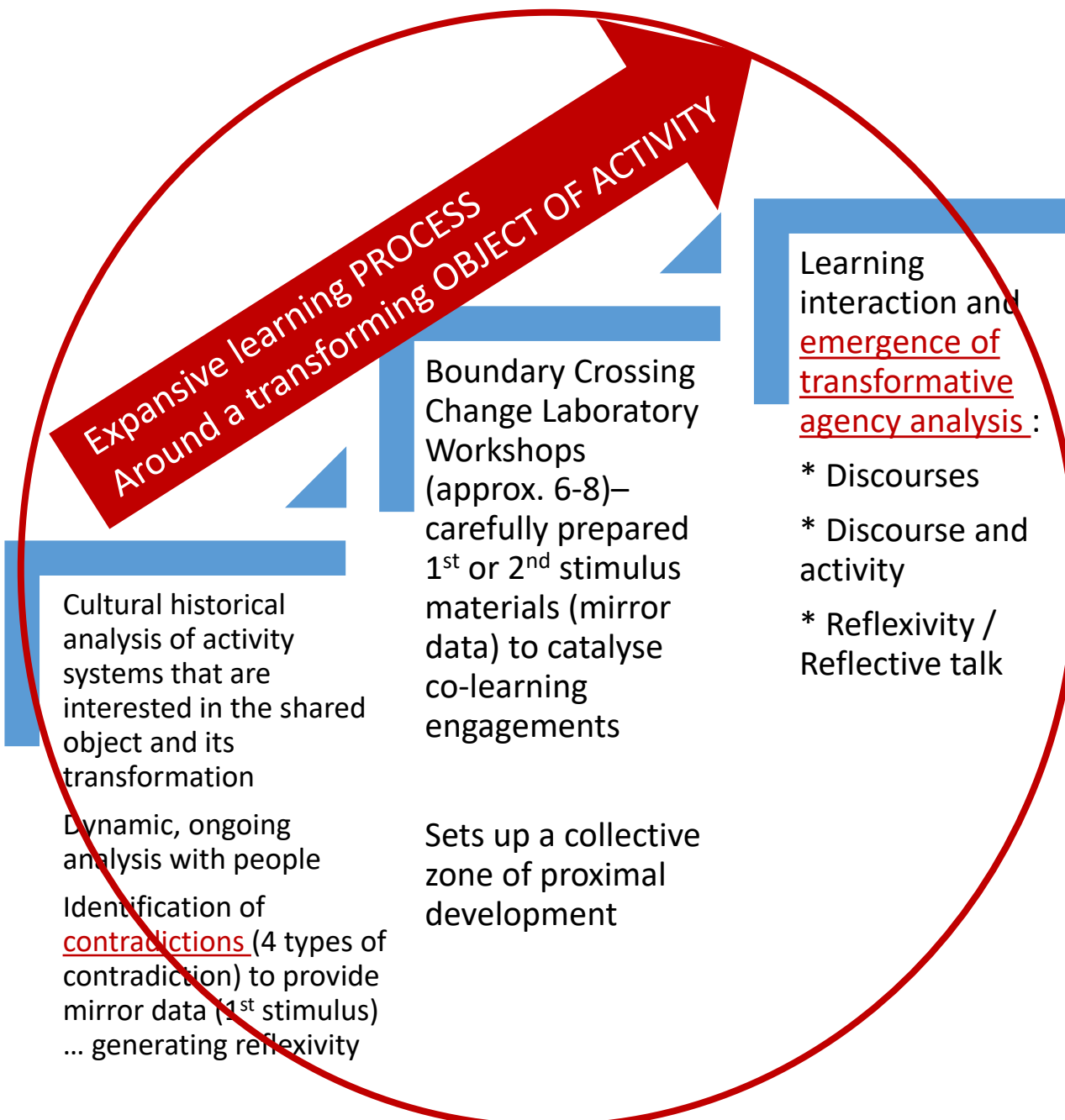
Theoretical background

- CHAT emerges from Vygotsky's developmental psychology which produced a theory of mind, linking subject, object and mediating tools (signs, symbols) into a **process** involving internalization of that which exists on the external plane first (i.e. cultural tools such as concepts, language etc.) – his focus was on development of higher order mental development via **mediation**.
- Vygotsky's work was taken forward by Leon'tev and Luria, and later by Engeström with a focus on **activity in context**, this extended Vygotsky's earlier focus on language and semiosis in the mediation process. The focus of CHAT is the collective transformation of the object of activity. Principles such as historicity, multi-voicedness guide the theory.
- Recent developments in CHAT are focusing on the importance of double stimulation in learning as catalyst for transformative agency, CHAT has also started working with more complex objects of activity 'runaway objects' and is moving out of the workplace into community co-learning environments where multiple activity systems interact.



analysis of cultures of learning: ethnographic enquiries and inductive analysis

historical and ethnographic data on the object of activity (e.g. organic farming) :



SHARED OBJECT: ACCESSIBLE, SUSTAINABLE AGRICULTURAL PRACTICE

CONTRADICTION #MTCYFSA1: Matole youths' activity system's- access to farming via conventional rain-fed market gardening and farming (object) vs smaller-scale farming with sustainable agricultural water and locally-adaptive seed

• Excerpt 6.40 (DIRSAM1, BCCLW1 in Matole Basin, May 27, 2016)

• **Male agro-ecologist:** ... needs, you could ... that could help ... about.
... Role of the formative interventionist researcher: ... working across activity systems ...
... we could get help or ...
... and the jojo tanks that they were talking

Expression of interest in expanding object of activity; introduces concepts of practice

• **R1:** Right, we will definitely take some of the things that have been discussed here for example you said you were interested in trainings. So we are going to ...
... College ... that "there are more farmers who are

Expression of agency
Commissive speech

Empathetic agency expression : relational possibility

... **Farmer 2:** I am very much appreciating of all the ...
... which information [FSA10] is already in the learning network and ...
... time of things like this ...
... organize more people ...
... attend.

Co-development of collective learning model for including youth in sustainable agriculture learning network

Moving learning pathway forward

• **R1:** By 10 June we will ... will then discuss with X ...
... interest is growing. Fort Cox ...
... in good time ...

- This model of care and collective learning of sustainable IBLN BCC exactly Matole between the IBLN involving supporting group being form

The micro-level analysis demonstrated here is essential for understanding learning processes and interactions, and emergence of agency, but means very little when taken out of the wider ongoing process of interaction and changes associated with the object of activity over time. This helps to link micro to macro, and to boundary crossing between different levels of activity.



Committing to Action
By showing up;
Transformed Activity
itself



Reporting action taking and
new activity and learning
platform

Moving learning pathway forward via consulting with actors

... that looks like this coming IBLN meeting (referring to BCCLW of 7 September 2016) will need to ... and the collaborative RWH&C training commitments and plan ... sovereignty ...

FSA10: Yes it should. ... I also have good news: *the youth that attended*

Reflexivity Expression

(held on 27 May 2016) *joined me and we registered a cooperative ZAMBS Agricultural Primary* the name is built using our initials. We have started preparing the bigger garden as a start.

Yeepee now I have youth on my side, its three young ladies, one young male and one mama (me).

Potential for cross-fertilisation & challenges

Potential for cross-fertilisation

- More refined perspectives on the relationship between individual and collective learning, and how culture, experience, concept formation and activity emerges (or not), and the history, politics and potential thereof
- Combining evidence of learning in concrete practices with investigations of on-going transformation in society
- Combining observable 'learning in action' with experiences of participants, intentions of facilitators...
- Understanding the nature of sustainability objects / activity / experiences and how they shape and are shaped by learning and learning research

Challenges

- What levels of micro-analysis do we need for analysis of sustainability learning and transformations/ transitions? What perspectives and methods are helpful and why?
- Bridging the findings of micro-analyses with implications for macro-events (societal transition) – learning as 'social movement' in social-ecological movements?
- Context-dependent findings: creating generalised knowledge (patterns, categorisations...) demands a critical mass of empirical investigators; and development of tools for cross case analysis at from methodological as well as empirical findings levels
- What can't be 'measured or empirically captured' by the researcher still exists (e.g. reflexive internal thoughts of people; interpersonal relations etc.) i.e. empirical research should not become 'empiricism'

Thank you for your attention!