FACULTY OF POLITICAL AND SOCIAL SCIENCES

DEPARTMENT OF POLITICAL SCIENCES
CENTRE FOR SUSTAINABLE DEVELOPMENT

EDUCATION & SOCIETAL TRANSFORMATION: EXPLORING THE ENTANGLEMENT OF EDUCATIVE AND POLITICAL SPACES AND CHALLENGES

Seminar “Transformative learning” | Université de Liège | Socio-Économie, Environnement et Développement (SEED) | 10th May 2017 | Arlon

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CONTENT

1. SUSTAINABILITY EDUCATION RESEARCH @CDO-UGENT
2. LEARNING & KNOWING IN PURSUIT OF SUSTAINABILITY
3. TRANSFORMATIVE LEARNING?!
4. SUSTAINABILITY IN HIGHER EDUCATION
5. LEARNING IN URBAN SUSTAINABILITY TRANSITIONS

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SUSTAINABILITY EDUCATION RESEARCH @CDO-UGENT

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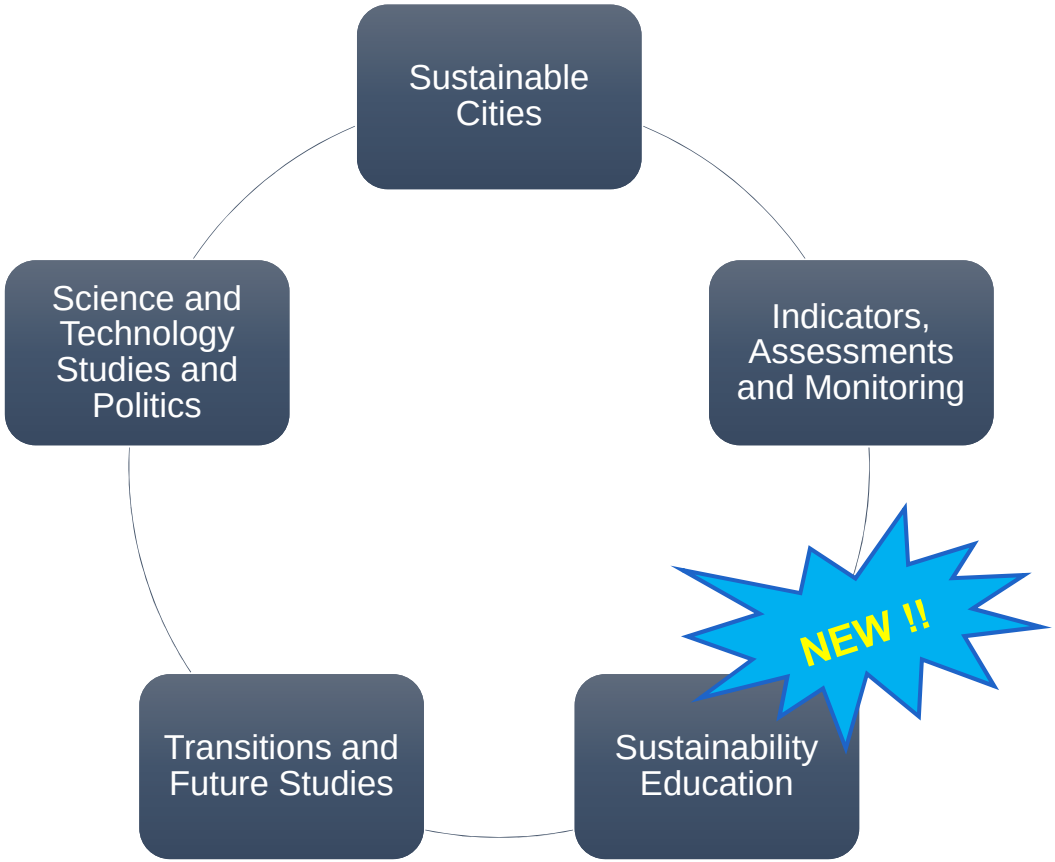
AN EMERGING RESEARCH PROGRAMME

Centre for Sustainable Development:

- multidisciplinary research group, embedded in the Department of Political Sciences
- 5 interrelated research programmes



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ONTOLOGICAL, EPISTEMOLOGICAL & THEORETICAL FOUNDATIONS

- Sustainability issues as ‘political’ issues, matters of public concern
- Constructivism: inspired by STS, e.g. Latour, Jasanoff, Marres…
- Pragmatism: e.g. Dewey + pragmatist sustainability education research (e.g. SMED research group Uppsala/Örebro)
- Complexity-acknowledging policy analysis: e.g. multi-level perspective on sustainability transitions
- Trans-disciplinarity (in education and educational research)

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RESEARCH INTERESTS

- Teaching and learning about ‘wicked’, unstructured socio-ecological problems
- The normative and political dimensions of sustainability education: e.g. questions of democracy, controversy, citizenship, public involvement, inclusion/exclusion…
- The entanglement of the educative and the political in formal and non-formal sustainability education practices

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EMPIRICAL FOCUS

- Experiential learning in the context of urban sustainability transitions
  - *Urban sustainability transitions as spaces for experiential learning:* Towards a deeper understanding or urban sustainability transitions as a matter of ‘learning by doing’ and ‘doing by learning’
  - *Wicked problems and educative spaces for urban sustainability transition:* How can urban sustainability transitions function as creative educative spaces in view of exploring and creating new possibilities for a more sustainable future? And how to design such democratic educative spaces?
- Sustainability in higher education
  - *System analysis of sustainability in higher education in Flanders:* How and to what extent is sustainability embedded in Flemish higher education today? A multi-level analysis of landscape, regime and niches
  - *Sustainability in education at Ghent University:* Integrating sustainability in education at Ghent University: the pilot cases in the educational programmes of business economics and electromechanical engineering
  - *Sustainable engineering practice:* Re-designing a project-based course and integrating sustainability in the curriculum of electro-mechanical engineering programme

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NETWORKS

- International Thematic Network SEDwise – ‘Sustainability Education – Teaching and learning in the face of wicked socio-ecological problems’
  - *Ghent University as a 'living lab' for innovative experiments with sustainability education*
- Scientific research network ‘Public pedagogy & sustainability challenges’
  - *An interdisciplinary research network of political theorists, educational theorists and sustainability education researchers who engage in a common quest for the public role of education in the face of sustainability challenges*

LEARNING AND KNOWING IN PURSUIT OF SUSTAINABILITY (PETERS & WALS 2013)

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‘SHARED’ DIAGNOSIS

- Key characteristics of sustainability issues require a re-orientation of higher education
  - indeterminacy
  - value-ladenness
  - controversy
  - uncertainty
  - complexity
- Business-as-usual has reached its limits
  - science-as-usual
  - education-as-usual

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EUROPEAN TRAINING NETWORK (HORIZON 2020)

- 6 universities – variety of disciplines – societal partners
- Focus: Collaboration of researchers and other stakeholders for making secondary schools and the communities of which they are part, more responsive, engaged and effective in addressing sustainability challenges (SDGs, e.g. climate change action, sustainable cities…)
- Objectives:
  1. Training a new generation of scientists who can work with new methodologies that are appropriate in boundary-crossing contexts where science meets society and knowledge and change is co-created by multiple stakeholders
  2. Capacity-building of secondary schools and communities

Not funded ☹

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INSPIRING CONCEPTS (PETERS & WALS)

- Phronesis

  "While ways of knowing that produce scientific and technical knowledge remain necessary, they need to be integrated with ways of knowing that produce what Aristotle called phronesis. Roughly defined, phronesis is ethically practical knowledge that is indispensable for the work of making context-specific value judgments about ends and means. Put another way, phronesis is a form of practical wisdom; it is knowledge about what should be done and how to act in particular circumstances—in a moral, ethical, and political rather than technical and instrumental sense (…). While wisdom can be understood in individual terms as something that arises out of personal contemplation and reflection, we think of it here mainly in social terms as something that is produced in and through deliberative forms of public work."

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INSPIRING CONCEPTS (PETERS & WALS)

- Epistemological pluralism: engaging multiple ways of knowing and multiple forms of knowledge
- Science as community (↔ science as commodity)
- Practical theory building: transdisciplinary action research

“TRANSFORMATIVE LEARNING”

- “view learning as more than merely knowledge-based
- maintain that the quality of interaction with others and with the environment in which learning takes place are crucial
- focus on existentially relevant or ‘real’ issues that affect and engage learners
- view learning as inevitably transdisciplinary, ‘transperspectival,’ and transboundary in that it cannot be captured by a single discipline or by a single perspective
- see indeterminacy as a central feature of the learning process in that it is not and cannot be known exactly what will be learned ahead of time, and that learning goals are likely to shift as learning progresses.”

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TRANSFORMATIVE LEARNING?!

- Is this ‘new’?
- Where does it come from? Does it build on existing knowledge traditions and, if so, which ones?
- What are the foundations for the claims made?

Further theoretical and empirical underpinning is necessary, and educational theory/research has a lot to offer in this respect. Examples:

1. Sustainability in higher education: alternatives for science/education-as-usual?
2. Learning in/through urban sustainability transitions: how is ethically practical knowledge/wisdom produced in/through deliberative forms of public work?

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THE PUBLIC ROLE OF UNIVERSITIES IN THE FACE OF SUSTAINABILITY CHALLENGES

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INSPIRING SCHOLARSHIP IN THE FIELD OF PHILOSOPHY OF EDUCATION

- Notion of ‘world university’ (Masschelein & Simons 2009):
  - a conceptualisation of the university where ‘the world is at stake’, where people are exposed to matters of public concern
  - ‘laboratory of experience and thinking’: experimental and attentive ethos
  - Interrupting the status quo, questioning the self-evident common sense, making new things possible
- Related to Medieval origin of the university as ‘Universitas Studii’

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INSPIRING SCHOLARSHIP IN THE FIELD OF PHILOSOPHY OF EDUCATION

- Public role of the university: creating space and time for 'collective experiments' in a Latourian sense (Simons & Masschelein 2009): gathering people around matters of concern
  - "It is an experiment because in view of a specific concern for which no expertise is available, an attitude of experimentation is required. It is a collective experiment because the issue creates a public and inaugurates a question about how we are going to live together. And as a collective experiment these moments actually integrate the 'functions' of research, teaching and service by gathering a public around a very specific concern, and hence making these concerns public. Perhaps these collective experiments point to what is unique about the university and what, at the same time, makes it a public institution."

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SEDwise

SUSTAINABILITY EDUCATION

Teaching & learning in the face of wicked socio-ecological problems

The central theme of this 2nd annual SEDwise meeting is *"Universities as laboratories for a sustainable world/city"*. During 3 days of lectures, study visits, worksh seminars we engage in a joint exploration of how universities can c and research on wicked socio-ecological problems and, in t "laboratories" where people are collectively exposed matters of public concern. Combining practical and t address topics such as transdisciplinarity – shifting roles o societal stakeholders – spaces and places for experimentatio interrupting the status quo and making new things possible – et choice for (inter)active, creative, experimental and transdisciplina to organise the entire network meeting in accordance with the characterising its central theme and hope to create an inspiring a collective inquiry into universities' potential to become laboratories for

International Thematic Network Meeting

30th May – 1st June 2017 , Uppsala, Sweden

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URBAN SUSTAINABILITY TRANSITIONS AS SPACES FOR EXPERIENTIAL LEARNING

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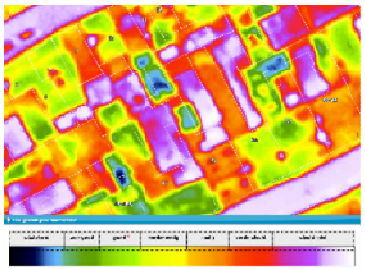
TOWARDS SUSTAINABLE CITIES: DOING BY LEARNING AND LEARNING BY DOING?

Outcome of experimental and experiential **learning**?

→ Grasping educative value requires theoretical and empirical exploration

*'The belief that all genuine education comes about through experience does **not** mean that **all experiences are genuinely or equally educative**. Experience and education cannot be directly equated to each other. For some experiences are mis-educative.' (Dewey 1938: 25)*



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TWO RELATED RESEARCH PROJECTS

1. “Urban sustainability transitions as spaces for experiential learning: towards a detailed understanding of institutional voids in Flemish cities”
   - UGent-BOF, 2016-2019
   - Thomas Block, Katrien Van Poeck
2. “Wicked problems and educative spaces for urban sustainability transition”
   - FORMAS, 2017-2019
   - Collaboration with Uppsala University: David Kronlid, Eva Friman, Leif Östman, Lovísa Eiríksdóttir, Katrien Van Poeck, Thomas Block, Michiel Dehaene

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INTERDISCIPLINARY THEORETICAL BACKGROUND

- Sustainability transition studies
- Political theory on new modes of governance
- Pragmatist educational theory: Dewey's theory of experience

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URBAN SUSTAINABILITY TRANSITIONS

- Sustainability **transitions** = transformative changes of socio-technical regimes at the systems level
- Importance of small scale, urban ‘niche experiments’ → **Strategic Niche Management** explores successful development of niches
- Role of contextual factors → **Multi-Level Perspective**: transition = result of interaction between landscape, regime and niches level

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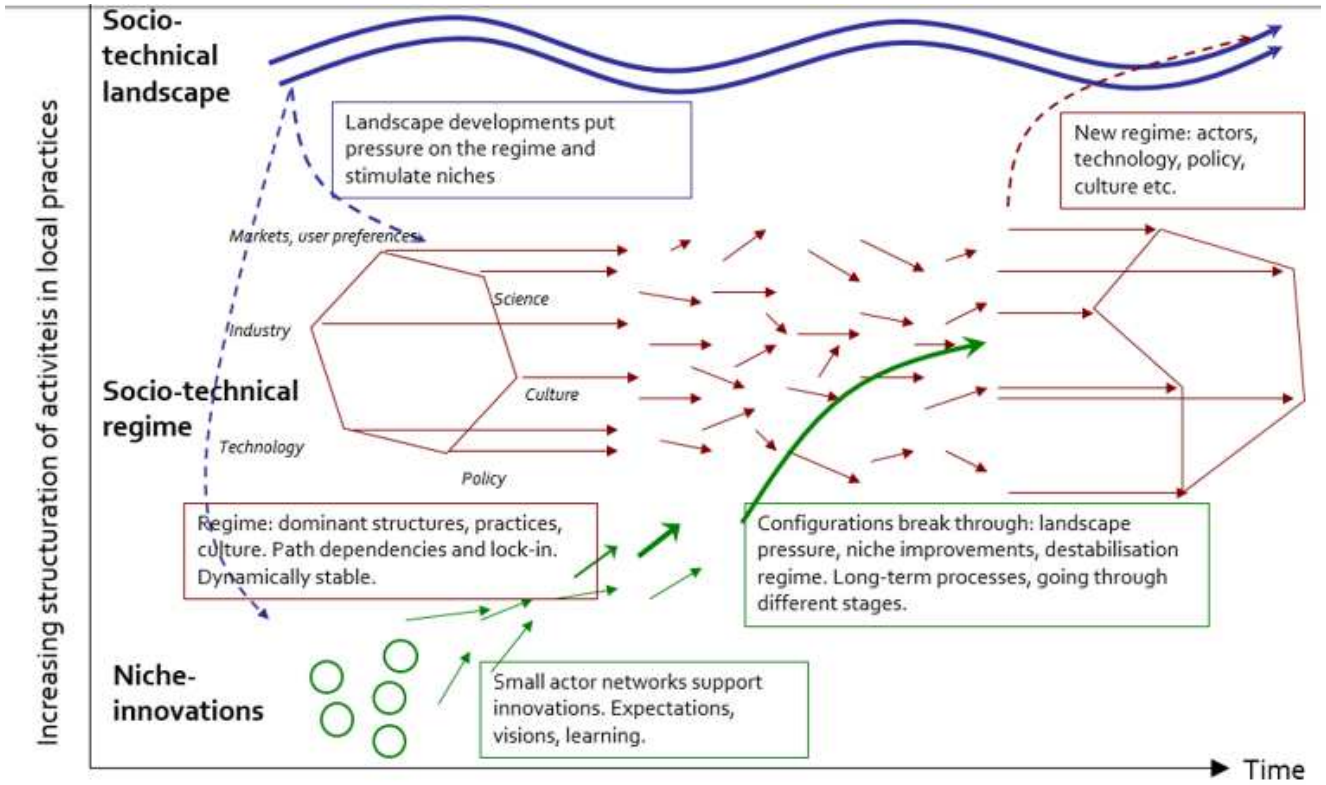
URBAN NICHE EXPERIMENTS IN A BROADER CONTEXT



Paredis 2013; Geels 2002

NEW POLITICAL SPACES IN AN INSTITUTIONAL VOID

- Formal, institutional, and bureaucratic government frameworks often fail to create a way out of unsustainability → solutions sought in '**new political spaces**': mixed 'urban governance' networks (multi-level & multi-actor)
- '**Institutional void**': a situation in which there are no generally accepted rules and norms for appropriate policy making and politics (Hajer 2003) → learning our way out?

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LEARNING CHALLENGE?

- Problem-orientation and focus on intervention
  → learning from **experience and experimentation**
- Practices of collective will-formation & knowledge deliberation
  → individual and collective **meaning-making**
- Complexity, wicked problems, non-linear processes
  → learning as a **continuous, contextualised** process
- Institutional void: disagreement, new solutions, more than cognitive
  → learning **knowledge and values**, **creativity**, **pluralism**

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DEWEY'S THEORY OF EXPERIENCE

- Great potential to elaborate on these challenges theoretically: transactional approach focusing on the **continuous and simultaneous transformation of the self and the world** is well suited for the study of processes of societal change as educative processes
- **Anti-dualistic**:
  - combining insights from both constructivist learning theory (e.g. Piaget) and socio-cultural theory (e.g. Vygotsky): learning as a dynamic interplay between **earlier experiences and new situations**
  - in relation to the **structure-agency** dichotomy

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CONCEPTUAL FRAMEWORK

Characteristics of urban sustainability transition politics	Research challenges for examining this as learning practice	Helpful concepts and insights from pragmatist educational theory
Strong focus on change, problem-solving and intervention	Understanding and investigating learning in relation to experiences with such problem-solving attempts	Transaction Environment Problematic situation
Collective will-formation through joint (knowledge) deliberation	Understanding and investigating learning as/through individual and collective meaning-making	Experimentation Inquiry Social intelligence
Complexity, wickedness, non-linearity	Understanding and investigating learning as a continuous process and situated practice	Continuity Doing and undergoing Habit
Need for finding new solutions in an institutional void	Understanding and investigating how learning can contribute to creativity, remain open to pluralism, and how knowledge and values are interrelated	Growth Educative moment Companion meanings/values

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TRANSACTIONAL THEORY OF LEARNING

- ‘Life goes on in an **environment**; not merely in it but because of it, through interaction with it’ (Dewey 1934/2005, p. 12) → humans continuously and actively adapt to and thereby change their environment
- Facing ‘**problematic situations**’ people start an inquiry aimed at creating a new adaptation → learning = a process that takes place through such **transactions** between a person and a social and physical environment
- Meaning is dynamically made and transformed in and by action and, as such, always related to previous experience as well as the present situation/environment (**doing and undergoing**)

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TRANSACTIONAL THEORY OF LEARNING

- Meaning-making has a *simultaneous* and a *sequential* dimension: through the re-actualisation of earlier experiences in a new encounter, both the present situation and the previous knowledge acquire new meaning on which subsequent experiences can build (**continuity**)
- Only some aspects of the (social and physical) surrounding conditions become actualised in action and thereby become part of an experience, i.e. become 'an environment' that can serve as an educational resource in the next transaction → an individual is not determined by its surroundings but also actively (re)constructs it through this process of '**environing**'.

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TRANSACTIONAL THEORY OF LEARNING

- Learning emerges from **inquiry** and **experimentation** in problematic situations which can arouse ‘an active quest for information and for production of new ideas’ and are as such ‘the stimulus to thinking’ and the drivers for a continuous spiral of learning as ‘new facts and new ideas thus obtained become the ground for further experiences in which new problems are presented’ (Dewey 1938/2015, p. 79)
- **Inquiry** = examining and reflecting upon means and ends, testing ideas and hypotheses by the consequences which they produce when they are acted upon → judgement based on careful observation, a wide range of information, and acquaintance with the past

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TRANSACTIONAL THEORY OF LEARNING

- Relation between individual and collective meaning-making, change…: focus on the creation and re-creation of **habits**
  - Individual + collective/institutional (cf. structuration, institutionalisation)
  - Transfer of habits: intra-personal, inter-personal, institutional and material dimension
- Habit = the ability to actively control one's environment and to use natural conditions as means to specific ends → requires 'plasticity': the ability to learn from experience, to modify actions on the basis of the results of prior experiences

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TRANSACTIONAL THEORY OF LEARNING

- Distinction:
  - Routine habits: unconscious, repeated responses to recurrent stimuli
  - Habits that contain an intellectual element: characterised by meaningful thought, observation and reflection, involving a mental act → prerequisite for its potential varied and elastic use in accordance with self-selected ends, desires and purposes (genuine learning, power to control the environment)

QUALITATIVE ANALYTICAL CONCEPTS

How to understand the transactional learning process in qualitative terms?

- Social intelligence – freedom of intelligence
- Growth
- Educative moments
- Companion meanings

RESEARCH QUESTIONS: SOME EXAMPLES

- What kinds of '**environing**' processes do we observe? Which aspects of the surroundings are taken into account in the meaning-making process and which ones are not? And how does this affect the meaning that is made of it? What is the influence of the facilitators of urban sustainability transition initiatives on the process of environing?

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RESEARCH QUESTIONS: SOME EXAMPLES

- Is there sufficient time and space for **inquiry**, i.e. for careful observation and for examining and reflecting upon means and ends? What are enabling or disabling conditions in this respect?
- How broad – or limited – is the range of information that is taken into account? What served as selection criteria for the latter and what are the (educative) implication thereof?

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RESEARCH QUESTIONS: SOME EXAMPLES

- Do participants and facilitators interact in a way that can be characterised by **freedom of intelligence**? Who frames the purposes and how does this framing take place?
- Is the joint inquiry into a problematic situation a pre-determined trajectory, mapped-out in advance, through which learners are guided by the facilitator towards a particular, desirable end? Or is it a joint experiment through which questions, challenges, purposes, ends and means are co-created (**social intelligence**)?

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ANALYTICAL METHODS

Pragmatist, practical perspective on epistemology, meaning-making and learning requires practical analytical frameworks for empirical analysis

- **Dramaturgical Analysis** (Hajer, Nahuis)
- **Practical Epistemology Analysis** – PEA (Wickman & Östman)

DRAMATURGICAL ANALYSIS

- **Scripting**: the efforts made for determining the characters in the play as well as the cues for appropriate behaviour and ‘access conditions’
- **Staging**: the deliberate organisation of an interaction through tools, methodologies, activities, artefacts, formal and informal rules of the game, etc.
- **Performance**: the way in which the contextualised interaction itself produces social realities such as understandings of the issue at stake, knowledge, and new power relations

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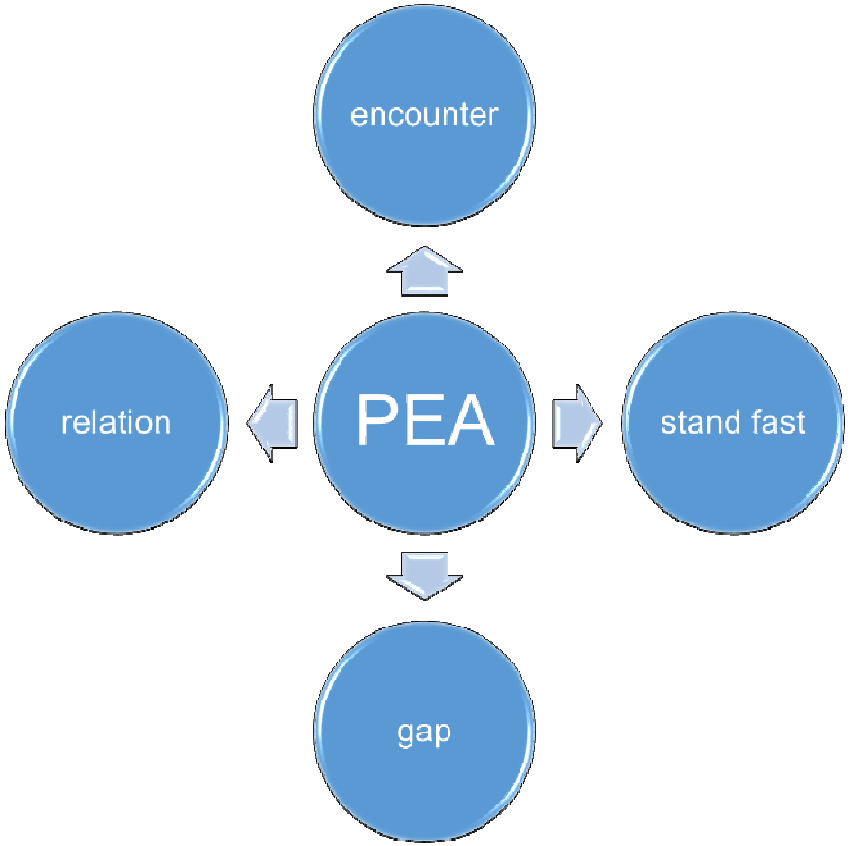
PRACTICAL EPISTEMOLOGY ANALYSIS



Different methods for examining in **detail** particular aspects, e.g.:

- Epistemological Move Analysis (EMA)
- Political Move Analysis (PMA)
- Transactional Argumentation Analysis (TAA)
- Transactional Governance Analysis (TGA)

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POLITICAL MOVE ANALYSIS

ENVIRONMENTAL EDUCATION RESEARCH, 2017
http://dx.doi.org/10.1080/13504622.2017.1306835

Routledge
Taylor & Francis Group

Check for updates

Creating space for 'the political' in environmental and sustainability education practice: a Political Move Analysis of educators' actions

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ABSTRACT
Literature about education's role in realising a more sustainable world emphasises the importance of acknowledging democratic and political challenges in environmental and sustainability education (ESE). This article offers an empirically grounded theoretical and methodological contribution to future research on how 'the political' is introduced, handled and experienced in ESE practice. It presents an analytical method, 'Political Move Analysis', for investigating how educators' actions open-up or close down a space for the political in learners' meaning-making. The method has been developed through empirical case studies that allowed to identify a variety of 'politicising' and 'de-politicising moves' performed by educators. Through these moves, educators can engage in very diverse teaching practices which differently affect the direction of people's meaning-making. These findings are theoretically discussed in view of how to understand the entanglement of the educative and the political in ESE. Prospects for future research and for inspiring teaching practice are pointed out.

ARTICLE HISTORY
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KEYWORDS
Environmental and sustainability education; ecological footprint; community supported agriculture; the political; transaction; Epistemological Move Analysis; Political Move Analysis

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Politicising moves	Lines	Description
Controversy creating move:	8, 10, 14	This move makes the learners create, express and defend conflictual standpoints
Hierarchisation move	5	This move makes the learners prioritise amongst different alternatives and thus create a hierarchy of concerns by taking a stand on which concerns take precedence and, consequently, which must give way
Excluding-including move	19	This move makes the learners contest a proposed decision of inclusion and exclusion regarding emotionally invested attachments
Public-private move	7, 9	This move makes learners move back and forth between public and private concerns

De-politicising moves	Lines	Description
Reinstating move	f	This move makes the participants re-orient their attention from particular, emotionally invested concerns, commitments and experiences towards 'the lesson', which in this case is about the ecological footprint conceived in terms of predetermined and rationally calculated facts and behaviour guidelines
Norm installing move	l	This move makes the participants react and take a stand on the postulated standard about how to behave in a certain situation
Rationalising move	n	This move makes the participants take a stand concerning a factual justification for a proposed norm by either accepting the factual justification or delivering a factual reason that justifies a divergent opinion
Closuring move	p	This move makes the participants end their argumentation and agree on, in this case, one particular normative conclusion

A FRUITFUL COMBINATION OF ANALYTICAL FRAMEWORKS

- Examining how the scripting, staging and performance of urban sustainability transition initiatives affect whether and how gaps are noticed and handled and how participants fill these gaps
- ‘Performance’: EMA, PMA, TAA…
- ‘Staging’: how is the environment used for creating and filling gaps with relations, what kind of environing takes place?
- Etc.

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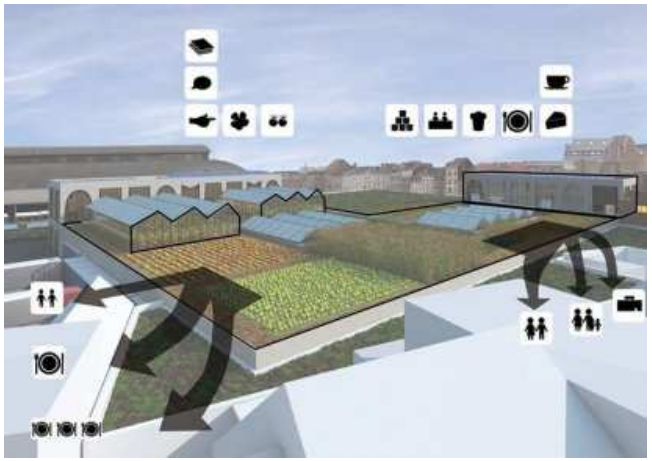
4 CASES



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THANK YOU!

… TIME FOR DISCUSSION

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