

INTERDISCIPLINARY COURSE 'SUSTAINABILITY THINKING'

Katrien Van Poeck & Leif Östman – Quito, Ecuador – 13 December 2017

SITUATING THE COURSE

SUSTAINABILITY VISION UGENT

Ghent University wants to be a **leading knowledge institute** for a future that is ecologically, socially and economically sustainable within a local and global context

(Ghent University Board, December 2013)



Ambitious vision text: e.g.: *“Integrating sustainable development systematically and substantively in the entire range of education”*

PARTICIPATORY

- Think-tank **Transition UGent**, active since **2012**
- Initiator: UGent's environmental coordinator
- Open **innovation** network
- **75 → +200 participants**: staff, students, experts, university management,...
- Knowledge creators, policy makers, dreamers, doers, translators to practice and builders from practice come together to **formulate ideas** for a sustainable university
- Aim: developing a **long-term vision** for embedding sustainability in UGent



METHOD: TRANSITION MANAGEMENT



- Start with frontrunners
- Long-term process
- In the shadow of ‘real’ politics
- Creating space for innovation: experiments
- Learning-by-doing and doing-by-learning

EDUCATION

2020

System Analysis

- ↗ Compartmentalisation / no integration / mono-disciplinary
- ↗ No student-led education (lecturers decide)
- ↗ Societal relevance is (often) lacking
- ↗ Education is not appreciated during evaluation
- ↗ Dominance of 'outdated' lectures

UGent as a learning society for a social just and ecological sustainable future

- ↗ New content: focus on socio-ecological challenges
- ↗ New organisation: inter- & transdisciplinary approach
- ↗ New links between education, research and services to society

↗ Embedding sustainability in education programmes

- Screening content and competencies
- Basics of SD in each program (obligatory)
- University-wide course (optional)

↗ Experiment with new education practices

Inter- and transdisciplinary; social media; societal relevance (community service learning); etc.

↗ Learn from current and new experiences

Search for good practices, summer schools,...

↗ Improved evaluation system

E.g. personal objectives in career path, foster vision developments within several departments



UPPSALA
UNIVERSITET



GHENT
UNIVERSITY

COURSE SPECIFICATIONS

- Small course: 3 credits (1 full-time year = 60 credits)
 - Study time: 90 hours
 - Contact hours: 25 hours (lecture, micro-teaching, seminar, group work)
- 3 teachers
- >70 students, >25 different education programmes
- Continuous assessment, no exam: scoring on participation in group exercise and discussion, quality of paper and presentations, taking into account the assimilation of received suggestions and critiques

FOCUS

Over the last years, we have increasingly been confronted with fascinating, often **complex challenges of sustainability**: climate change, food crises, poverty, urbanization and gentrification, loss of biodiversity, etc. **Expert knowledge** concerning these sustainability issues is **incomplete, fragmented, and uncertain**, giving rise to scientific controversies. Furthermore, **social and political controversy** arises due to a lack of agreement on norms and values at stake and on the acceptability of goals and solutions. As such, sustainability issues are increasingly characterised and interpreted as so-called **'wicked' problems**, as problems **without clear-cut solutions**. Acknowledging this complexity and taking it into account in decision-making and actions is not self-evident, neither inside nor outside the academic world.

In this course, we confront students with **different perspectives** on a sustainability issue and encourage them to **explore the complexity, ambiguity and controversies** this brings about - yet **without falling into undue anything-goes-relativism**. Students will experience that, in general, experts from the exact sciences use another framing than social scientists, and that the knowledge of academics, policy-makers, business leaders and representatives of NGO's is complementary, but often diverges. Some are predominantly concerned with ecological limits, while others prioritise poverty and social exclusion. Sometimes a global perspective dominates, at other times a local one. Etc. **This course aims to familiarise students with the multi- and transdisciplinary character of topical sustainability problems and with multiperspectivism, and as such, to lay bare the politics of these issues.**



INTRODUCTORY LESSONS

- The basic concepts concerning sustainability
- A short historical outline and the most important perspectives on sustainability (e.g. Brundtland report, Ecological modernization, Limits to growth, Factor four, Ecological Economics, Environmental justice, Degrowth, etc.)
- The difference between multi-, inter- and transdisciplinary
- Transition thinking: sustainability transitions; structural, technological and cultural changes; influencing sustainability transition; perspectives and methods...

GROUP WRITING ASSIGNMENT (4-6)

- Scrutinise a sustainable issue by using different research techniques and methods, e.g.
 - discourse analysis, development of future scenarios, case-study, applying the multi-level perspective...
 - 1 group: 'student-led education'
- Interactive seminars to explain techniques - feedback
- Detailed protocol
- Every year: 1 issue in focus (now: sustainable urban mobility)
- Group paper (6000 words) + presentation at public congress

LEARNING OBJECTIVES

- Students understand the central concepts, main perspectives and analytical frameworks of sustainability and transition theories, and know how to apply them.
- Students understand the central characteristics of multi-, inter- and transdisciplinarity.
- Students are capable to outline the contours of a multi-, inter- en transdisciplinary perspective on a sustainability issue.
- Students are capable to make a report and presentation about a sustainability issue.

AN EXAMPLE: DISCOURSE ANALYSIS

GROUP WRITING ASSESSMENT

- Small groups of 4-6 students make a discourse analysis on a specific sustainability controversy
- Choice list:
 - Can we eat meat in a sustainable world?
 - Slums: leave, upgrade or clear?
 - Is birth control a sustainable strategy and solution?
 - Working less for more?
 - Is degrowth a sustainable strategy and solution?
 - Is COP26 a sustainable strategy and solution?
 - ...

Are GMOs and sustainable agriculture compatible?

“DISCOURSE” (DRYZEK – HAJER)

- A shared way of approaching the world, a coherent story
- A regular pattern, a habit regarding the way of seeing, thinking and speaking about things and associated activities, ways of behaving
- Based on assumptions, judgements and opinions
- Leading to approval or disapproval
- Used to make meaning of phenomena
- Created and evolving through particular practices

ELEMENTS OF A DISCOURSE ANALYSIS

- Arguments
 - How do they try to convince others?
 - What kind of mottos and metaphors are used?
 - What kinds of practices and institutions are used (e.g. human rights, traditions)?
- Actors
 - Who determines each discourse (individuals & collectives)? Who says what?
 - Can we detect discourse coalitions, i.e. a group of actors (temporarily) sharing particular routines, rules and norms?
- Worldviews
 - What are the assumptions, beliefs, ontologies behind the arguments?

A DISCOURSE ANALYSIS IS NOT ...

- A list of pro and contra arguments
- A list of advocates and opponents
- An analysis of the scientific reviewed
inter

Dive into the societal debate !! (journals,
debate evenings, blogs, websites, TV
programs, books,...)

OUTCOME

‘Solve hunger problem’

- Higher productivity is necessary to address the world hunger problem
- Less pesticides
- Highyielding crop plants
- **Biotech experts + multinationals**

‘Seldom useful’

- Only in extreme situation
- Independent research
- Unequal distribution of food is the problem (not technical!)
- **Some politicians, (bio)farmers, consumers, NGOs,...**

‘Freedom of choice’

- GMOs are one option
- Use labels (to deal with risks)
- Opportunity in several cases
- **Some politicians (e.g. USA), academics, private companies,...**

‘Too many risks’

- Against every GMOs (precaution principle)
- Disaster for biodiversity and independency of farmers
- **Some NGOs, politicians, acad.**



Katrien Van Poeck

CENTRE FOR SUSTAINABLE DEVELOPMENT

E katrien.vanpoeck@ugent.be

T +32 9 264 82 07

M +32 475 59 05 54

www.ugent.be

www.cdo.ugent.be

Leif Östman

UPPSALA UNIVERSITY, DEPT. OF EDUCATION

E leif.ostman@edu.uu.se