



LABORATORIUM VOOR EDUCATIE EN SAMENLEVING

Education as a response to sustainability issues

***Practices of environmental education in the
context of the United Nations Decade of
education for sustainable development***

Katrien Van Poeck

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Promotor: Prof. Dr. Joke Vandenabeele

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Summary

The United Nations designated the decade 2005-2014 as the 'UN Decade of Education for Sustainable Development' (ESD). Practices of environmental education (EE) are facing this changing policy discourse and practice and are challenged to find new ways to relate to it. Drawing on an empirical analysis of the policymaking process in Flanders as well as of seven very diverse EE practices we aim at grasping the educational dynamics emerging in concrete practices within a policy-context focusing on ESD.

Throughout the history of EE and ESD education is pre-eminently framed as an instrument to tackle social and ecological challenges through a narrowly conceived process of socialisation. Sustainability appears as a goal that can be reached by applying the proper learning strategies and, thus, education is reduced to the acquisition of those skills, competences, knowledge, or dispositions that are regarded vital so as to qualify people for sustainable behaviour or for active, democratic, and sustainable citizenship. Our analysis of the scholarly discussion about EE and ESD shows how this narrow focus on 'learning' is inadequate so as to grasp what is at stake in educational practices addressing sustainability issues. Researchers on EE and ESD point at the importance of educational practices that, in one way or another, take into account the far-reaching implications of sustainability issues. Yet, all the same criticism is raised about the expectation that these educational practices can solve social and political problems. A variety of different opinions exists simultaneously centred around the paradox between acknowledging pluralism and taking into account sustainability concerns. The insights of Bruno Latour and Noortje Marres about 'public issues' inspired us to develop a conception of EE and ESD that moves beyond normative socialisation without falling into a sheer plurality of opinions, values, interests, and points of view. Thus, this doctoral research aims at deepening our understanding of what it means to approach sustainability issues as public issues within educational processes.

Our analysis of the interaction between policymaking and educational practices shows the emergence of a regime that fosters the 'privatisation' rather than 'public-isation' of sustainability issues within EE practices. That is, policymakers as well as practitioners and participants are somehow expected to be willing and able to see these practices, think and speak about them and act in/toward them in a very particular way and, as a result, EE practices tend to contain (instead of proliferate) contestation and controversy and to limit (rather than broaden) the public around sustainability issues. Yet, this regime to which ESD policymaking contributes does not force EE practices to the privatisation of sustainability issues. It is 'merely' appealing for such practices. As our case study reveals, at particular moments EE practices do create a space for public-isation and, thus, resist the appeal for privatisation. By bringing this forward in our descriptions we want to invite and inspire the reader to be attentive to different ways of seeing, speaking, thinking, and acting.

Samenvatting

De periode 2005-2014 werd door de Verenigde Naties uitgeroepen tot Decennium van Educatie voor Duurzame Ontwikkeling (EDO). Dit plaatst praktijken van Natuur- en Milieueducatie (NME) voor nieuwe uitdagingen. Op basis van een empirische analyse van zowel het EDO-beleid in Vlaanderen als van zeven erg diverse NME-praktijken willen we de educatieve dynamiek vatten binnen die educatieve praktijken binnen een beleidscontext die focust op EDO.

Doorheen de geschiedenis van NME en EDO wordt educatie in de eerste plaats opgevat als een instrument om, via gerichte socialisatie van individuen, sociale en ecologische uitdagingen aan te pakken. Duurzame ontwikkeling lijkt dan een doel dat bereikt kan worden d.m.v. de juiste leerstrategieën. Educatie wordt op die manier gereduceerd tot het verwerven van die vaardigheden, competenties, kennis en gewoontes die als essentieel beschouwd worden met het oog op duurzame gedragspatronen en actief, democratisch, duurzaam burgerschap. Onze analyse van de wetenschappelijke literatuur over NME/EDO toont hoe een dergelijke, enge focus op 'leren' ontoereikend is om educatie in de context van duurzaamheidskwesties te vatten. NME/EDO-onderzoekers wijzen op het belang van educatieve praktijken die op de een of andere manier rekening houden met de verreikende gevolgen van duurzaamheidskwesties. Anderzijds wordt kritiek geuit op de assumptie dat educatieve praktijken sociale en politieke problemen zouden kunnen oplossen. Binnen dit debat bestaan uiteenlopende standpunten omheen een paradox tussen duurzaamheidsbekommernissen en het erkennen van pluralisme. Het denken van Bruno Latour en Noortje Marres over 'publieke kwesties' inspireerde ons om te onderzoeken wat het betekent om duurzaamheidskwesties als publieke kwesties naar voren te halen in educatieve praktijken en hoe NME/EDO meer kan zijn dan normatieve socialisatie zonder te vervallen in een louter pluralisme van opinies, waarden, belangen en standpunten.

Onze analyse van de interactie tussen beleid en praktijk toont hoe er een bepaald regime ontstaan is dat het 'privatiseren' eerder dan het 'publiek-maken' van kwesties binnen NME-praktijken bevordert. Dit wil zeggen dat van beleidsmakers zowel als praktijkwerkers binnen deze beleidscontext een bepaalde manier van kijken, denken, spreken en handelen t.a.v. die praktijken wordt verwacht; een manier van kijken, denken, spreken en handelen die gericht is op het beheersen (in plaats van bevorderen) van contestatie en controverse en op het beperken (eerder dan uitbreiden) van het publiek rond duurzaamheidskwesties. We zagen ook hoe dit regime NME-praktijken niet dwingt tot het privatiseren van duurzaamheidskwesties. Het gaat enkel om een verwachting. Zoals onze case studie laat zien, kunnen educatieve praktijken op bepaalde momenten ook ruimte creëren voor het publiek-maken van kwesties en, dus, deze verwachting naast zich neerleggen. Door dit te presenteren, willen we de lezer uitnodigen en inspireren om aandacht te hebben voor andere manieren van kijken, denken, spreken en handelen m.b.t. educatie in de context van duurzaamheidskwesties.

Woord vooraf: the making of...

Bruno Latour, de Franse wetenschapssocioloog en –antropoloog die verderop in dit proefschrift uitgebreid aan bod komt, wijdde heel wat teksten aan het bestuderen en illustreren van hoe wetenschappelijke kennis en inzichten steeds tot stand komen, t.t.z. geconstrueerd worden binnen een complex geheel van mensen, instrumenten, discussies, teksten, interventies, ontmoetingen, financieringsmechanismen, enz. Het is dus geen toeval dat het voorwoord van heel wat boeken en thesissen begint met de verklaring dat wat voorligt nooit zou geworden zijn wat het nu is zonder de inbreng van... Dat is bij dit proefschrift uiteraard niet anders. In dit woord vooraf wil ik daarom de kans nemen om de mensen te bedanken zonder wie deze doctoraatsthesis er nooit zou gekomen zijn en zij die – soms met grote inspanningen, soms door kleine dingen – mee gezorgd hebben voor het uiteindelijke resultaat. Diezelfde gelegenheid wil ik echter aangrijpen om de lezer een inkijk te geven in het proces achter het construeren van onze analyses, ideeën en concepten of, zoals Latour het verwoordt, in ‘la cuisine de la science en train de se faire’.

Het oorspronkelijke idee voor dit onderzoek is ontstaan halfweg 2008. Het EDO-overlegplatform (Educatie voor Duurzame Ontwikkeling), een overlegorgaan dat ik coördineerde vanuit mijn job bij de Vlaamse overheid, opperde de nood aan meer wetenschappelijk onderzoek over EDO en NME (Natuur- en MilieuEducatie). Ik deelde deze bekommernis en besepte dat er op dat moment weinig middelen beschikbaar waren om dit te financieren. Tegelijkertijd was het iets wat ik zelf heel graag wou doen. Het was echter met weinig hoop op succes dat ik op een ochtend het bureau van mijn toenmalige afdelingshoofd, Marc Cherretté, binnenstapte met de vraag of ik een dergelijk onderzoek mocht opstarten, als deel van mijn job binnen de dienst NME. Even later kwam ik buiten met een nieuwe uitdaging. Een welgemeende dankjewel om me deze unieke kans te geven – en het vertrouwen om er mijn eigen weg in te zoeken – is hier dus op zijn plaats.

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In oktober 2010 kwam mijn doctoraatscommissie bij elkaar om zich uit te spreken over mijn onderzoeksvoorstel. De feedback van de commissieleden – Ilse Loots,

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Introduction

The United Nations designated the decade 2005-2014 as the 'United Nations Decade of Education for Sustainable Development' (ESD). The research we present in this doctoral thesis focuses on practices of environmental education (EE) within this context. EE practices are facing this changing policy discourse and practice and are challenged to find new ways to relate to it. We approach our research from the perspective of this interaction between policymaking on the one hand and educational practices on the other hand. More specifically, we will inquire into the following research questions:

- How is ESD-policy pursued in Flanders?
- Within this context, how can we understand the educational dynamics emerging in practices of EE?

Before going further with the subject of our inquiry, the specific context in which this doctoral research came about needs some elaboration since it differs somewhat from the more mainstream setting and origin of a doctoral process. From 2002 I worked as a policy advisor in the EE unit of the Flemish government. There, I was among other tasks responsible for the implementation of the UN Decade of ESD. I coordinated the development of an Implementation Plan for ESD in Flanders for our unit, which was responsible for stimulating networking and capacity building concerning ESD. As we will elaborate below, this Implementation Plan was the outcome of a participatory process in an 'ESD consultation platform' with representatives from the various departments of the Authorities of Flanders, federal and provincial government agencies and a wide range of stakeholders from civil society. One of the policy objectives put forward in this Plan, was the need for scientific research on ESD practices and policymaking. As a major assignment of the EE unit is to serve as a centre of expertise about EE and ESD, my employers entrusted me with this task in late 2008. The rationale behind this decision was that by assigning a policy advisor to conduct the research by herself, the resulting knowledge development would simultaneously strengthen the unit.

Moreover, the decision had to contribute to reducing the ‘theory-practice gap’ and the idea was that research outcomes could regularly inform ESD policy and practices.

Considering that rigorous and critical academic research on ESD beyond a mere practice-based orientation is required, I started doctoral studies at the University of Leuven in February 2009. In this way, I became involved in fundamental academic research and educational theory. Undoubtedly, the opportunity to be in contact with fellow researchers, the doctoral seminars and colloquia, and first and foremost, the guidance of my supervisors to a large extent affected the eventual focus of this research and contributed to its development. The double role of policy advisor and researcher certainly created a number of advantages for doing the empirical research, such as an increased access to information and acquaintanceship with the subject of my research. Yet, it also contained specific risks and pitfalls which we had to take into account. As we will further elaborate in the section on research design and methodology, a point of particular interest was to pay attention to a sound balance between closeness and involvement with the subject on the one hand and an academic distance towards it on the other hand. It appeared to be a constant challenge to develop and maintain a stance of ‘empathic neutrality’ (Patton 2002, 50), searching for a middle ground between becoming too involved – which can cloud judgement – and remaining too distant – which can reduce understanding. From the start, an important inducement to take this into account was starting the doctoral studies and, specifically, taking advantage of the support and critical guidance of my supervisors. In 2012 I worked with a PhD fellowship for the university in order to finish my doctoral research. I consider this grant an invaluable contribution to stimulating the academic distance and reflection – or perhaps, in line with our conclusions, I should rather call it ‘scholè’ – required to realise our research objectives.

As you will notice, this doctoral thesis is based on manuscripts which have the format of scientific articles and book chapters that are published, accepted or submitted for publication in international journals and academic books. Writing articles instead of a monograph implies both advantages and limitations. An important limitation is the fact that the format of scientific articles limits the space for 'thick description' (in depth and in detail) of each of the cases we studied. We did decide to write articles nonetheless as an inducement to intervene in the emerging debate within academic journals on EE and ESD. Inevitably, the chosen format of a mix of an introduction, manuscripts, and concluding remarks brought about a degree of overlapping since the separate papers not only had to stand alone but also had to be integrated in a coherent argumentation developed in this dissertation.

In the introduction we elaborate on the subject of our inquiry as well as on the analytical framework, research design and methodology. Then we present the results of our analysis in the collection of manuscripts. Finally, we present our conclusions, some retrospective reflections on this doctoral research as well as prospects for a future research agenda.

Problem statement

The subject of our research is environmental education (EE) in the context of the UN-Decade of education for sustainable development (ESD). So as to situate this subject we will first present its historical evolution through a chronological sketch drawing on the limited literature available on the topic as well as on the key policy documents in this field. Subsequently we go into the debate in academic literature about the relationship between the two central concepts: EE and ESD. The main considerations emerging from this historical and academic outline constitute the basis for the decisions we made as to our research objectives and design.

From environmental education toward education for sustainable development: A historical sketch

Since the beginning of the twentieth century, there is a field of educational theory and practice evolving from nature education over conservation education and environmental education toward education for sustainable development (Tilbury 1995; Palmer 1998; Postma 2004). The historical evolution of this educational field is strongly affected by the prevailing thought and practices with regard to our natural environment. More precisely, this brief historical sketch reveals that education has predominantly been conceived as an *instrument* to tackle the evolving social and political problems concerning this environment.

Nature and conservation education

As Postma (2004) emphasises, ever since the relation between people and their natural environment was conceived as problematic, appeals have been made to education. At the beginning of the twentieth century, the industrial revolution and the concomitant expansion of industrial towns brought about a matter of

social concern: an increasing alienation from nature which was regarded inherent to modern city life. Nature education initiatives were introduced with the conviction that studying nature (inside as well as outside the classroom) and direct contact with the natural environment would promote love and respect for it (Palmer 1998; Postma 2004). Knowing about and caring for nature were believed to go hand in hand.

Halfway through the twentieth century, new worries concerning the natural environment arose: progressive urbanisation began threatening the integrity of landscapes and natural resources in large parts of Western Europe and North America (Postma 2004). An increased public awareness of problems of nature conservation elicited the introduction of conservation education. The aim was to connect children to their natural environment. Knowledge was regarded indispensable in order to convince them of the need for protection whereas excursions into nature were assumed to encourage them to experience and appreciate their involvement with the natural environment. In this context, the Institute for Conservation Education ('Instituut Voor Natuurbeschermings-educatie' – IVN) was established in The Netherlands in 1960 as well as the Flemish Centre for Conservation Education ('Centrum Voor Natuurbeschermingseducatie' – CVN) five years later (Stryckers 2010). The main purpose of these organisations was to foster public support for nature conservation.

Environmental education

The 1970s were characterised by a growing awareness of the magnitude, seriousness and multidimensional nature of the environmental crisis (Postma 2004; Sauvé 1999). Alarming scientific reports and future scenarios (e.g. Meadows et al. 1972) laid the foundation of this increased attention to urgent and complex environmental problems on a global scale: resource depletion, population growth, world hunger, climate change, the extinction of species, the unsafe storage of

nuclear waste, ozone layer depletion, the pollution of air, etc. This analysis was connected with a clear message: without a rapid and radical transformation of our consumer behaviour, common practices and institutions, these problems will worsen and could eventually lead to irreversible losses (Postma 2004). A variety of newly founded groups and associations mobilised this public awareness and a movement of environmentalists translated public indignation into political claims aiming to put environmental issues on the political agenda. The analysis of these new movements was radical: the capitalist organisation of the global market economy and the allied ideas of economic growth and technological progress were blamed for the ecological crisis. Again, education was assumed to contribute to the solution of a social and political problem. Worldwide, an abundance of initiatives emerged under the banner of 'environmental education'. Children and youngsters not only had to be educated to be nature lovers but also to be critical and ecological minded citizens.

This instrumental aim is also reflected in a growing body of policy documents as EE became increasingly consolidated and institutionalised (Tilbury 1995; Palmer 1998; Postma 2004). An important landmark was the formulation and adoption of a definition of EE at the 'International Working Meeting on Environmental Education in the School Curriculum' organised by IUCN and UNESCO in 1970 (Palmer 1998, 7 – our emphasis):

'Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture, and his biophysical surroundings. Environmental education also entails practice in decision-making and self-formulation of a code of behaviour about issues concerning environmental quality.'

Another milestone was the establishment of the International Environmental Education Programme, launched at the 'International Workshop on

Environmental Education’ held in Belgrade (UNESCO 1975). Two years later, the ‘First Intergovernmental Conference on Environmental Education’ (UNESCO 1977) resulted in the ‘Tbilisi Declaration’, an intergovernmental statement which was to a large extent based on the ‘Belgrade Charter’. Both documents formulated the objectives for EE as follows:

- *‘to foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas;*
- *to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment;*
- *to create new patterns of behaviour of individuals, groups and society as a whole towards the environment.’ (UNESCO 1975; UNESCO 1977 – emphasis added)*

Furthermore, a set of key principles for EE were formulated and adopted in Tbilisi (UNESCO 1977). The Declaration states among other things that EE should consider the environment in its totality, including economic, political, cultural-historical, ethical and aesthetic aspects emphasising the complexity of environmental problems and thus the need to develop critical thinking and problem-solving skills. EE should be based on an interdisciplinary approach to education examining major environmental issues from local, national, regional, and international points of view and focusing on current and potential environmental situations while taking into account the historical perspective. EE should help learners discover the symptoms and real causes of environmental problems and explicitly consider environmental aspects in plans for development and growth. These principles reflect a highly ambitious approach to education and high hopes as to what EE can contribute to the realisation of an environmentally sound society.

In 1988, the 'European Year of the Environment', a resolution was adopted by the European Community in which the Council of Ministers agreed on the need to promote EE as an integral and essential part of every European citizen's upbringing (Palmer 1998). The objective and guiding principles of EE were defined as follows:

'The objective of environmental education is to increase the public awareness of the problem in this field, as well as possible solutions, and to lay the foundations of a fully informed and active participation of the individual in the protection of the environment and the prudent and rational use of natural resources. For the achievement of the objectives environmental education should take into account particularly the following guiding principles:

- the environment is a common heritage of mankind,*
- the common duty of maintaining, protecting and improving the quality of the environment, as a contribution to the protection of human health and the safeguarding of the ecological balance,*
- the need for a prudent and rational utilization of natural resources,*
- the way in which each individual can, by his own behaviour, particularly as a consumer, contribute to the protection of the environment.'* (CEC 1988 – emphasis added)

The above mentioned policy documents vary with regard to the extent to which they articulate the purpose of EE from an instrumental perspective. In fact, in the course of time, the expectation that education can solve environmental problems becomes the dominant perspective. The first definition by IUCN and UNESCO particularly emphasised the actualisation of children's developmental potentialities (e.g. 'recognizing values and clarifying concepts', 'understanding and appreciating the inter-relatedness among man, his culture, and his biophysical surroundings') and only vaguely and in a rather open-ended way referred to the 'self-formulation of a code of behaviour about issues concerning environmental quality'. The 'Tbilisi Declaration' / 'Belgrade Charter' and especially the European

resolution sharply focus on changing behaviours, attitudes, and mentalities in a preconceived, environmentally sound way – though with this crucial difference that the latter strongly emphasises individual responsibilities whereas in the 1970s the ecological crisis was predominantly considered a social problem subject to collective responsibility. Furthermore, in contrast to the Tbilisi Declaration which explicitly broadened ecological issues by relating them to e.g. economic, social and political factors, the scope of this European resolution is limited to ‘environmental problems’.

Another important tendency in EE since the 1980s is the increasing abandonment of the formerly dominating modernist discourse (Sauvé 1999). The emergence of what Beck (1986) has called a ‘risk society’ characterised by unpredictability, uncertainty and omnipresent (ecological) risks challenged both the modernist belief in scientific and technological progress as well as the instrumental approach to education. Solutions that used to be taken for granted increasingly proved to be inadequate in the context of complex, uncertain, unstable, and value-laden problems. Thus, the linear problem-solving model that reduces education to an activity aimed at predetermined goals became increasingly questioned by educational researchers (Wildemeersch 1991; Vandenabeele and Wildemeersch 1997; Sauvé 1999). They pleaded for bringing together diverse types of knowledge (not only scientific but also experimental, experience-based knowledge) and a more active role for the learners. This creates a space for educational practices that focus on the forming of public opinion and active responsibility within a context characterised by plurality and conflict (Postma 2004).

Education for sustainable development

The presentation of the influential United Nations report ‘Our Common Future’, better known as the Brundtland Report (WCED 1987) was a next key milestone in the history of EE. In this report the finiteness of the earth’s natural resources and

the infinite growth of human population and consumption were put forward as major concerns connecting environmental issues with (under)development and economic growth (Postma 2004). With the Brundtland Report the concept of 'sustainable development' was launched as

'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' (WCED, 43)

Since the Brundtland Report the concern for a reconciliation of environmental conservation with economic development increasingly affects EE and sustainable development becomes the leading concept in articulating this concern (Tilbury 1995). This evolution is in essence policy-driven (Jickling and Wals 2007; Nomura and Abe 2009) as it has been furthered by a succession of decisions made by international institutions. Agenda 21, the global action plan that arose from the United Nations Conference on Environment and Development (Earth Summit) in Rio de Janeiro in 1992 considered EE as an essential *instrument* – here again – for the realisation of a sustainable future and devoted a chapter on 'Promoting Education, Public Awareness and Training'. The UN Summit in Johannesburg in 2002 (Rio+10) endorsed the importance of education in the pursuit of sustainability and incited for the establishment of a decade of education for sustainable development (ESD). December 20, 2002, the UN General Assembly announced the decade 2005-2014 as the 'United Nations Decade of Education for Sustainable Development' (DESD). The United Nations Educational, Scientific and Cultural Organisation (UNESCO) was designated as the leading agency for the promotion of the Decade and developed an international implementation scheme. National governments were demanded to develop strategies and action plans in view of the implementation of the Decade. At the high-level meeting of Environment and Education Ministries in Vilnius in 2005, the United Nations Economic Commission for Europe (UNECE) adopted a Strategy for ESD as a basis for regional implementation of the Decade within the UNECE-region. As we will

show in manuscript 1, the implementation of the DESD in Flanders is highly shaped by this UNECE Strategy.

An educational field moving with the times

This brief analysis of the history of EE reveals a close connection between on the one hand social thought and practices – particularly the changing concerns about the environment and its associated problems – and on the other hand the way in which content and purposes of EE and ESD were defined and promoted (Tilbury 1995). This connection is predominantly understood from an instrumental point of view. In order to realise an environmentally sound world, EE and ESD are designed to change people's behaviour, attitude, and mentality in a particular, preconceived way. Ecological and sustainability issues are mainly presented as matters of individual learning as the aims of EE and ESD are almost exclusively defined in terms of individual dispositions. An ecologically sound and sustainable society emerges then as a challenge that can be met by applying the proper learning strategies and, thus, education becomes first and foremost a matter of socialisation, that is, the acquisition of particular knowledge, skills, competences, or dispositions. EE and ESD are reduced to instruments to foster the values and principles of sustainable development, to promote corresponding behavioural changes, and to qualify people for the role of active participants that contribute to the democratic realisation of sustainable development. In the remainder of this dissertation, we will argue why this is problematic and develop an alternative perspective on education in the light of sustainability issues as an attempt to move beyond the omnipresent socialisation approach.

Sustainable development as a new focal point for environmental education? A long-lasting debate.

In this section, we elaborate on the academic debate about the relationship between EE and ESD. Indeed, since the publication of the Brundtland Report

sustainable development increasingly affects EE policy and practice. Yet, this has incited very different opinions about the relation between both concepts. First, we address some general considerations about the existing body of literature in this domain and show how, within this literature, a multitude of different perspectives on the relation between EE and ESD exists simultaneously. Next, we elaborate on the variety of perspectives constituting the on-going debate. Our aim is not to factually define and delineate the relation between EE and ESD for once and for all, nor to pass judgement over the desirability of ESD. What is relevant for us is to clarify the discussion, that is, the arguments used and the assumptions at work. As we will show, this discussion sharply focuses on a tension between acknowledging pluralism (that is, taking into account a multiplicity of views, values, interests and knowledge claims) and concerns about the far-reaching implications of sustainability issues. The debate about this paradox in EE and ESD literature largely informs our research interest and objectives.

Literature about environmental education and education for sustainable development: preliminary remarks

Research literature about EE and ESD is published in a number of disciplinary journals as well as in mainstream interdisciplinary and educational journals (Wright and Pullen 2007; Scott 2009). Typical EE journals are e.g. *‘Environmental Education Research’*, *‘Journal of Environmental Education’*, *‘Southern African Journal of Environmental Education, Ethics and Action’*, *‘International Research in Geographical & Environmental Education’*, *‘Canadian Journal of Environmental Education’*, *‘The journal of the Australian Association for Environmental Education’* and *‘Applied Environmental Education and Communication’*. Recently, journals which particularly address ESD have been launched, such as *‘International Journal of Sustainability in Higher Education’* (since 2000), *‘Journal of Education for Sustainable Development’* (since 2007), and *‘The Journal of Sustainability*

Education’ (since 2010) although papers focusing on ESD are also published in the traditional EE journals (Wright and Pullen 2007).

Critical reviewers of EE and ESD literature argue that it lacks self-criticism (Reid and Scott 2006; Cutting and Cook 2009) as well as a thorough empirical underpinning (Reid and Scott 2006; Nomura and Abe 2009). Reid and Scott (2006) analysed the ten first volumes of Environmental Education Research and found that only a minority of authors develop their theory based on empirical findings. Furthermore, EE and ESD research and literature are criticised for being isolated within the field’s own niche. Not only should they strive for introducing concepts, interests, frameworks and findings in mainstream literature (Scott 2009; Reid and Scott 2006), it is argued, they also need to broaden their horizon – which is currently dominated by a natural science perspective – by drawing on educational science (Breiting 2009; Reid and Scott 2006) as well as political and historical analyses of ESD (Nomura and Abe 2009).

The past decades have been characterised by a significant growth of ESD literature (Wright and Pullen 2007). Between 1990 and 2005 the number of articles on ESD as well as the journals in which they were published and the number of authors writing about it have increased. Nevertheless, as we will show, the concept of ESD remains very vague and ambiguously defined (González-Gaudiano 1999; Bonnett 1999; Gough 2002; Sumner 2003; Reid and Scott 2006; Sumner 2008; Cutting and Cook 2009; Breiting 2009). Different research priorities regarding ESD have come to the fore. Some define the aim of ESD research in a very pragmatic way, that is, in terms of searching for effective strategies and ‘best practices’ of behavioural change (Paden and Chhokar 2007; Monroe 2007).

‘Now it seems ESD has moved from its early phase of “Who am I?” [...] to a second phase of “How do I do my job?”’ (Paden and Chhokar 2007, 74)

Others, however, disagree with the assumption that it is obvious by now how to understand education in the context of sustainable development (Cutting and Cook 2009; Breiting 2009). These researchers argue for a more critical analysis of the discourse on ESD and propose a research agenda that acknowledges the diversity of theories and practices within the field of EE (Sauvé and Berryman 2005).

The relationship between environmental education and education for sustainable development

The search for what ESD is or should be as well as how it relates to EE is reflected in the increasing variety of expressions used to label the concept: besides 'education for sustainable development', the term used in official policy documents, authors write about 'education about sustainable development' (Sauvé 1996), 'education as sustainability' (Foster 2001), 'learning as sustainability' (Sterling 2003), 'education for sustainability' (Huckle 1999), 'learning for sustainability' (Senge et al. 2006), 'sustainable education' (Sterling 2001), 'sustainable learning' (Sumner 2003), 'environment and development education' (Smyth 1999), 'education for environment and sustainable development' (Sauvé 1996), 'education for environment and development' (Nomura and Abe 2009), 'environmental education for sustainable development' (Sauvé 1996), 'education for sustainable futures' (Selby 2006), 'education for a sustainable future' (Nomura and Abe 2009), 'environmental education for equitable and sustainable societies' (Council of the Earth 1993), 'environmental education for sustainable societies and global responsibility' (Sauvé 1999), 'environmental education for the development of responsible societies' (Sauvé 1999), 'education for a better world' (Chapman 2007), 'education for sustainable contraction' (Selby 2007), 'education consistent with Agenda 21' (Smyth 1999), 'education 21' (Smyth 1999), 'ecopedagogy' (Kahn 2008), etc.

Several authors have argued that the distinction between EE and ESD remains insufficiently clarified (Gadotti 2008; Mogensen and Schnack 2010; Reid and Scott 2006; Chapman 2007).

'The questions remain though, what is education for sustainable development, and what, in fact, is sustainable development? This has posed particular problems for environmental educators in clarifying what is the difference between environmental education (EE) and education for sustainability (EfS). The answer could be "everything" or it could be "nothing", depending on the values and assumptions at work.' (Chapman 2007, 1)

Hesselink et al. (2000) reported on an international online debate among experts in EE and ESD ('ESDebate') and distinguished four perspectives on the relation between both concepts. Many of the participants viewed ESD as a new paradigm, as the next generation of EE.

'[They] argue it is more future-oriented (careful examination of probable and possible futures); critical of the predominant market and consumption driven society; more sensitive to the different realities that challenge people around the world (sensitive to context); more systemic in dealing with complexity; more community and solidarity oriented (as opposed to individualistic and self-promoting); less concerned with product (behavioural outcomes); more concerned with process (creating the right conditions for social learning); more open to new ways of thinking and doing; and preoccupied with linking social, economic and environmental equity at the local, regional and global level.' (Hesselink et al. 2000, 15)

Others, however, reject the idea that ESD represents something new and argue either that it should be a part of 'good EE' or, on the contrary, that EE is only a subset of ESD which is more comprehensive by including issues of development, North-South relationships, cultural diversity, and social and environmental equity. Again others view ESD and EE as partly overlapping concepts.

As indicated, we do not aim at defining and delineating the relation between EE and ESD unequivocally. Although the historical evolution outlined above could easily read as a succession of new perspectives and paradigms, each of them pretending to break out of preceding conceptions (Postma 2004), one could wonder if the 'new' trends – such as ESD – are always as innovative as they appear to be. At least one constant is the way in which education is conceived as an instrument to tackle evolving social and political challenges such as urban children's increased alienation of nature, problems of nature conservation, the environmental crisis and, currently, issues of (under)development. Furthermore, a 'new' perspective such as ESD might be – at least partly – just another manifestation of longer lasting, recurring topics of consideration that were, for instance, already reflected in the 'Tbilisi Declaration' and the 'Belgrade Charter' (e.g. linking social, economic and environmental aspects, a focus on the local, regional and global level, linking environmental issues with plans for development and growth). As we will further elaborate in the next section, the differences in opinion regarding EE and ESD mainly seem to reveal the perspective the author takes, e.g. a focus on policy discourses versus on practices in the field, an instrumental approach to education versus a critical stance towards such instrumentalism, etc. With our research we want to analyse these underlying perspectives, in particular the diverging approaches to education that tend to be concealed by the vagueness of ESD.

A new focal point for environmental education?

Opinions concerning the desirability of ESD as a new focal point for EE are also sharply divided. Whereas policymakers worldwide pay lip service to sustainable development and ESD enthusiastically, in academic literature a persistent debate is going on between advocates and opponents of the concept of sustainable development in general as well as of the idea to replace EE by ESD.

Although sustainable development is omnipresent in policy discourses, the concept remains largely contested (Bruyninckx 2006). Critics consider it a catch all term susceptible to divergent interpretations (Jickling 1994; Dobson 1996; Gunder 2006; Jickling and Wals 2007; Kahn 2008). Its meaning is highly ambiguous as the concept conjoins profoundly contradictory meanings and, in its vagueness, succeeds in reconciling the most conflicting ideologies (Huckle 1993; Sauvé 1999; Wals and Jickling 2002; Gadotti 2008; Räthzel and Uzzell 2009). The Brundtland definition provided a common language that enables dialogue between environmental activists, conservationists, scientists and green politicians on the one hand and representatives of international business and trade on the other (Postma 2004).

‘Sustainable development talk can lead people in the direction of Orwell’s [...] famously satirical notion of “double-think” whereby ordinary citizens can increasingly hold in their minds contradictory meanings for the same term and accept them both. The power of universal discourse in reducing meaning to a minimum is such that, as in Nineteen Eighty-Four, antagonistic concepts can be conjoined in a single phrase [...] or concept (i.e. “sustainable development”).’
(Jickling and Wals 2007, 14)

However, this shallow consensus conceals convictions and interests that are still basically antagonistic. Sustainable development is thus the subject of a continuous, more or less explicit struggle over divergent interpretations. Critics argue that this struggle for ‘discursive hegemony’ (Hajer 1995) has been settled in favour of neoliberal economic thought and its concomitant political ideals (Gunder 2006; Jickling and Wals 2007; Gadotti 2008). The dominant understanding of ‘development’ as ‘growth’ embedded sustainable development within an economic discourse so that the resulting policymaking and practices tend to let economic interests prevail over ecological concerns (Chapman 2007). Thus, although the concept holds the promise of radical social change (Hajer

1995; Bruyninckx 2006; Gadotti 2008), its vagueness, consensual disposition as well as the hegemony of an economically oriented conception of sustainability impede fundamental transitions (Huckle 1999; Gunder 2006).

Ever since this problematic notion of sustainable development turned up in the context of EE, it brought about an academic debate concerning the desirability to complement or replace EE with ESD. Advocates of ESD consider it – in line with the policy documents we discussed in the historical sketch above – as an indispensable contribution to the pursuit of sustainable development (e.g. Huckle 1993; Hesselink et al. 2000; McKeown and Hopkins 2007; Paden and Chhokar 2007; Bajaj and Chiu 2009; Hopkins 2009).

‘Education as well as good government, finance, research, and policy are all tools that must work in concert to achieve a more sustainable future.’ (McKeown and Hopkins 2007, 23 – emphasis added)

Opponents for their part regard this stance as an undue instrumental approach to education, reducing it to merely an instrument to promote a specific, predetermined kind of ‘sustainable’ behaviour (Jickling 1994; Sauvé 1996; Sauvé 1999; Smyth 1999; Foster 2001; Scott 2002; Sauvé and Berryman 2005; Selby 2006; Jickling and Wals 2007; Breiting 2009; Rudsberg and Öhman 2010; Östman 2010; Læssøe and Öhman 2010; Lundegård and Wickman 2012).

‘Education is concerned with enabling people to think for themselves. Education for sustainable development [...], or education “for” anything else is inconsistent with that criterion.’ (Jickling 1994, 6)

They argue that this brings about homogenising effects that reduce the space for autonomous decision-making whereas, they argue, EE and ESD demand a ‘pluralistic’ (some label it ‘democratic’) approach to education, one that acknowledges, stimulates, and engages a variety of values, interests, and knowledge claims (Sauvé 1996; Berryman 1999; Hesselink et al. 2000; Sauvé and

Berryman 2005; Jickling and Wals 2007; Gadotti 2008; Breiting 2009; Rudsberg and Öhman 2010; Östman 2010; Lundegård and Wickman 2012). Precisely such a focus on a plurality of views is regarded vital in relation to ecological and sustainability issues as they are situated in a field of tension between the personal and the political.

‘They are personal because they are felt at individual, family, and community levels, and for many constitute a struggle for existence and identity. They are political because they arise from the ideological frameworks and economic development strategies of capitalist globalization.’ (Clover and Hill 2003, 89)

Almost every ‘private’ decision brings about ‘public’ consequences (Dobson 2003) and social conditions affect individuals’ freedom of choice. Therefore, it is argued, education should take into account this ‘political’ character of environmental or sustainability issues and requires individual (private) as well as collective (public) action (Huckle 1993; Jensen and Schnack 1997; Hesselink et al. 2000; Orr 2002; Postma 2004; Gadotti 2008; Räthzel and Uzzell 2009). These authors disagree with others’ conception of EE and ESD as a tool for effectively promoting individual behavioural change (e.g. Brody and Ryu 2006; Paden and Chhokar 2007; Monroe 2007; Heimlich and Ardoin 2008; Robelia et al. 2011) and emphasise that education in the context of ecological and sustainability issues is closely linked to citizenship (Jensen and Schnack 1997; Huckle 1999; Orr 2002; Jickling and Wals 2007; Gadotti 2008; Breiting 2009; Mogensen and Schnack 2010). The difficult, complicated and puzzling nature of these issues, they argue, demands well-informed but also active and critical citizens, willing to engage in a democratic debate.

‘The challenge for ESD [...] is to identify what kind of learning can qualify the learners’ sound choices in a reality that is often characterized by complexity and uncertainty, and which also motivates them to be active citizens who are able to set the agenda for changes if necessary. In this sense, sustainable development is

more a matter of democratic citizenship than compliance and individual behaviour – and ESD is a never-ending process of learning about how to qualify the participants to cope with this citizenship role in a sensible way.’ (Mogensen and Schnack, 2010, 69 – emphasis added)

Remarkably, also within this scope of active citizenship, the emphasis is on qualification and on fostering particular outcomes. Again, thus, the aims of EE and ESD are understood in terms of individual dispositions and socialisation. Although there are obviously substantial differences with an approach to education as an instrument to promote behaviour change, here too, an ecologically sound and sustainable society emerges as a matter of learning by individual citizens. This is articulated in the expectation that education can qualify people for the role of active participant and provide them with the proper learning experience to democratically achieve sustainability.

Although the plea for such a democratic and pluralistic approach is broadly supported by EE and ESD scholars, at the same time the concern is raised that democratic/pluralistic educational practices might be inadequate to address urgent sustainability problems and serve ‘the common good’ (Læssøe 2007; Wals 2010; Kopnina 2012). This paradox between the sense of urgency emerging from a deep concern about the state of the planet and the living conditions of its inhabitants on the one hand and the conviction that it is wrong to persuade people to adopt pre- and expert-determined ways of thinking and acting on the other (Wals 2010) brings about an ambiguous relation between democracy and sustainable development (Læssøe 2007). If all learning outcomes are considered equally valid as long as they have emerged from a democratic process, this might lead to an ‘anything goes’ relativism which is problematic since it prevents legitimate criticism of erroneous views and opinions and runs the risk of neglecting the far-reaching implications of many sustainability issues and the injustices they often bring about. This democratic paradox and the inevitable

tensions it brings about in educational practices goes to the core of our research interest. Whereas the debate about this paradox in EE and ESD literature – which will be further elaborated in manuscript 6 – is nurtured by a variety of nuanced positions, its contours are nevertheless defined by a sharp opposition between two extremes: on the one hand, an instrumental approach starting from the state of the planet as a normative basis for behaviour change and, on the other hand, a pluralistic approach resulting in a relativistic tolerance that grants every opinion equal value. In the remainder of this thesis we will argue why this dichotomised perspective is inadequate so as to grasp the democratic paradox in EE and ESD and develop an alternative perspective that allows to examine how educational practices strive to take into account a multiplicity of views, values, interests and knowledge claims without resorting to an ‘anything goes’ relativism *vis-à-vis* the far-reaching implications of sustainability issues.

Yet, first we want to draw attention to another consideration arising from the academic debate on EE and ESD, one that also guided the choices made with regard to our research objectives and design. Within this debate, objections to view education as an instrument for sustainability are reinforced by the above mentioned problematic nature of the notion of sustainable development, particularly its vagueness and ambiguity (Sauvé 1999; Orr 2002; Wals and Jickling 2002; Chapman 2007; Sumner 2008; Gadotti 2008). Whereas some authors indicate that ambiguity is not necessarily problematic since a critical analysis of divergent interpretations can be very educational (Huckle 1999; Jickling and Wals 2007), critics argue that such an analysis is insufficiently applied in *practice* (Selby 2006).

‘Rather than discussing and exploring underlying ideologies, values, and worldviews, the general consensus at the World Summit on Sustainable Development [...] seemed to be that educators have passed the reflective stage,

and that they must roll up their sleeves and start implementing!’ (Jickling and Wals 2007, 6)

Such gaps between discourse and practice largely affect the debate about EE and ESD. Some authors argue that, because of the focus on ESD, the merits of EE’s long tradition, that is, a body of literature and several (international) Declarations, is overlooked so that valuable ideas and experiences fall into oblivion and time is wasted on the ‘re-invention of the wheel’ (Palmer 1998; Berryman 1999; Sauvé 1999; Chapman 2007; Gadotti 2008). ESD advocates acknowledge these merits, yet they raise objections to dominant *practices* of EE that are failing to realise the ambitious principles and purposes put forward in the *discourse* on it (Huckle 1999; Smyth 1999; González-Gaudiano 1999; Gough and Scott 1999; Knapp 2000). For instance, many authors indicate that the ecological and sustainability problems we currently face are somehow very difficult, complicated and puzzling. Contemporary society is becoming increasingly complex and globalised. Interrelated ecological, economic, cultural, historical, ethical, religious, technological, social and political phenomena all have an impact on the issues at stake and bring about profound changes in human interactions. The impact of people’s lifestyles link distant communities as well as current and future generations and the reach of power relations expand across the world’s regions (Held et al. 1999; Postma 2004). Education in the context of environmental or sustainability issues, it is argued, should take into account complexity and globalisation (Smyth 1999; Sterling 2003; Selby 2007b; Sterling 2007; Gadotti 2008; Bajaj and Chiu 2009; Mogensen and Schnack 2010). Yet, although the importance of an integrated approach to economic, political, cultural and ecological issues has already been emphasised in the foundations of EE, i.e. the Belgrade Charter and the Tbilisi Declaration (see above), critics denounce the reductionist, mechanistic approach to reality that prevails in educational practices (Smyth 1999; Selby 2007b). The Decade of ESD, it is argued, provides the

opportunity for a 'fresh start' (Huckle 1999). Opponents, however, doubt that the discourse on ESD will ensure 'desirable' practices. A similar gap between discourse and practice can emerge here as well (Sauvé 1999; Sauvé and Berryman 2005; Selby 2006; Mogensen and Schnack 2010). Thus, differences in opinion seem to correspond largely to the *perspective* these authors take, either emphasising theory development and policy discourses or focusing on practices in the field. This consideration incited us to approach our research from the specific focus on the interplay between policymaking and educational practices.

Research objectives, design, and methodological choices

From the historical sketch and the analysis of EE and ESD literature three considerations emerged that strongly affect our research objectives and design. First, the academic debate and our analysis of the history of EE and ESD reveal that education is pre-eminently understood as an indispensable instrument in the pursuit of sustainable development. Sustainability appears as a goal that can be reached by applying the proper learning strategies and, thus, education is reduced to a matter of socialisation, that is, the acquisition of those skills, competences, knowledge, or dispositions that are regarded vital so as to qualify people for sustainable behaviour or for active, democratic, and sustainable citizenship. Secondly, the scholarly discussion about the relationship between EE and ESD and about the desirability of the latter profoundly addresses the paradox between on the one hand acknowledging pluralism, that is, taking into account a multiplicity of views, values, interests and knowledge claims and, on the other hand, concerns about the far-reaching implications of sustainability issues. And, thirdly, diverging stances concerning the desirability of ESD as a new focal point for EE are strongly affected by the authors' perspectives emphasising either theory development and policy discourses or practices in the field. In what follows we explain how these considerations gave rise to our specific research focus and objectives. Next, we address the design of this doctoral research by describing our analytical framework, research questions, sampling methods, and data collection and analysis.

Research objectives

Our research has two main objectives: first, revealing the interaction between policy practices and educational practices and secondly, grasping the educational dynamics within these practices.

Revealing the interaction between policy practices and educational practices

In the brief history of EE and ESD we showed how growing attention for ESD is established through diverse policy initiatives in the light of the UN-Decade and how this evolving policy context gave rise to sharply divided opinions concerning the desirability of sustainable development as a new leitmotiv for EE. EE practices are facing this changing policy discourse and practice and are challenged to find new ways to relate to it. This interaction between policymaking on the one hand and educational practices on the other hand usually receives ample treatment in academic literature about ESD. Yet, as we showed above, arguments used in the debate about the desirability to complement or replace EE by ESD tend to vary depending on the perspective that authors take, emphasising either the (historical) policy discourses on EE and ESD, or the concrete educational practices emerging within this evolving policy context. Therefore, the focus of our research is precisely on the interplay between policymaking and educational practices. Drawing on an empirical analysis, we want to gain insight in ESD-policymaking as well as in the rich diversity of educational practices. We aim at grasping the educational dynamics emerging in concrete practices within a policy-context focusing on ESD.

Understanding education in the light of public issues

In order to grasp this educational dynamics, as argued above, we aim at developing a perspective on EE and ESD that moves beyond the omnipresent socialisation perspective and – at the same time – allows to analyse how educational practices strive to take into account a multiplicity of views, values, interests and knowledge claims without resorting to undue relativism concerning the far-reaching implications of sustainability issues. Therefore, we draw on a theoretical framework that acknowledges the paradox between pluralism and sustainability concerns. We found such a perspective in Bruno Latour's and

Noortje Marres' ideas about 'public issues'. As we elaborate in the collection of manuscripts, these insights inspired us to develop a conception of education that goes to the core of this paradox without the ambition to solve the tension inherent in it. As we will show, this enables a perspective on education that moves beyond normative socialisation without falling into a sheer plurality of opinions, values, interests, and points of view. Thus, this doctoral research aims at deepening our understanding of what it means and requires to approach sustainability issues as public issues within educational processes. Guiding concepts for this analysis are provided by Marres' (2005) distinction between the 'privatisation' and 'public-isation' of issues. Although she developed the notion of 'public-isation' obviously from the perspective of political democracy – which, as we will further elaborate below, is a domain that should be regarded in separation from educational processes – some of its main features are also very helpful to investigate educational practices in the light of public issues.

In the remainder of this introduction, we present our analytical framework and research design, thereby addressing the major methodological considerations we took into account. First we elaborate on these topics related to the analysis of ESD policymaking, next in connection to the case study of educational practices.

Analysing ESD-policy in Flanders

In this section we successively address the choice for the Policy Arrangements Approach (PAA) as an analytical framework to study ESD policymaking in Flanders and describe the research design by detailing our first research question and by going into the matters of data collection and -analysis.

Analytical framework: the Policy Arrangements Approach

The PAA is an analytical framework developed as an attempt to overcome a number of shortcomings of other and more common approaches to policy

analysis (Leroy et al. 2003, Arts et al. 2006). In much of the policy analysis literature, attention is predominantly given to the organisation of the policy domain rather than to (evolving) policy content. Policy analyses also tend to focus on the strategic responses of the actors involved, instead of addressing structural political changes and their impact on the different actors. The PAA seeks to do justice to the duality of actor and structure as well as to the balance between content and organisation of social, political and policy processes.

Stability and change in 'policy arrangements' and the driving forces behind them (Arts et al., 2006) are central analytical issues for the PAA. The concept of a policy arrangement refers to the temporary stabilisation and institutionalisation of the content and organisation of a policy domain. Long-term processes of political and social change are linked with day-to-day policymaking processes (van Tatenhove et al. 2000, 7). In relation to our research objectives, we put forward three important tendencies influencing ESD policy and practice: the increasing impact of ESD policy and discourse on environmental education, the framing of social and political problems as learning problems, and ecological modernisation (see manuscript 1). As to the day-to-day policymaking processes the focus of the analysis is on four, strongly intertwined dimensions (Arts et al. 2000). Firstly, every arrangement is characterised by a limited number of coalitions built up by actors sharing common resources, rules of the game or similar interpretations of policy discourses (Arts et al. 2000). These *actors and coalitions* strive for the same kind of policy goals and participate in policy processes to realise them. Some coalitions support dominant discourses and rules of the game, others bring them under discussion (supporting versus challenging coalitions). A second dimension of policy arrangements is the *distribution of power and influence* between actors (Arts et al. 2006). Power refers to the mobilisation, division and deployment of resources (e.g. money, human resources, knowledge, competences and qualification). Influence is about who determines policy outcomes and how.

Thirdly, the *rules of the game* set the opportunities and restrictions for actors to participate in the policy domain (Arts et al. 2000). A distinction can be made between formal rules, laid down in laws and documents, and informal or de facto rules connected with certain policy cultures. They can be formulated very rigorously as well as more broadly and they vary strongly concerning their degree of formality and compelling nature. Current *policy discourses and programmes* are the fourth dimension of a policy arrangement. The concept of discourse refers to the views and narratives of the actors involved, their norms and values, definitions of problems and approaches to solutions by which they give meaning to social and political reality within ‘a struggle for discursive hegemony’ (Hajer 1995: 59). Programmes refer to the specific content of policy documents and measures (Arts et al. 2006: 99). The four analytically distinguished dimensions are inextricably bound up with each other. Any change on one of them induces change on other dimensions. Therefore, innovation can arise in each of the four dimensions and then set a chain of reaction that affects the others (Arts et al. 2006: 99).

Detailed research questions

From the perspective of this analytical framework, we can now further clarify our first research question – How is ESD-policy pursued in Flanders? – by the following two (more detailed) questions:

- How does this policymaking process take place with regard to the actors involved and the coalitions they form, the resources, the rules of the game, and policy discourses and programmes?
- How is this process related to the structural social and political developments that constitute the context of day-to-day policymaking practices?

A single-case design

With our analysis of ESD policymaking we focus on one particular case: the policymaking process in Flanders. The choice for a single-case study (Yin 2009) fits with our research objectives. As we aim at revealing the interaction between policy practices and educational practices and at grasping the educational dynamics within these practices, it is important to conduct an in-depth and detailed study of both the policymaking process and educational practices. We consciously opted to bring to the fore the richness and diversity of educational practices (see also below). Therefore, we decided to limit our examination to practices within one particular policy context. The unit of our analysis is, thus, the actual policy translation and implementation process of the UN Decade of ESD in Flanders. Opting for a single-case design also entails limitations. For instance, the results of our analysis of Flemish ESD policymaking cannot be simply generalised to other (national, subnational, or international) contexts. Yet, this is not our aim. With our analysis we do aim to reveal the interaction between Flemish ESD policy and concrete educational practices within this context, which, we hope, can inspire and inform researchers in other contexts to undertake similar inquiries and, thus, to contribute to a global understanding and documentation of the DESD and its varied translations in diverse policy processes and practices.

The choice to focus on Flanders is mainly motivated by practical reasons. As argued above, this research started as a response to the appeal for research on ESD in the Flemish ESD Implementation Plan. Furthermore, since I worked as a policy advisor on ESD, the opportunities for access to information (documents, key informants, etc.) is an additional motivation for the focus on Flanders. Finally, the staggering and time consuming data collection methods that were required for the analysis of educational practices (see below) are another practical reason to conduct the research nearby.

Considering this specific research context, taking and maintaining a stance of 'empathic neutrality', i.e. a balance between distance and involvement can be regarded particularly challenging as to this policy analysis. On the one hand, it is not impossible that the fact that I had formerly been a policy advisor involved in ESD policymaking produced particular 'investigator effects' (Patton 2002) influencing the responses of the people under study. Yet, it is impossible to define and clarify the existence and/or the nature of such potential effects. On the other hand, it should be acknowledged that – because of this 'double role' – involvement with the subject of research can be regarded above average. We took these considerations seriously and made every effort to reduce their impact on our research results. First, we extensively reported in this dissertation any (personal and professional) information that may have affected data collection, analysis and interpretation. Secondly, we started the data collection in the field (the interview and survey – see below) as well as data analysis only after I – temporarily – had quit being a policy advisor and worked for the university with a scholarship. This fostered a certain distance toward the subject of research on the part of the investigator. Furthermore, we emphasised this independent position in the communication with the people under study so as to minimise potential investigator effects on their part. Therefore, thirdly, we also assured these people that all the data would be treated anonymously.

Data collection

In accordance with the first research question, the aim of the policy analysis is to describe the emerging policy arrangement with regard to ESD in Flanders. With regard to data collection, we strived for triangulation of qualitative data sources (Janssens 1985; Baarda et al. 2001; Patton 2002) so as to strengthen our study by intermixing interviewing, a postal survey, and an extensive document analysis. Using only one method renders a study vulnerable to errors linked to that particular method whereas the use of multiple methods allows for 'cross-data

validity checks' (Patton 2002, 248). As we will show, inconsistencies in findings across different kinds of data (e.g. an unquestioned, taken-for-granted focus on socialisation and competencies in particular policy documents vis-à-vis a more critical stance towards it in the responses to our survey as well as during the interview) are illuminative and offer opportunities for deeper insight in the policymaking process. As in every research, time and resources were limited. Considering that our research objectives require a broad perspective on the subject of research – focusing on policy as well as educational practices – we decided to conduct only one semi-structured in-depth interview¹. Interviewing (a balanced sample of) all the relevant actors involved would have been unfeasible. Therefore, we chose to interview a policy advisor responsible for the implementation of the UN Decade of ESD in Flanders who can be considered a key respondent with regard to Flemish ESD policymaking. It can reasonably be assumed that this policy advisor is the best qualified respondent so as to obtain up-to-date, first-hand information about both the policymaking process and the output of this process. Originally, we intended to complement the data derived from this interview by organising a focus group discussion with the members of the 'ESD consultation platform' (see also manuscript 1), a coordination mechanism for ESD in Flanders composed of representatives of diverse public administrations on different levels including ministers' political advisors, and non-state actors such as NGOs, unions, institutes for higher education, school systems within compulsory education and strategic advisory councils. Unfortunately, the focus group meeting had to be cancelled because of an insufficient number of participants. We replaced this focus group discussion by a postal survey with open questions², a device that is less time-consuming on the part of the participants and not tied to one particular place and point in time. The survey has been

¹ See Appendix 1: Semi-structured interview questions for the policy advisor.

² See Appendix 2: Survey questionnaire.

answered by 15 respondents (all of them were members of the ESD consultation platform) and the diversity of these respondents represents the variety of the actors involved (public administration – multi-level and multi-sector –, NGOs, the field of compulsory and higher education, etc.). Furthermore, we analysed 23 international and 36 Flemish policy documents³. As a policy advisor, I also participated in the meetings of the ESD consultation platform. Yet, as I did not attend these meetings with the intention to consciously and systematically collect data, we do not present these meetings here as participatory observations although they did provide us with additional information concerning the policymaking process.

Data analysis

We imported the verbatim transcription of the audio-recorded interview, the answers to the survey questionnaire as well as the policy documents into the qualitative analysis software QSR NVivo so as to facilitate data storage, coding, retrieval, and linking. Initially, we defined ‘sensitising concepts’ (Patton 2002, 278) based upon concepts within the Policy Arrangements Approach so as to guide our analysis:

- Actors
 - Actors involved
 - Evolution of actors involved
 - Addition of actors
 - Loss of actors
 - Actors not reached
 - Coalitions
 - Evolution of coalitions
 - Interdependency

³ See Appendix 3: Overview of the analysed policy documents.

- Actors' roles
- Actors' strategies
- Impact structural developments
 - Political modernisation
 - Increased influence of ESD on EE
 - Sustainable development as a learning problem
 - Ecological modernisation
- Resources
 - Resources
 - Financial resources
 - Personnel
 - Expertise
 - Evolution of resources
 - Evolution of power
 - Impact structural developments
 - Political modernisation
 - Increased influence of ESD on EE
 - Sustainable development as a learning problem
 - Ecological modernisation
- Rules of the game
 - Applying rules
 - Nature of the rules
 - Formal
 - Informal
 - Rigorously formulated
 - Broadly formulated
 - Compelling
 - Not compelling

- Evolution of rules
- Impact of the rules
- Impact structural developments
 - Political modernisation
 - Increased influence of ESD on EE
 - Sustainable development as a learning problem
 - Ecological modernisation
- Discourses
 - Discourses on sustainable development
 - Discourses on ESD
 - Discourses on education
 - Dominant discourses
 - Clashing discourses
 - Evolution of discourses
 - Discourse coalitions
 - Impact structural developments
 - Political modernisation
 - Increased influence of ESD on EE
 - Sustainable development as a learning problem
 - Ecological modernisation

These sensitising concepts were the first nodes used for coding in NVivo. As the analysis advanced, these sensitising concepts were complemented, refined, adjusted, etc.⁴ according to insights arising from the data. We strived for verification of the results of this analysis by means of review and argumentation among colleagues (Miles and Huberman 1994; Hitchcock and Hughes 1989), that is the co-authors of manuscript 1 and the anonymous reviewers of this manuscript.

⁴ See Appendix 4: NVivo tree nodes and free nodes for policy analysis.

Analysing environmental education practices

As we explained above, the aim of this doctoral research is to deepen our understanding of what it means and requires to approach sustainability issues as public issues within educational practices and how the interaction between policy practices and educational practices is enhancing or otherwise inhibiting publicisation. Therefore, we conduct multiple case studies. In this section we successively argue why, here too, we use an analytical framework inspired by the PAA and describe the research design through a further elaboration of our second research question and by specifying our focus and going into the matters of sampling, data collection and -analysis.

The Policy Arrangements Approach as a source of inspiration for analysing educational practices

To meet the empirical challenges implied in our research objectives, we do not only apply the PAA for the analysis of ESD policymaking but also to study the educational dynamics in concrete practices. More specifically we want to reveal how the ‘arrangement’ of educational practices contributes to the ‘privatisation’ or otherwise ‘publicisation’ of issues. The merits of the PAA for the study of policymaking practices (that is, seeking balances between actor and structure as well as between content and organisation) also go for its application in (qualitative) analyses of educational practices. Not only does the broad perspective – taking into account the strategic actions within practices as well as the structural developments and both the content- and organisation-oriented dimensions – allows to ‘take context seriously’ (Patton 2002, 61); the approach also provides a lens for a nuanced empirical analysis that ‘direct[s] the looking and the thinking enough and not too much’ (Stake 1995, 15). We will further elaborate on these methodological considerations in the next sections.

Whereas we apply the PAA straightforwardly – as described above – for the policy analysis, we used it rather as a source of inspiration and, thus, adjusted the framework for the analysis of educational processes. More precisely we attempted to render it useable for discovering and understanding privatising and public-ising practices related to the issues at stake within these processes by adjusting the four dimensions in order to allow an analysis of educational practices. That is, we study the *actors* involved and their coalitions, the *resources* that are mobilised (here: educational tools, methodologies, and activities), the formal and informal *rules of interaction*, and the *discourses* on sustainable development and ESD. Through the analysis of these dimensions we aim at revealing whether, and if so, how, educational practices engage in the public-isation of sustainability issues. In manuscript 3 we further elaborate on how we apply this analytical framework.

Detailed research questions

Building further on our theoretical focus and analytical framework, we can now further clarify the second research question – Within this context, how can we understand the educational dynamics emerging in practices of EE? – in more detail as follows:

- How do educational practices present sustainability issues as public issues or otherwise?
- How is the privatisation or otherwise public-isation of issues affected by the actors involved, the educational resources, the rules of interaction, and the discourses on sustainable development and ESD?
- How does ESD policymaking as it is pursued contribute to the privatisation or otherwise public-isation of sustainability issues within these practices?

- Do – and if so, how do – particular educational practices reveal an educational dynamic that deviates from the kinds of practices that are predominantly fostered by EE and ESD policy?

Focus and bounds

As we argued, the aim of our multiple case studies is to deepen our understanding of what it means and requires to approach sustainability issues as public issues within educational processes. Guiding concepts for this analysis are provided by Marres' distinction between the 'privatisation' and 'public-isation' of issues. Yet, our purpose is not to characterise the cases as either 'privatising' or 'public-ising' from a critical, evaluative perspective aiming at the development of true and valid knowledge that EE practices are then assumed to apply. Rather, we want to contribute to an in-depth understanding of these practices and invite and inspire the reader to be attentive to how processes of privatisation and public-isation emerge within EE and ESD (Masschelein and Simons 2006). Thus, the case study is an exploratory inductive analysis starting from an explicit theoretical perspective that guides fieldwork and the interpretation of findings. Patton (2002, 129) labels this kind of research as 'orientational qualitative inquiry'⁵. The focus of our inquiry is determined by the theoretical framework elaborated above and thus our findings are interpreted and given meaning from that perspective. The aim is elucidation rather than an absolute open-minded discovery of emergent theory: we want to describe specific manifestations of already assumed general patterns. That is, we want to explore and describe how public-isation and privatisation of sustainability issues, as theorised by Marres, take shape in EE practices. Such orientational qualitative inquiry, Patton argues, is a legitimate and important approach to theoretical elaboration, confirmation, and elucidation but requires

⁵ In fact, Patton argues that this kind of inquiry is characterised by an explicit *theoretical or ideological* perspective that determines the focus of research. Obviously, the case study we present starts from a theoretical rather than ideological perspective. Examples of the latter are for instance feminist and Marxist inquiry.

that the researcher is very clear about the guiding theoretical framework and its implications on study focus, data collection, fieldwork, and analysis.

As to our empirical focus, the case study can also be characterised as what Miles and Huberman (1994: 8) define as ‘social anthropology’. Many social anthropologists, they argue, are concerned with the genesis or refinement of theory and therefore may begin with a conceptual framework and take it out to the field for testing, refinement, or qualification. Indeed, we aim at refining theory by bringing forward how particular educational practices deal with the publicisation or privatisation of sustainability issues. Social anthropologists, Miles and Huberman argue, use ethnographic methods that tend toward the descriptive and are interested in the behavioural regularities in everyday situations: language use, artefacts, rituals, relationships. With our analysis of the PAA-dimensions – the actors involved, the educational instruments, rules of interaction, and discourses – we indeed want to reveal and describe day-to-day educational practices. Obviously, from the perspective of our research objectives and questions, these educational *practices* are the unit of analysis.

Sampling

As Miles and Huberman (1994: 28) emphasise, ‘the most useful generalisations from qualitative studies are analytic, not sample-to-population’. Put in other words: rather than generalisation, qualitative inquiry strives for in-depth understanding. Thus, instead of constructing a ‘representative’ sample, ‘purposeful sampling’ in qualitative research is aimed at the selection of ‘information-rich’ cases whose study will illuminate the questions of inquiry (Patton 2002).

So as to select a sample of information-rich cases, we applied several strategies for purposeful sampling (Patton 2002). The most important one was ‘maximum variation (heterogeneity) sampling’ (see also Baarda et al. 2001), but we

complemented this strategy with theory based and emergent sampling. As we aimed at exploring the rich diversity of educational practices operating under the banner of EE, maximum variation sampling was our primary concern. As Patton (2002) argues, when selecting a small sample with great diversity, data collection and analysis yield two kinds of findings: the documenting of unique cases as well as the emergence of shared patterns that cut across cases.

Heterogeneity sampling begins with identifying diverse characteristics or criteria for constructing the sample. We determined five criteria, taking into consideration our aim to explore the diversity of EE practices. A first criterion is the distinction between practices operating within the formal and institutionalised 'EE sector' and rather peripheral practices. The other criteria are derived from the dimensions of the PAA. The second one is based on the actor-dimension and concerns the question whether the guiding actor of the case is situated within government, civil society or the market. The third criterion is based on the educational resources. That is, we aimed at examining cases that are heterogeneous as to the use of educational tools, methodologies, and activities. A fourth characteristic is the rules of the game affecting the cases, more particularly, the distinction between practices that are rather open or otherwise closed-off for the participation of actors. The fifth and last criterion is based on the cases' discourses on education. Therefore, we applied the strategy of theory based sampling and distinguished 4 'learning metaphors'⁶ that can be applied to characterise the cases' view on education: the 'acquisition metaphor' (Sfard 1998), the 'participation metaphor' (Sfard 1998), the 'knowledge creation metaphor' (Paavola et al. 2004) and the 'response metaphor' (Vandenabeele and Wildemeersch 2012). A second stage in the case selection process implied listing potential cases according to these criteria. Obviously, this required some

⁶ 'Metaphors for learning' are images that allow defining education and bringing forward fundamental assumptions behind educational theories and practices (Sfard 1998; Elmholt 2003). See also manuscript 5 and 6.

preparatory research. In order to have an overview of potential cases, we used the ‘Environmental Education Inventory’ provided as an online tool by the EE Unit of the Flemish government. Furthermore, we conducted an exploratory document analysis by scrutinising online information in order to roughly determine how each case relates to the five criteria. Thereby, we assessed the cases by determining their most apparent characteristics. For example, when more than one learning metaphor, guiding actor, etc. occurred, we picked out the most apparent/dominant one. Next, we evaluated the listed cases as to the potential for data gathering. That is, we assessed whether we would have access to information through documents, interviewing and observations and, as a result, we excluded cases that could only be studied retrospectively as well as practices within which no (or little) observable activities were planned during the period of data collection. With regard to the listing and selection of cases, we could benefit from my access to and acquaintanceship with the field as a policy advisor (and thus, in a sense, as a key informant). I had access to an abundance of information concerning relevant practices which allowed me, for instance, to find an interesting market-driven EE practice (a colleague drew my attention to it). Another example is an EE networking activity I attended where a movie made by ‘t Uilekot drew my attention as it – at first sight – seemed to reveal the response metaphor for learning.

Aiming at maximum variation as to the five aforementioned criteria, we finally selected 7 cases, each of them as different as possible from every other:

1. The project ‘Environmental Performance at School’ (Milieuzorg Op School – MOS)
2. An environmental education centre
3. The ‘Transition Towns Network’ in Flanders
4. A transition arena aiming to make a city ‘climate neutral’
5. A Community Supported Agriculture initiative

6. 't Uilekot, a regional centre for action, culture, and youth
7. Ecolife, an organisation that offers workshops to promote ecological behaviour change

Case	Sector		Actors			Resources	Rules of the game		Metaphors for learning			
	EE sector	Peripheral practices	Government	Civil society	Market	Educational tools, methodologies, and activities	Open	Closed-off	Acquisition	Participation	Knowledge creation	Response
Environmental Performance at School	X		X			Classes, task forces, actions, excursions		X		X		
Environmental education centre	X		X			Excursions, exposition		X	X			
Transition Towns Network		X		X		Courses, meetings, actions, task forces	X			X		
Transition arena		X	X			Meetings, task forces	X				X	
Community Supported Agriculture		X			X	Excursions, voluntary work	X			X		
't Uilekot		X		X		Films, excursions, actions, meetings, debates	X					X
Ecolife	X			X		Workshops		X	X			

Table 1: Matrix maximum variation sampling – 7 cases

As generally within qualitative research (Patton 2002), we faced numerous situations in which we had to take additional within-case sample decisions

(emergent sampling). In some cases, this has been conducted deliberately and well-considered. In other cases, fieldwork brought about unexpected, on-the-spot decisions about sampling to take advantage of new opportunities. An example of the former is the way in which we selected – again with maximum variation sampling – 6 divergent MOS-schools so as to explore how the project takes place within different settings. Via the MOS-coaches, we sent a call for schools willing to participate in our inquiry and asked them to answer a short questionnaire. So as to select a variety of schools, we took into account the level (primary – secondary) and form (general – technical – vocational) of education, the geographical spread over 2 provinces, the advance of the MOS-project (i.e. the obtained label as an award of good work, see also manuscript 3), and the school system.

School	Level and form of education				Province		Advance of the MOS-project				School system			
	Primary education	General secondary school	Technical (secondary) school	Vocational (secondary) school	East-Flanders	West-Flanders	Logo 1	Logo 2	Logo 3	Green Flag	State school system	Catholic school system	Municipal school system	Provincial school system
1		X				X				X		X		
2			X	X	X				X		X			
3			X	X		X	X							X
4	X				X					X	X			
5	X				X			X					X	
6	X					X		X			X			

Table 2: Matrix maximum variation sampling – 6 MOS-schools

On-the-spot sampling decisions concerned for instance decisions about which activities to observe, which respondents to interview or which sub-group to observe during a workshop, excursion, or discussion. These decisions were made as well-considered as possible, attempting to take into account the implications on our findings. For example, through such (unforeseen) within case sampling decisions we seized the opportunity to test or challenge our made-shift research findings. During a subgroup-discussion of the transition arena for instance, we deliberately observed a workshop that at first sight seemed to contradict our findings based on a previous observation. Yet, we also faced what Miles and Huberman (1994, 31) call 'the lovely imperfection and intractability of the field', that is, all kinds of questions of practicality that limited the space for well-considered decision-making such as a finite amount of time, overlapping schedules, a limited period of investigation, difficult access to particular actors or events and diverse logistical problems (e.g. a fishing boat that was too small for a researcher as an extra passenger).

Data collection

As our research objectives and questions require, we collected data by 'going into the field' (Patton 2002, 47), that is through direct and personal contact with the people under study in their own environment. Thus here, too, a stance of 'empathic neutrality' (see also above) is utmost important. This involves a commitment 'to understand the world as it unfolds, be true to complexities and multiple perspectives as they emerge, and be balanced in reporting both confirmatory and disconfirming evidence with regard to any conclusions offered' (Patton 2002: 51). Going into the field with empathy and neutrality implies that the impressions and feelings of the researcher are part of the data. Indeed, we imported these impressions and feelings in 'research journal' memos in NVivo. Sometimes, they strongly affected analysis decisions. For instance, we decided to use one particular interview only very limitedly since we had the strong

impression that the respondent was influenced by the fact that the interviewer was a (former) policy advisor of the EE unit of the Flemish government. He created the impression that, for him, the main purpose of the interview was to present a good image of his organisation. We did not take into account the data that could have been affected by this agenda and made a lot of effort to cross-check the information from the interview with other data sources.

Indeed, here too, we strived for maximising the rigour of our inquiry by the strategy of triangulation of qualitative data sources (Janssens 1985; Baarda et al. 2001; Patton 2002). We combined a document analysis (78), in-depth interviews (19) and direct observations (45)⁷.

	Documents	Interviews	Observations
Environmental Performance at School			
<i>Overall project</i>	<i>19</i>	<i>3</i>	<i>4</i>
<i>School 1</i>	<i>1</i>	<i>1</i>	<i>3</i>
<i>School 2</i>	<i>3</i>	<i>1</i>	<i>1</i>
<i>School 3</i>	<i>2</i>	<i>1</i>	<i>2</i>
<i>School 4</i>	<i>4</i>	<i>1</i>	<i>2</i>
<i>School 5</i>	<i>7</i>	<i>1</i>	<i>4</i>
<i>School 6</i>	<i>2</i>	<i>1</i>	<i>2</i>
Environmental education centre	2	2	4
Transition Towns Network	2	2	3
Transition arena	20	2	4
Community Supported Agriculture	8	1	4
’t Uilekot	5	1	7
Ecolife	3	2	5

Table 3: Data collection per case

⁷ See Appendix 5: Overview data-collection case study.

As to the document analysis, we studied the websites of the cases as well as documents gathered during observations and documents we received from people we observed and/or interviewed. For the in-depth interviews, we selected key-respondents within each case. We prepared a general list of semi-structured interview questions that we subsequently adjusted for every respondent⁸. The direct observations varied with regard to duration (going from half an hour to maximum a whole day) as well as concerning the degree of 'observer involvement'. Depending on the specificity of the setting, my role as an observer was sometimes an unobtrusive onlooker (e.g. literally sitting aside and not at the table where the members of the transition arena discussed issues), sometimes a full participant (e.g. weeding with volunteers at the CSA farm) and sometimes something in-between (e.g. first listening and recording, afterwards participating in a discussion of the transition towns movement because the other participants insisted on that). The information gathered during the observation is captured in detailed field notes, partly based on (verbatim transcripts of) video-tapes. We made a lot of effort to capture direct quotations so as to maximise the 'emic' or insider perspective (Janssens 1985; Patton 2002). Hand-written notes were always typed and completed (often assisted by the video-tapes) as soon as possible after the observation. As already indicated, this triangulation of data sources enabled us to compare and cross-check the consistency of information derived at different times and by different means (Patton 2002), for instance to compare what interviewees told us (e.g. 'we do not face dissenting opinions as to the MOS project in our school') with what we observed (i.c. the occurrence of dissent), what people said in public (e.g. encouraging people to reduce their individual ecological footprint) and in private (i.c. that individual efforts will be insufficient to tackle the ecological crisis), how things evolve over time (e.g. over the successive meetings of the transition arena), how particular topics are approached from

⁸ See Appendix 6: General list of semi-structured interview questions for the case study.

different points of view (e.g. the varying opinions of two interviewees of the Transition Towns movement), etc. Eventual inconsistencies then raised the interesting question why differences did appear, which guided the proceeding analysis.

Data analysis

As we did for the policy analysis, so as to guide the analysis of data in this case study we likewise defined 'sensitising concepts' (Patton 2002, 278) based upon the (adjusted) dimensions of the Policy Arrangements Approach:

- Actors
 - Actors involved
 - Actors not reached
 - Actors affected by the issue
 - Coalitions
 - Interdependency
 - Actors' roles
 - Role of citizens
 - Role of experts
 - Role of the market
 - Role of politicians
- Resources
 - Educational tools
 - Use of tools
 - Motivation for the use of tools
 - Criteria for the choice of tools
 - Who decides about tools
 - Sustainability indicators
 - Ecological footprint

- Self-made indicators
 - Use of indicators
 - Motivation for the use of indicators
- Learning environment
 - Attention for the learning environment
 - No attention for the learning environment
- Rules of the game
 - Applying rules
 - Formal
 - Informal
 - Rigorously formulated
 - Broadly formulated
 - Compelling
 - Not compelling
 - Rules about the involvement of actors
 - Rules about conflict
 - Rules about dissent
 - Rules about the distribution of roles
 - Harmony and consensus
 - Pluralism
 - Dealing with conflict
 - Rational approach
 - Moral approach
 - Political approach
 - Approach to deviating opinions
 - Irrational
 - Immoral
 - Legitimate

- Openness to something new, different
 - On the part of the ‘teacher’
 - On the part of the ‘learner’
- Regulation educational process
 - Flexible
 - Standardised
- Relation ‘teacher’ – ‘learner’
 - Egalitarian
 - Hierarchic
- Social cohesion
- Integration
- Kinds of interactional practices
 - Teaching
 - Open questions
 - Questions to elicit a predetermined answer
 - Stories
 - Stories of the ‘teacher’
 - Stories of the ‘learner’
 - Discussing issues
 - Expressing one’s opinion
 - ‘Teacher’ expressed his/her opinion
 - ‘Learner’ expressed his/her opinion
 - Asking one’s opinion
 - Asking the ‘teacher’s’ opinion
 - Asking the ‘learner’s’ opinion
- Discourses
 - Discourses on sustainable development
 - Attention to power relations

- Alternatives and solutions
 - Offering solutions
 - Exemplifying solutions
 - Trying out solutions
 - Imagine solutions
 - Solutions are difficult
- Sustainability claims
 - Sustainability claims are universal
 - Sustainability claims are contextual
- Causes of sustainability problems
 - Individual responsibility
 - Structural causes
- Knowledge about sustainability issues
 - Knowledge about causes
 - Knowledge about effects
 - Knowledge about alternatives
 - Knowledge about strategies for change
- Triple P
- Discourses on education
 - Purpose of education
 - Active, sustainable citizenship
 - Behavioural change
 - Transfer of knowledge
 - Social change
 - Value development
 - Transfer of values
 - Relation education – ethics
 - Education as an instrument for ethical principles

- Education as an ethical practice
- Relation education – social change
 - Behaviour change
 - Public involvement
- Relation education – citizenship
 - Instrumental
 - Non-instrumental

These sensitising concepts were the first nodes used for coding in NVivo. The documents, verbatim transcripts of the interviews and the field notes were imported in the software so as to facilitate the analysis. As the analysis advanced, these sensitising concepts were complemented, refined, adjusted, etc. according to insights arising from the data⁹. As Patton (2002) indicates, we experienced how immersing oneself in the data through transcribing audio and video tapes, checking transcriptions typed by others, and typing and complementing handwritten field notes was an important first step in the analysis giving rise to emergent insights. Yet, as Patton also argues, within qualitative inquiry no formula exists to transform data into findings. The challenge is to find a way to creatively synthesise and present the findings. We attempted to meet this challenge by connecting our data to the concepts offered by Latour and Marres. Thus, the PAA provided us with a lens to broadly collect and systematically analyse the ‘raw’ data derived from field work and the theoretical concepts enabled us to interpret these findings.

Patton (2002) emphasises the importance of analytic reflexivity which involves self-questioning and self-understanding as well as political/cultural consciousness and ownership of one’s perspective. Again, review and argumentation among colleagues turned out to be conducive to such reflexivity (Miles and Huberman 1994; Hitchcock and Hughes 1989). In this respect, our case study undoubtedly

⁹ See Appendix 7: NVivo tree nodes and free nodes for case study.

benefited from discussions among the co-authors of manuscript 3, 4, 5, 6 and 7, from comments received from anonymous reviewers, and from presentations and subsequent discussions for audiences of academics as well as practitioners. A point of particular relevance we experienced in this regard is that such argumentation created opportunities for the generating and assessing of rival conclusions (Patton 2002). For instance, the co-authors of manuscript 4 repeatedly challenged my proposals to characterise certain practices I observed as contributing to privatisation or public-isation which incited a nuanced and finely tuned understanding of the cases. In this sense, our inquiry fits the general characterisation of qualitative research as an iterative process of discovery and verification, moving back and forth between induction and deduction.

Manuscripts

MANUSCRIPT 1:

Taking stock of the UN Decade of Education for Sustainable Development: The policymaking process in Flanders¹⁰

The United Nations designated the period 2005-2014 as the Decade of Education for Sustainable Development (DESD). As this Decade comes to an end, the time has come to take stock of the actual policy translations and implementation processes it has brought about. In this paper, we aim to contribute to documenting the outcomes of the DESD with an empirical analysis of the policymaking process on education for sustainable development (ESD) in Flanders, a sub-national entity of the Belgian federal state. In academic literature, the concept of ESD and its desirability as a new leitmotiv for environmental education (EE) has been the subject of an extensive debate (see below). However, this lively discussion is characterised by a mainly ‘non-empirical’ approach ‘dealing largely with theory or conceptual matters through literature review, discussion and/or commentary with no particular reference to the gathering or processing of empirical data’ (Reid and Scott 2006, 582). Empirical studies analysing actual policy processes and outcomes (e.g. Nomura and Abe 2009; Huckle 2009) remain rare. With our case study of ESD policymaking in Flanders we want to contribute to the empirical underpinning of this debate. We analyse the way ESD policymaking in Flanders is part of this increasing impact of ESD policy and discourse on EE as well as of two other overall trends in environmental and educational policymaking: the tendency to frame social and political challenges as ‘learning problems’ for individuals and the prevailing discourse of ‘ecological

¹⁰ A revised version of this manuscript – co-authored by Joke Vandenabeele and Hans Bruyninckx – has been published in *Environmental Education Research*. We thank the three anonymous reviewers of an earlier version of this paper for their valuable comments and very helpful suggestions.

modernisation'. By addressing the insights and considerations emerging from our case study we want to inspire researchers in other contexts to undertake similar inquiries and, thus, to contribute to a more in depth understanding of the DESD and its varied translations in diverse policy processes and practices.

ESD-policy in Flanders

In this article we first document the policymaking on ESD in Flanders in terms of the actors involved, the resources that are mobilised, the rules of the game as well as the discourses regulating policy practice on ESD. Flanders is a subnational entity of Belgium. The Belgian federal state (at the national level) consists of six subnational entities: three communities (the Flemish Community, the French Community and German-speaking Community) and three region (the Flemish Region, the Brussels-Capital Region and the Walloon Region). In Belgium, ESD is an authority distributed to the subnational level. This article focuses on the subnational entity of Flanders which consists of the Flemish Community and the Flemish Region. The Flemish authorities consist of the Flemish Parliament, the Government of Flanders, and the Flemish administration. The last is subdivided into 13 policy areas, each composed of a department (responsible for the preparation and evaluation of the policy and regulations) and several agencies (implementing the policy). Flanders is a densely populated region with 6 300 000 inhabitants (466/km²) (Flemish government 2012a). As to the available income, the region ranks among the top three of the best performing EU countries. The income of 10 per cent of the Flemings does not exceed the poverty line. In 2007, the Global Footprint Network (2013) determined the footprint of an average Belgian at 8 global hectares¹¹ which is significantly higher than that of an average world citizen (2.7) and also of the average inhabitants of neighbouring countries

¹¹ The world average bio-capacity, that is the surface area of agricultural land, forest and fishing territory available, is 1.8 gha per capita.

France (5.0), Germany (5.1), The Netherlands (6.2) and the UK (4.9). Several 'sustainability indicators' monitored by the Flemish government reveal a 'critical situation', particularly those with regard to energy, climate change, transport, and biodiversity.

Striving for triangulation of qualitative data sources (Patton 2002) we gathered an empirical basis for our analysis by means of an in-depth interview, a postal survey, and an extensive document analysis. As interviewing (a balanced sample of) all the relevant actors involved would have been unfeasible within the available time, we decided to interview a policy advisor responsible for the implementation of the DESD in Flanders who can be considered a key respondent with regard to Flemish ESD policymaking. It can reasonably be assumed that this policy advisor is the best qualified respondent so as to obtain up-to-date, first-hand information about the policymaking process and its output. We complemented the data derived from this interview by surveying the members of the 'ESD consultation platform' (see below). A postal survey with open questions has been answered by 15 respondents and the diversity of these respondents represents the variety of the actors involved. Furthermore, we analysed 23 international and 36 Flemish policy documents. We imported the verbatim transcription of the audio-recorded interview, the answers to the survey questionnaire as well as the policy documents into the qualitative analysis software QSR NVivo. 'Sensitising concepts' (Patton 2002, 278) – built upon both the dimensions we aim to describe (actors, resources, rules of the game, discourses / policy programmes) and the three developments we want to take into account – guided our analysis and were the first nodes used for coding. As the analysis advanced, these sensitising concepts were complemented, refined, adjusted, etc. according to insights arising from the data.

A point of particular interest, methodologically, is the fact that the researcher who conducted the analysis had formerly been a civil servant involved in the

implementation of the DESD through facilitating networking within the ESD consultation platform as well as capacity building concerning ESD for EE practitioners. This position enabled an increased access to information as well as a thorough acquaintanceship with the field. On the other hand, it should be acknowledged that, because of this 'double role', involvement with the subject of research can be regarded above average. We took these considerations seriously and made every effort to carefully consider and control the balance between distance and involvement with the subject of our analysis. We started the data collection in the field (the interview and survey – see below) as well as data analysis only after the researcher had quit being a civil servant and worked for the university with a PhD scholarship. Furthermore, we emphasised this independent position in the communication with the people under study and assured them that all the data would be treated anonymously.

The actors involved

As we will show, ESD policy in Flanders is a two-track policy strongly guided by international institutions and developments but also embedded in the Flemish overall sustainable development policy. At the high-level meeting of Environment and Education Ministries in Vilnius in 2005, Flanders committed itself to the implementation of the Strategy for ESD developed by the United Nations Economic Commission for Europe (UNECE). This Strategy stresses the importance of shared responsibilities, cooperation, and participation of relevant stakeholders (UNECE 2005). UNESCO, designated by the UN General Assembly as the leading agency of the DESD, also emphasises in its International Implementation Scheme the importance of alliances, partnerships between relevant actors within governments (sub-national, national, regional and international) as well as in civil society and the private sector (UNESCO 2005).

As the in-depth interview, postal survey, and policy documents show, this emphasis put on multi-level and multi-actor cooperation also characterises the Flemish ESD policymaking. The importance of cooperation and broad participation has repeatedly been underlined by all actors involved and was implemented by the establishment of an 'ESD consultation platform' (VLOR and Minaraad 2007; Verheyen 2009; Flemish government 2009a). This platform was created in response to UNECE's appeal to install a coordination mechanism for the ESD Strategy in order to stimulate implementation, information exchange, and partnerships. It is composed of representatives of diverse public administrations on different levels including ministers' political advisors, and non-state actors such as NGOs, unions, institutes for higher education, school systems within compulsory education and strategic advisory councils. The platform has been given a mandate by the Government of Flanders to coordinate the implementation of the DESD, to contribute to its implementation by formulating advisory opinions as well as to foster multi-actor, multi-level, and multi-sector collaboration. In response to our survey, the actors involved describe their contribution to ESD policymaking and the role they take in the platform on different domains. Public servants regularly mention their contribution to the preparation and implementation of ESD policy. Non-state actors often refer to their task of following up ESD policy, trying to influence it, representing their organisation or sector, and contributing to the implementation by applying ESD in concrete practices.

'I voice the stand of my organisation at the diverse consultative bodies. Within my organisation I transfer the information of the consultative bodies to those colleagues that coach the schools. Internally, I try to put ESD on the agenda of our coaching and training units. Up till now with limited results. Sometimes, I directly communicate with schools, e.g. so as to announce didactic tools, trainings.'
(respondent 13)

Seven respondents explicitly expressed appreciation of the consultation and cooperation within this platform. They particularly value the opportunities it brings about for a dialogue on how the different partners involved understand ESD, which is experienced as an inducement to applying the concept in practices.

‘ESD policy in Flanders enabled me to further develop my perception of ESD. The administration paid a lot of attention to consultation and that allowed me to compare my own view with that of others.’ (respondent 4)

‘The ESD consultation platform stimulated me and my organisation to take steps in translating ESD in our daily practices. Up till now, ESD is a very theoretical concept that is difficult to apply. Thanks to the exchange, we are able to further develop ESD in our own organisation as well as for other organisations.’ (respondent 14)

The document analysis as well as the survey reveal repeated and sometimes severe criticism as to the assumed lack of commitment to ESD on the part of the Government. Several participants particularly question the lack of resources provided for the implementation of ESD. We will go into this matter later on. Furthermore, they express scepticism concerning the commitment of all relevant administrations such as the departments of Education, of Culture, and of Economy (e.g. Flemish government 2008a; Flemish government 2008b; Minaraad 2009). The interviewee explains that the Environment, Nature, and Energy Department – specifically the EE Unit – is the driving force behind the Flemish ESD policy through establishing, financing, and coordinating the ESD consultation platform and that, on the level of public administration, implementation always occurred in cooperation with the Department of Education and Training. The document analysis, interview, and the answers to our survey questionnaire also show a persistent concern about other actors that are not or insufficiently involved in the Flemish ESD policy. Discussions in the ESD platform, advices by strategic advisory councils, and remarks of the respondents reflect discontent

regarding the limited involvement of ESD practitioners and the overrepresentation of actors in the field of formal education and people with an environmental education background. There has been insisted on enhancing the engagement of actors in the field of non-formal learning and on bringing in more stakeholders from outside the EE sector. Particularly the involvement of partners from business circles and industrial sector umbrella organisations has been under discussion.

'Seeking alliances with the business world has been debated in the platform. Maybe we should reinforce the attempts to get those actors involved. Yet, we never reached agreement about that. It remained unclear how to succeed in it. Moreover, some people in the platform were all for it while others were rather sceptical.' (respondent 16)

In the course of the policy process, there has been an evolution in the participation of stakeholders. The interviewee explains that new actors, for instance from the field of higher education and the cultural sector, got involved appealed by concrete initiatives while others, such as the department of Economics, Science, and Innovation as well as ministers' political advisors quit participation. The policy advisor assumes that ESD has never been more than a side issue for them and got more and more pushed into the background as they found that the initiatives taken by the platform did not fit within their overall assignment. All the same, he explains, the bonds between maintaining participants were strengthened: stable relationships of trust have arisen, actors 'genuinely committed' to ESD were distinguished, and the people involved learned to know each other better so that it became clear whose expertise can be applied for what ends, which collaborations are possible for which objectives, etc. The evolving participation of the actors involved in the platform goes together with a more or less conscious strategy of the EE Unit to move beyond the formal procedures and channels in their attempts to implement the ESD policy objectives

in Flanders as those formal structures have proven to be difficult, inert, and resistant (see also below).

'The rather formal endeavour to implement ESD through official channels has been abandoned early on. We chose to invest in those opportunities where we saw that people were committed to ESD and willing to contribute to its implementation instead of continuing to try to embed ESD in formal structures where it might have had little opportunities.' (respondent 16)

As such, in the course of time, a coalition arose of diverse actors trying to enhance and accelerate ESD policy and practices in Flanders. This coalition, gathered in the ESD consultation platform, strived for political validation of the ESD implementation plan (see below) as well as for providing the resources required to realise this plan. On the occasion of the election of the Flemish Parliament in 2009, for example, the president of the platform sent a memorandum to the relevant political actors in order to bring to their attention these concerns of the ESD consultation platform (Verheyen 2009). Members of the Strategic Advisory Council for Environment, Nature and Energy Policy who were also involved in the ESD consultation platform strengthened this coalition by writing advices for the Flemish Government and ministers that reflected concerns, opinions, and proposals introduced in the consultation platform (Minaraad 2007; Minaraad 2008; Minaraad 2009).

The rules of the game

In our description of the rules of the game affecting ESD policymaking in Flanders, it is important to distinguish between formal rules, laid down in laws and documents, and informal or de facto rules connected with certain policy cultures. Furthermore, rules can be formulated very rigorously as well as more broadly and they vary strongly concerning their degree of formality and compelling nature (Arts et al. 2000). ESD policy in Flanders is influenced by a number of rules of the game that are formally established though characterised by a low degree of

authority. There is no imperative law forcing the Flemish Government or the other actors involved to implement ESD policy goals. Nevertheless, there are a few declarations and agreements with a powerful moral authority that affect ESD policy and practice in Flanders.

At the international level, the roots of ESD policymaking were shaped by the Rio Declaration and Agenda 21 (1992) that considered learning to be indispensable for reaching sustainable development. The importance of ESD was later confirmed by the Johannesburg Plan of Implementation (2002), bringing about the installation of the DESD through resolution 57/254 of the United Nations General Assembly. Resolutions 58/219 and 59/237 offered additional support for the Decade. UNESCO's International Implementation Scheme (2005) and the UNECE Strategy for ESD (2005) made these appeals more concrete. In Flanders, the foundations of overall sustainable development policy are captured in the Belgian constitution in which sustainable development was included in 2007.

'During the exercise of their respective competences the federal state, the communities and the regions will pursue the goals of a sustainable development in its social, economic and environmental aspects, taking into account the solidarity between generations.' (Belgian Constitution, art. 7bis, 2007)

This affects Flemish policymaking: the application of the basic principles of sustainable development is now a constitutional obligation for the Government of Flanders. As a result, this Government adopted a regional decree on sustainable development in 2008 by means of which sustainable development obtained structural legal grounds. The decree aimed at ensuring the continuation of the Flemish sustainable development policy by obliging every newly formed Government to develop and adopt a 'Flemish Strategy for Sustainable Development'. As neither in the constitution, nor in the decree on sustainable development ESD is mentioned, there is no statutory obligation for an ESD policy in Flanders. Nevertheless, in both the first (Leterme 2006) and the second

(Peeters 2010) Flemish Strategy for Sustainable Development ESD has been given a prominent place. The policy goals were formulated formalistic rather than addressing specific content with regard to ESD, e.g. organising an ESD consultation platform, providing process coaching, integrating ESD in policy-, planning- and regulatory frameworks, installing an ESD coordination unit encompassing diverse policy areas, promoting ESD with financial policy instruments, stimulating ESD in formal education through final objectives and competence profiles, installing learning networks, etc. In 2009, the Government adopted the Flemish Implementation Plan concerning ESD 'Learning for a viable future' (Flemish government 2009a). The Plan was developed on a participatory basis via the ESD consultation platform and aimed at associating the UNECE Strategy for ESD with the specific Flemish context and the actions put forward in it were the same as these in the ESD-project of the first Flemish Strategy for Sustainable Development.

Several Flemish ministers state in their policy documents for the term 2009-2014 that they intend to realise the ESD Implementation Plan (Peeters 2009a; 2009b; Schauvliege 2009; Smet 2009). Yet, numerous respondents are very critical and conclude that the political commitment to ESD is largely limited to paying lip service to the objectives formulated in the plan since those objectives are insufficiently translated in tangible measures or the provision of the necessary resources (see also below).

'ESD policy is extensively developed on paper. Yet, the realisation in real terms is less obvious. [...] It remains unclear to what extent the implementation is monitored, followed-up and if necessary adjusted. Nevertheless, this is a necessary condition for a successful implementation of the plan.' (respondent 13)

The only imperative rule of the game affecting ESD in Flanders is the introduction of new 'cross curricular final objectives' in secondary education in 2010. In Flanders, final objectives (cross curricular as well as subject specific) are adopted

by the Parliament and determine which key competences pupils have to achieve through compulsory education. Since all Flemish schools have the obligation to prove their efforts regarding the realisation of these final objectives, this legislative measure is regarded an important incentive for the implementation of ESD in formal education. Sustainable development has been given a prominent place in these revised cross curricular final objectives through which the Flemish Parliament aimed to create ‘a sort of safety net for valuable and socially relevant content that is inadequately addressed within the subject specific final objectives’ (Flemish government 2009c – our translation). The key competences with regard to sustainable development are described as follows:

‘The pupils

- participate in environmental policy and environmental performance at school;*
- recognise the interrelatedness of economic, social and ecological aspects of sustainability issues and the effects of technology and policymaking;*
- try to use space, resources, goods, energy and transport in a sustainable way;*
- try to find sustainable solutions for the improvement of their local and global environment;*
- show interest in and appreciation for nature, landscape and cultural inheritance;*
- experience the value of nature and enjoy it.’ (Flemish government 2009c, 18 – our translation)*

Mobilisation, division and deployment of resources

UNESCO and UNECE both emphasise that the provision of the necessary resources largely affects the success of the DESD.

‘The IIS urges governments and other potential funding sources to assess the existing resources and needs related to ESD in their jurisdictions and to reallocate existing resources and find ways to create new resources. Even with linking

existing programmes to ESD, a need for new resources exists. Additional human resources and funding will be necessary to augment current resources.’ (UNESCO 2005, 24).

Pointing to these international statements, the need for sufficient human and financial resources has been stressed repeatedly throughout the Flemish policy process (Flemish government 2005a; VLOR and Minaraad 2007; Verheyen 2009; Flemish government 2009b; Flemish government 2010a). The conclusion that to date very little new resources have been provided brought about explicit criticism within the ESD consultation platform (Flemish government 2010a). Participants that responded to our survey, too, voiced such criticism:

‘Governmental support and resources for ESD are very limited, in my opinion too limited. The activities and reports of the ESD consultation platform show great enthusiasm, a lot of creativity and devotion from the Environmental Education Unit [...] as well as other participating public services and NGOs. It is obvious that a more substantial funding and support by the Government would enhance Flemish ESD policy.’ (respondent 12)

As our document analysis shows (e.g. Flemish government 2010a) and as the interviewee explained, since the Government of Flanders did not allocate resources specifically to ESD policy, the implementation of ESD in Flanders so far depended largely on the redistribution of funds within the existing budgets of several departments. Tangible policy measures were thus the result of the commitment of actors within public administration rather than the outcome of deliberate political decision making. Initially, the actions put forward in the Flemish ESD Implementation Plan were for the most part financed with funding for EE. Later on, however, other collaborating partners started to contribute, they too falling back on the reallocation of existing means.

When taking stock of the realisation of the ESD Implementation Plan and the Flemish Strategies on Sustainable Development, the consultation platform

concluded that the lack of significant resources disabled the realisation of several actions such as an ESD project fund and process coaching for ESD organisations and professionals (Flemish government 2010a). On the other hand, the actors involved indicated that being on a budget also stimulated collaboration and creativity as a result of the search for co-funding and that it opened up a space for experimentation because of the absence of top-down steering and management.

'Restricted resources created the situation in which there were no indicators, evaluation tools, and expectancies embedded in hierarchic structures. This would have been the case if the minister would genuinely be interested in ESD and set targets that we have to reach. This could possibly have influenced the policy process negatively rather than positively because things get managed then and people feel obliged to do something. Whereas now, we are all in the same boat, with little support and funding from the Government. This fostered collaboration instead of competition. [...] Yet, now time has come to help the matter along with the necessary funding.' (respondent 16)

The situation with regard to the deployment and division of personnel is very similar (Flemish government 2005b) in that new recruitment for ESD failed to occur while the DESD brought about changes in the tasks and responsibilities of existing personnel (Flemish government 2010b). In the EE Unit, two policy advisors were deployed to coordinate the ESD consultation platform and to study and foster ESD as an important trend affecting EE policy and practice (Flemish government 2010a). In other policy areas (e.g. the Department of Education and Training, the Tourism Flanders Brussels Agency, the Flemish Department of Foreign Affairs, the Department of Culture, Youth, Sport and Media and the Agency for Socio-Cultural Work for Young People and Adults) staff members were not full-time seconded but spent time on the promotion, coordination and implementation of ESD in their policy area.

Policy discourses and programmes

With our analysis of policy discourses we both focus on the actors' views and narratives about sustainable development, education, and ESD and on the specific content of policy documents and measures (Arts et al. 2006).

Through cooperating with diverse actors for concrete realisations such as workshops or publications, the members of the ESD consultation platform experienced that ESD is a 'difficult' concept, a flag that covers a diverse cargo: it is applied in various and very different fields. Therefore, a task force was set up so as to create a common conception of ESD (Flemish government 2009b) resulting in the brochure 'ESD: Flag and Cargo' (2010c) that describes ESD as

'[...] learning to think about and work towards a liveable world, now and in the future, for ourselves here and others elsewhere on the planet. The aim is therefore to equip individuals and groups with the skills they need to make conscious choices for such a liveable world' (Flemish government 2010c, 4–5).

In order to achieve these aims, according to the brochure, ESD has to pay attention to a number of key principles: transferring new knowledge, encouraging systems thinking, aiming at value development, taking into account emotional aspects and being action-oriented. The interviewed policy advisor argues how this brochure has influenced ESD practices in Flanders. It has been issued on 3.000 copies and diverse actors referred to it in their own publications, mission statements and educational materials. In our survey seven respondents indeed explain that this brochure affected their understanding of ESD. Furthermore, in the answers to our question about how they conceptualise ESD elements regularly occurring are the assumption that ESD is a matter of information, awareness-raising, and participation that should contribute to a change in attitude, mind-set, and behaviour; that it should foster support for sustainability measures; that it should prepare people for their role in a sustainable world by

developing the necessary competences; and that it should enable people to make proper choices.

'[ESD is] showing students the need for a transition, preparing them for the things to come, and letting them participate in this transition.' (respondent 11)

'[ESD is] the development of competences that contribute to making sustainable choices, taking into account the impact now and in the future, for ourselves and for others, here and elsewhere.' (respondent 14)

Whereas some respondents understand sustainable development as a balance between people, planet, and profit, others strongly contest this view.

'[Sustainable development is] the sustainable use of resources, thinking about the future (long term) while developing new processes in all areas, cradle to cradle, seeking balances between the economy and the environment...' (respondent 9)

'What should certainly be avoided, is taking for granted the image of a balance between people, planet, and profit. In contrast with assumptions from the managerial point of view, those three aspects are not of equal value. That is why I prefer the image [...] representing the economy (profit) as an embedded sphere within society (people) that is in its turn embedded in the environment (planet). This image is very useful to clarify what sustainable development is really about.' (respondent 15)

A related discussion that regularly arose in the policymaking process regards the relation between EE and ESD (Flemish government 2005a; Minaraad 2007; Cherretté 2009). Most stakeholders consider EE as just one subset of ESD, alongside, for example, health-, peace-, citizenship-, development-, human rights education. This broad variety of educational efforts, it is argued by the strategic advisory councils for education and for environment, nature and energy policy, should contribute to ESD, which, then, serves as a 'compass' for all forms of education by interpreting various contents within the sustainable development framework (VLOR and Minaraad, 2007). On the other hand, it is emphasised that

not the entirety of EE practice should be reoriented towards ESD. Basic nature education remains valuable. This view is also reflected in the brochure 'ESD: flag and cargo' and has been expressed by three respondents that participated in our survey. Furthermore, eleven respondents explained that the DESD has been a trigger for reflection on current (EE) practices. Three of them particularly mentioned their participation in the task force that wrote 'ESD: flag and cargo'. The interviewee, too, stressed that the DESD has brought about a time for reflection about day-to-day practices, not only about EE but also about education in general. This also fostered discussions about how to understand education.

'A [...] tension with regard to the conception of education, is the difference between those who think instrumentally, based on a strong sense of urgency, and plea for direct behavioural change as opposed to others who support a pedagogical, emancipatory perspective putting the learning process and personal development first rather than direct results.' (respondent 16)

Since 'green economy' is put forward by the UNECE Steering Committee for the DESD as an important topic, it is a core subject of discussion within the ESD consultation platform (Flemish government 2011; 2012b; 2012c). In a UNECE discussion paper, ESD and green economy – understood here as 'an economy where economic prosperity can go hand-in-hand with ecological sustainability' (UNECE 2011, 3) – are considered to be 'two sides of the same coin' (Ibid. 2), that is, ESD is assumed to master the greening the economy from the bottom up 'because it has the ability to equip people with the values, competences, knowledge and skills that are necessary for them to put the green economy concept into practice'. Thus, the emphasis is on fostering 'green skills', raising awareness ('sustainable thinking'), and promoting sustainable consumption and production.

During the meeting of the ESD consultation platform in October 2012 (Flemish government 2012c) the participants were asked to report on their intentions with

regard to 'green economy' as well as on how they view the role of the platform in this respect. As to the latter, the response was somewhat ambiguous. On the one hand, the platform was urged to take concrete initiatives (e.g. curricular reform) and mobilise relevant stakeholders (e.g. the Minister of Education and business partners). On the other hand however, several participants argued that the concept of green economy remains unclear and ambiguous and emphasised the need for further study, training, and information exchange as well as the importance of 'remaining critical', particularly with respect to how the notion of green economy is framed on the international level.

Discussion: the interaction of Flemish ESD policymaking with broader societal developments

Our case study shows how the day-to-day policymaking process in Flanders is inextricably intertwined with three overall developments in environmental and educational policymaking that affect ESD policy and practice: the increasing impact of ESD policy and discourse on EE, the framing of social and political problems as learning problems, and ecological modernisation. In the remainder of this article, we discuss this interaction drawing on our empirical analysis and connecting it to the academic discussion on these developments.

The influence of ESD policy and discourse on EE

With the Brundtland Report the concept of 'sustainable development' was launched as a 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' (WCED 1987, 43). Since then this notion increasingly affects EE (Tilbury 1995; Postma 2004). This evolution is in essence policy-driven (Jickling and Wals 2007; Nomura and Abe 2009) as it has been furthered by a succession of decisions made by international institutions. Agenda 21, the global action plan that arose from the United Nations Conference on Environment and Development (Earth Summit) in

Rio de Janeiro in 1992 considered EE as an essential instrument for the realisation of a sustainable future and devoted a chapter on 'Promoting Education, Public Awareness and Training'. The UN Summit in Johannesburg in 2002 (Rio+10) endorsed the importance of education in the pursuit of sustainability and incited for the establishment of the UN Decade of ESD which, eventually, has been announced on December 20, 2002 by the UN General Assembly. Our case study indeed reveals how the growing influence of ESD policy and discourse did not only bring about a reallocation of resources (funds and personnel) from EE to ESD but also implies that policymaking within the EE unit is increasingly affected by strategies that are put forward by international institutions.

Yet, the observation that ESD is becoming more and more established in EE does not imply that the relation between both concepts is clear for everybody. Several authors have argued that the distinction between EE and ESD remains insufficiently clarified and that a multitude of different perspectives exists simultaneously (Gadotti 2008; Mogensen and Schnack 2010; Reid and Scott 2006; Chapman 2007). The efforts made in Flanders so as to develop a shared understanding of ESD (cf. the brochure 'ESD: flag and cargo') can be seen as an attempt to clarify this notion that is perceived as a 'difficult concept' and to increase understanding as to how it relates to EE and other educational fields. The strategic advisory councils for environment, nature and energy policy and for education also engaged in such a discussion that resulted in an image of ESD as 'a compass' for all forms of education.

Furthermore, opinions concerning the desirability of ESD as a new leitmotiv for EE are also sharply divided. Whereas policymakers worldwide pay lip service to sustainable development and ESD enthusiastically, in research literature a persistent debate is going on between advocates and opponents of the concept of sustainable development in general as well as of the idea to replace EE by ESD. Critics consider sustainable development an ambiguous catch all term that

conjoins profoundly contradictory meanings and, in its vagueness, succeeds in reconciling the most conflicting ideologies (e.g. Dobson 1996; Gunder 2006; Jickling and Wals 2007; Räthzel and Uzzell 2009). Sustainable development is thus the subject of a continuous, more or less explicit struggle over divergent interpretations which, critics argue, has been settled in favour of neoliberal economic thought and its concomitant political ideals which serve as an impediment for fundamental social change (Huckle 1999; Gunder 2006; Jickling and Wals 2007; Gadotti 2008). We observed how this struggle is also felt in Flemish ESD policymaking as it is reflected in the discussion about the conception of sustainability as a balance between people, planet, and profit.

Thus, since this problematic notion of sustainable development turned up in the context of EE, it brought about contestation as to the desirability to complement or replace EE with ESD. We found how diverse actors in Flanders emphasised the value of 'basic nature education' and stressed that not the entire EE sector should be reoriented towards ESD. In the scholarly debate, advocates of ESD consider it an indispensable contribution to the pursuit of sustainable development (e.g. McKeown and Hopkins 2007; Paden and Chhokar 2007; Bajaj and Chiu 2009; Hopkins 2009), while opponents regard this stance as an undue instrumental approach to education, reducing it to merely an instrument to promote a specific, predetermined kind of 'sustainable' behaviour (e.g. Jickling 1994; Sauvé 1999; Scott 2002; Jickling and Wals 2007; Breiting 2009; Östman 2010; Lundegård and Wickman 2012). They argue that this brings about homogenising effects – all the more problematic because of the ambiguity that characterises the notion of sustainability – and reduces the space for autonomous decision-making. Therefore, they emphasise that EE and ESD demand a 'pluralistic' approach to education, one that acknowledges, stimulates, and engages a variety of values, interests, and knowledge claims. Although the plea for such a pluralistic approach is broadly supported by EE and ESD scholars, at the same time the concern is

raised that pluralistic educational practices might be inadequate to address urgent sustainability problems (e.g. Læssøe 2007; Wals 2010; Kopnina 2012). As the policy advisor we have interviewed indicates, a similar discussion between ‘those who think instrumentally’ and ‘others who support a pedagogical, emancipatory perspective’ emerged in Flanders as well.

Furthermore, the scholarly debate about EE and ESD elaborately addresses gaps between discourse and practice. Some authors argue that, because of the focus on ESD, the merits of environmental education’s long tradition, that is, a body of literature and several (international) Declarations, is overlooked so that valuable ideas and experiences fall into oblivion and time is wasted on the ‘re-invention of the wheel’ (Palmer 1998; Berryman 1999; Sauvé 1999; Chapman 2007; Gadotti 2008). ESD advocates acknowledge these merits, yet they raise objections to dominant practices of environmental education that are failing to realise the ambitious principles and purposes put forward in the discourse on it (Smyth 1999; González-Gaudiano 1999; Gough and Scott 1999). The DESD, it is argued, then provides the opportunity for a ‘fresh start’ (Huckle 1999). Opponents, however, doubt that the discourse on ESD will ensure ‘desirable’ practices. A similar gap between discourse and practice can emerge here as well (Sauvé 1999; Sauvé and Berryman 2005; Selby 2006; Mogensen and Schnack 2010). In Flanders, the interviewed policy advisor as well as several respondents to our survey indicated that the DESD served as ‘a trigger for reflection’ on current (EE) practices.

The framing of social and political problems as learning problems

An undeniable development that affects overall educational policy – but also educational theory and practice – is the tendency to frame social and political problems as ‘learning problems’ (Biesta 2004; Simons and Masschelein 2006; 2009). During the twentieth century the role of education within society changed as national governments started to think of themselves as being responsible for

governing the relation between education and society (Simons and Masschelein 2006). This relation has been conceived in different ways. For instance, education has been understood as a prerequisite in the pursuit of social transformation (e.g. reducing social inequality) but also as a necessary instrument for the conservation of particular social and cultural values and, thus, to secure the stability of society. Despite such ideological differences, Simons and Masschelein highlight the shared horizon for this governmental concern with the role of education in society: the assumption that governments have to intervene in education in view of social (and related cultural or economic) concerns. In other words, learning emerges as a solution for numerous problems and learning policy and experts in education are deployed to resolve social problems. Individual learners should acquire the 'proper' knowledge, insights, skills, and attitudes. They have to 'learn' to adapt their behaviour to what is considered desirable and make themselves competent to deal with the given challenges. This tendency is part of a broader process of individualisation in contemporary society where the responsibility for social problems is increasingly reserved for individual people (Finger and Asün 2001). Drawing on the insights of Michel Foucault, Simons and Masschelein (2006, 414) elaborate how the 'governmentalisation of learning' is closely linked to the individualisation and de-socialisation of problems as in the current governmental regime individuals are addressed as 'subjects that are situated in an environment which [they] have to adapt proactively and creatively in order to satisfy [their] needs – that is, a regime in which [they] are (interpellated to be) entrepreneurial selves'. Learning, thus, is increasingly understood as a condition for individual autonomy and people are addressed as being responsible for (regulating) their own learning.

This tendency to translate 'societal problems' into 'educational solutions' (Simons and Masschelein 2006, 395) pre-eminently applies to ecological issues and sustainable development. Ever since the relationship between people and their

natural environment has been conceived as problematic, appeals have been made to education (Postma 2004). Since the beginning of the twentieth century there is a field of educational theory and practice developing from nature education over conservation education and environmental education toward education for sustainable development (Tilbury 1995; Palmer 1998; Postma 2004). Within this historical development, at least one thing remained constant: education has predominantly been conceived as an instrument to tackle the evolving social and political challenges concerning the environment. In confrontation with changing ecological problems such as urban children's increased alienation of nature, problems of nature conservation, the environmental crisis and issues of (under)development educational policy and reform are designed to change people's behaviour, attitude, and mentality in a particular, preconceived way.

In our case study ecological and sustainability issues predominantly emerge as matters of individual learning and the aims of EE and ESD are almost exclusively defined in terms of individual dispositions. This is strongly reflected in the only imperative rule of the game on ESD in Flanders, that is, the revised final objectives that translate sustainability in a set of 'key competences' individual pupils should achieve. Furthermore, the way ESD is defined in 'ESD: flag and cargo' as a process of 'equipping individuals and groups with the necessary skills to contribute to a liveable world', as well as the key principles put forward in this brochure and the conceptualisation of the relation between ESD and green economy also show how the social and political challenge of sustainability is easily translated in 'educational solutions' (e.g. the transfer of knowledge and values, green skills, competences such as systems thinking). The answers to our postal survey emphasising e.g. awareness-raising, behavioural adjustment, and the need to prepare people for their role in a sustainable world by developing the necessary competences reveal the prevailing of a similar interpretation of ESD. An ecologically sound and sustainable society emerges thus as a challenge that can

be met by applying the proper learning strategies and, thus, education becomes first and foremost a matter of socialisation, that is, the acquisition of particular knowledge, skills, competences, or dispositions. EE and ESD are reduced to instruments to foster the values and principles of sustainable development, to promote corresponding behavioural changes, and to qualify people for the role of active participants that contribute to the democratic realisation of sustainable development (Ferreira 2009; Van Poeck and Vandenabeele 2012). As we already showed above, this tendency to frame sustainability as a learning problem is also addressed in the debate concerning the influence of ESD policy and discourse on EE as such an 'instrumental' approach to education is criticised by scholars as well as policy actors. A particular subject of discussion within the Flemish policy process is the taken-for-granted connection between a competence oriented understanding of ESD and the pursuit of a green economy.

Ecological modernisation

The framing of sustainable development as a learning problem is reinforced by a third development we want to address: the discourse of 'ecological modernisation' as the new dominant way of conceptualising environmental problems in the Western world that has emerged since the late 1970s as a result of a particular interplay between governments, environmental movements, and key expert organisations (Hajer 1995). Here, too, the Brundtland Report is considered a milestone for the emergence of this discursive shift within different industrialised countries as well as in international organisations such as the UN, the OECD, and the European Union (Hajer 1995; Mol and Spaargaren 2000). In line with Hajer (1995, 44) we understand 'discourse' as a 'specific ensemble of ideas, concepts, and categorisations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities'. Acknowledging the consideration that (environmental) discourse is thus inevitably place and time specific as well as the need to differentiate

between different sorts of ecological modernisation (Hajer 1995; Christoff 1996; Mol and Spaargaren 2000), we nevertheless want to depict the overall features of this discourse as these affect ESD policymaking in Flanders today.

Although within the discourse of ecological modernisation it is acknowledged that 'structural design faults' in the core institutions of modern society – i.e. the industrialised production system, the capitalist organisation of the economy and the centralised state – cause severe environmental destruction (Mol and Spaargaren 2000) it is all the same assumed that the existing political, economic, and social institutions can *internalise* the care for the environment (Hajer 1995). Hence, a fundamental transformation of these societal structures does not appear here as a prerequisite for tackling this crisis. As such, ecological modernisation challenges the radical environmentalist critique of the 1970s that argued for a fundamental reorganisation of those institutions that are involved in the modern organisation of production and consumption. A key assumption is, thus, the possibility of reconciling economic growth, technological development and the solution of ecological problems. Within this discourse, the environmental challenge is regarded a management problem as well as a 'positive-sum-game': 'there would be no fundamental obstructions to an environmentally sound organisation of society, if only every individual, firm, or country, would participate' (Hajer 1995, 26). In Flanders, the influence of an ecological modernisation perspective can be found in the discourse about a green economy 'where economic prosperity can go hand-in-hand with ecological sustainability' as well as in the conception of sustainability as a balance between ecological, social, and economic concerns. We also showed, however, that both discourses are the subject of discussion among the actors involved.

Hajer (1995) emphasises that although the political scientists who introduced the concept of ecological modernisation (Joseph Huber and Martin Jänicke) allocated a central role for technological innovation and economic development, the

conceptual change actually stretches to many other domains (see also Mol and Spaargaren 2000) such as the techniques of environmental policymaking, the role of science and scientists, micro-economic and macro-economic strategies, the legislative discourse and, finally, participatory practices. As to the last, ecological modernisation brought about a reconsideration of participation seeking to bring to an end the former sharp antagonistic debates between the state and the environmental movement by acknowledging new actors and creating new practices (e.g. active funding of NGOs, round table discussions). Læssøe (2007; 2010), too, highlights that ecological modernisation did not only put forward 'participation' as a new buzzword but also brought about a reconsideration, i.e. a narrowing of participatory practices. His analysis of citizen participation in environmental issues in Denmark reveals an orientation towards consensus and the marginalisation of any conflicts or contestation concerning values, political ideology, and the ever-present tension between private and collective interests. In this respect, ecological modernisation is closely linked to a comprehensive transformation of the political domain of society within which government is no longer the exclusive centre of political control and new, more cooperative forms of political and administrative arrangements emerge (Pierre and Guy Peters 2000; Hajer et al. 2004). This process of 'political modernisation' (Arts et al. 2006) implies new relationships of power between state, market, and civil society as well as new notions and practices of policymaking. In our case study, such a reconsideration of participatory practices is reflected in the role of the ESD consultation platform (i.e. contributing to the implementation of policy), the way it is composed of a variety of actors collaborating as a coalition of ESD advocates, and the persistent criticism about the lack of involvement of 'all relevant stakeholders'. Yet, here too, contestation emerged as well, particularly as to the desirability to build alliances (and, thus, consensus) with partners from business circles.

Conclusions

Our analysis of the Flemish policy practice shows how the increasing influence of ESD policy and discourse on EE, the framing of sustainability as a learning problem, and ecological modernisation gave shape to the boundaries of a particular governmental regime. Drawing on Foucault's 'governmentality' perspective, Ferreira (2009, 612) argues that within such a regime 'a range of semi-normative prescriptions [...] work to include, exclude and govern what it is acceptable (possible) to think and what it is acceptable (possible) to do' (Ferreira 2009, 612). Nevertheless, our case study also shows that these developments do not completely determine ESD policymaking in Flanders. We observed, for instance, that whereas stakeholders' role in the consultation platform has been set rather formalistically (representation, consultation, and implementation of the DESD) participants themselves described it in terms of a valuable dialogue, where differences could sometimes be articulated and could work as a trigger for reflection on existing educational practices and policy. The prevailing (competence-oriented) instrumental conception of education has been the subject of discussion as well as, for example, the connection between ESD and green economy and the need to build alliances with partners from business circles. Our analysis of the policymaking process with regard to ESD in Flanders within the context of those broader social and political developments allowed us to understand how policy settings bring about powers that legitimise and maintain as well as counteract the bounds of a particular governmental regime (Duyvendak and Uitermark 2005, Ferreira 2009).

Obviously, more empirical research is required so as to achieve a more comprehensive understanding of the DESD and the actual policy translations and implementation processes it has brought about. The need for further research is not limited to policy analyses in other geographical contexts (subnational, national, and international). Empirical case studies focusing on the interaction

between policymaking on the one hand and educational practices on the other hand are indispensable to achieve a deeper understanding of the DESD. The present case study on ESD policymaking in Flanders is part of a broader doctoral research project in which we also studied very different educational practices: the transition town movement, the project 'Environmental Performance at School' ('Milieuzorg Op School'), an environmental education centre, a Community Supported Agriculture initiative, a regional centre for action, culture, and youth, a transition arena for a climate neutral city, and an organisation that offers workshops to promote ecological behaviour change. These multiple case studies, too, show how the (international and Flemish) ESD policymaking contributes to the establishment of a particular regime which defines the contours of what is 'sayable', 'seeable', 'thinkable', and 'possible' (Simons and Masschelein, 2010b, 512). It affects what becomes (im)possible in concrete educational practices as well as how we can (or should) think and speak about these practices. Our analysis revealed that the increased influence of ESD also affects the examined EE practices. We thus observed how the consensual catch-all term 'sustainable development' reduces the space for contestation and controversy within these practices. Furthermore, we repeatedly observed how the prevailing discourse of ecological modernisation and its emphasis on 'collaboration' between 'allies' and on 'managing' ecological problems encourages practitioners to see the issues at stake and to think and speak about them in a very particular way and to act accordingly. Finally, we found that the framing of sustainable development as a learning problem fostered an emphasis on socialisation and qualification within the examined EE practices.

Masschelein and Simons (2003) emphasise that – although it might be tempting – a regime such as the one we described cannot be interpreted as a 'system' that can be changed (or, at least, that we can try to change) according to plan. Rather, it generates effects by *appealing* to people (i.e. ESD and EE policymakers and

practitioners but also participants) for a particular way of seeing, speaking, thinking, and acting (i.e. in relation to sustainability issues and educational practices). With our research, we aim to describe and, thus, to show EE/ESD policy and practices sometimes legitimise and maintain but at particular moments also counteract the bounds of this regime. By bringing this forward in our descriptions we want to invite and inspire the reader to be attentive to different ways of seeing, speaking, thinking, and acting. Such inquiries can contribute to what Ferreira (2009) calls 'unsettling the taken-for-granted' in EE and ESD, illuminating how certain orthodoxies have become 'normal' and 'obvious' all the same, how these orthodoxies assumes the possibility of infringement, and subversion (Duyvendak and Uitermark 2005; Ferreira 2009).

Learning from sustainable development. Education in the light of public issues.¹²

Introduction

Since the publication of the Brundtland Report (WCED 1987), sustainable development has played an increasing role in environmental education policy and practice. Education for sustainable development (ESD)¹³ is primarily policy-driven, highly influenced by decisions made in international institutions (Jickling and Wals 2007; Nomura and Abe 2009). Nevertheless, opinions concerning the desirability of ESD as a new focal point for environmental education are sharply divided (e.g. Jickling 1994; Sauvé 1996; Sauvé 1999; Smyth 1999; González-Gaudiano 1999;

¹² This manuscript – co-authored by Joke Vandenabeele – has been published in *Environmental Education Research*. We thank the three anonymous referees for their very helpful suggestions.

¹³ The notion ‘Education for sustainable development’ (ESD) is highly contested in academic literature. Different authors use more than twenty distinct terms to point to learning processes in the field of sustainability issues: ‘education for sustainable development’, ‘education about sustainable development’, ‘education as sustainability’, ‘learning as sustainability’, ‘education for sustainability’, ‘learning for sustainability’, ‘sustainable education’, ‘sustainable learning’, ‘environment and development education’, ‘education for environment and sustainable development’, ‘education for environment and development’, ‘environmental education for sustainable development’, ‘education for sustainable futures’, ‘education for a sustainable future’, ‘environmental education for equitable and sustainable societies’, ‘environmental education for sustainable societies and global responsibility’, ‘environmental education for the development of responsible societies’, ‘education for a better world’, ‘education for sustainable contraction’, ‘education consistent with Agenda 21’, ‘education 21’, ‘ecopedagogy’, etc. Each (slight) distinction refers to differences in opinion and/or interpretation. It is beyond the scope of this article to consider this discussion extensively. Instead, we pragmatically use the term ESD since we address the increasing influence of sustainable development on environmental education as a policy-driven tendency and ESD is the word used in policy discourse. In our conclusion, yet, we put forward the idea of ‘learning from sustainable development’ as an alternative perspective that takes into account several concerns that play a part in this debate.

Huckle 1999; Gough and Scott 1999; Foster 2001; Scott 2002; Sauvé and Berryman 2005; Selby 2006; Jickling and Wals 2007; Chapman 2007; Sumner 2008; Gadotti 2008; Bajaj and Chiu 2009; Mogensen and Schnack 2010). Critics have raised the concern that education *for* sustainable development – like education *for* anything else – reduces education to a mere instrument for promoting a specific kind of ‘sustainable’ behaviour (Jickling 1994). At the core of this debate is the problematic relationship between democracy and sustainable development (Læssøe 2007). In February 2010, this journal devoted a special issue to the meaning of democracy and values in relation to environmental and sustainability education. Sustainability issues are situated in a field of tension between the personal and the political, as almost every ‘private’ decision has ‘public’ consequences and social conditions affect individuals’ freedom of choice. They have far-reaching implications and require a democratic approach based on participation. Yet it is by no means obvious that citizen participation will enhance sustainability and serve ‘the common good’. Læssøe (2007) emphasizes that there are no simple and obvious ways in which this tension may be resolved. Wals (2010) highlights this as a paradox between the sense of urgency emerging from a deep concern about the state of the planet and the conviction that it is wrong to persuade people to adopt pre- and expert-determined ways of thinking and acting. In this article, we address the issue of democracy in ESD, focusing on how educational practices can deal with this unsolvable tension.

As part of a PhD study on the challenge posed to environmental education practices by growing policy attention for ESD, we conducted an exploratory study of the literature in order to grasp the academic debate between advocates and opponents of ESD. We analyzed 64 references, for the most part articles published in disciplinary journals¹⁴ but also papers from journals with an interdisciplinary or

¹⁴ e.g. ‘Environmental Education Research’, ‘Journal of Environmental Education’, ‘Southern African Journal of Environmental Education, Ethics and Action’, ‘International

educational sciences focus, conference papers, and books. References were selected in those disciplinary journals as well as by consulting the Web of Science, using key words such as 'ESD', 'education for sustainable development', 'sustainable development' or 'sustainability' combined with 'education' or 'learning', 'DESD' and 'Decade of education for sustainable development'. Furthermore, the reference lists of selected sources yielded additional references. This analysis did not only clarify the diverse points of view on the relationship between environmental education and ESD, but it also drew our attention to the argument advanced by many authors that education in the context of sustainable development is closely linked to citizenship and requires both an individual and a collective focus (Jickling and Wals 2007; Breiting 2009; Mogensen and Schnack 2010; Jensen and Schnack 1997; Räthzel and Uzzell 2009; Huckle 1993; Huckle 1999; Orr 2002; Gadotti 2008). The latter is particularly relevant in the context of this PhD research, which is part of ongoing research at the Laboratory for Education and Society, Katholieke Universiteit Leuven. The aim of the Laboratory is to articulate new and highly diverse societal challenges through the development of theory (by forming concepts and language). Research at the Laboratory starts from the observation that fundamental transformations are taking place in society as well as in educational sciences and its disciplines. As a consequence, educational theory and practice face important challenges. The educator is confronted with developments and practices in which the question on how to live, both individually and socially, is posed anew. The Laboratory discusses problems and questions related to education, not as private and individual matters, but always as public concerns.

Research in Geographical & Environmental Education', 'Canadian Journal of Environmental Education', 'The journal of the Australian Association for Environmental Education', 'Journal of Sustainability in Higher Education' and 'Applied Environmental Education and Communication'

From this perspective, we want to contribute to the debate on the democratic paradox in ESD. As we will explain below, we did not find the necessary concepts and arguments in the ESD and environmental education literature. Therefore, we explored the literature about democracy, citizenship and civic learning. This analysis is theoretically anchored in the distinction made by Lawy and Biesta (2006) between a 'citizenship-as-achievement' and 'citizenship-as-practice' approach. We first show how the dominant discourse on ESD translates issues of sustainable development into the traditional concept of 'citizenship-as-achievement', defining these issues as learning problems faced by individuals and reinforcing an instrumental relationship between learning, citizenship, and democracy. In the second part of this article, we analyze how Biesta but also Todd and Säfström criticize this 'citizenship-as-achievement' perspective. Drawing on Jacques Rancière's and Chantal Mouffe's democracy theories, they present vital insights for a radically different perspective that is based on a process of subjectification rather than socialization. Third, we show how these insights can offer a new perspective for ESD. We argue that presenting sustainable development issues as 'public issues', as matters of public concern, allows educational practices to move beyond socialization and to experiment with the tension between a sense of urgency and the need for democratic participation.

Citizenship-as-achievement

There is a tendency in contemporary society to frame processes of social change as a challenge for individuals to acquire the proper knowledge, behaviour and competences (Simons and Masschelein 2010; Biesta 2004). Education experts are deployed and the learning of individuals as well as groups and communities emerges as a solution for numerous problems (Wildemeersch and Vandenabeele 2007). This applies to sustainable development in particular. UNESCO's (2005) International Implementation Scheme for the Decade of ESD (DESD) states that

the general target of ESD is to foster the values and principles of sustainable development and to promote corresponding behavioural changes.

'The overall goal of the DESD is to integrate the principles, values, and practices of sustainable development into all aspects of education and learning. This educational effort will encourage changes in behaviour that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations.' (UNESCO 2005, 6)

A similar interpretation is reflected in the UNECE Strategy for ESD, which defines ESD as a 'prerequisite for achieving sustainable development' (UNECE 2005, 1). In the international policy discourse on ESD, issues of sustainable development are thus mainly seen as matters of individual learning, as problems that can be tackled by applying the proper learning strategies.

The view that ESD is an effective tool in changing individual behaviour (Paden and Chhokar 2007) is equally prevalent in the academic literature, which suggests that educators should develop 'strategies to help [...] people to choose more sustainable options' (Monroe 2007, 108). Nevertheless, others argue that the purpose of education is not to contribute to solving specific sustainability problems here and now by promoting particular behavioural outcomes but that it should aim at the 'empowerment' of active, critical, and independent citizens that are able to decide for themselves and to participate in democratic decision-making (Jickling and Wals 2007; Breiting 2009; Mogensen and Schnack 2010; Jensen and Schnack 1997; Huckle 1999; Huckle 2008). Breiting (2009, 200) distinguishes between these two approaches as follows:

'We still see major research contributions in the environmental education research field building on the idea that environmental education is about 'manipulating' learners and grownups into becoming individuals exhibiting 'correct attitudes and behaviours' related to the environment following a 'treatment' or an 'intervention' with the necessary tools by the teacher or through

an environmental education programme. While the terms used here are deliberately stark, the key issue they articulate is the discrepancy between the idea that environmental education should foster active, critical and independent citizens and other views that position learners as marionettes for the good intentions of environmentalists or environmental educators.'

However, within this scope of active citizenship the emphasis is also on qualification and on fostering particular outcomes. Here, this is articulated in the expectation that education can qualify people for the role of active participant and provide them with the proper learning experience to democratically achieve sustainability. This is particularly – though not exclusively – the case in the 'action competence approach' to environmental education and ESD (Jensen and Schnack 1997; Breiting 2009; Mogensen and Schnack 2010).

'[...] one key role for ESD in an action competence approach becomes that of developing the students' ability, motivation and desire to play an active role in finding democratic solutions to problems and issues connected to sustainable development. The challenge for ESD in this perspective is to identify what kind of learning can qualify the learners' sound choices in a reality that is often characterised by complexity and uncertainty, and which also motivates them to be active citizens who are able to set the agenda for changes if necessary. In this sense, sustainable development is more a matter of democratic citizenship than compliance and individual behaviour – and ESD is in a never-ending process of learning about how to qualify the participants to cope with this citizenship role in a sensible way.' (Mogensen and Schnack 2010, 68-69)

However, translating education into a process of qualification and of teaching people how to behave as active participants in a democratic society is not unproblematic. This learning perspective is closely linked to what Lawy and Biesta (2006) have called 'citizenship-as-achievement', i.e. the idea that citizenship is a status that individuals can only achieve by moving through a particular learning trajectory. Citizenship is thus pinned down to a particular set of knowledge,

attitudes and skills and a lack of these can serve as a ground for excluding people from involvement. At the core of this view is what Biesta (2011a) calls a 'socialization conception' of civic learning. Everyone has to be socialized into the same standard and this standard is ultimately based on a cluster of knowledge claims: 'knowledge about what a good citizen is; knowledge about what a good citizen needs to learn; and knowledge about how individuals can learn to become good citizens' (Biesta 2011a, 142). The meaning of citizenship as an essentially contested concept is ignored, and the space for marginalized voices and for alternative arguments and points of view is limited.

In the next section of the paper, we explore the views put forward by Biesta, Todd and Säfström, who developed a concept of education and citizenship that turns this dominant socialization perspective upside down. Whereas the argument proposed by the socialization approach to civic learning is that we need proper learning as individual citizens in order to develop a better democracy, Biesta suggests 'that we need more and better democracy in order to get better citizens' (Biesta 2011b, 8). Within such a 'citizenship-as-practice' perspective (Lawy and Biesta 2006), the focus is no longer on the competences that citizens must achieve, but on the democratic nature of the spaces and practices in which citizenship can develop.

Citizenship-as-practice

In a special issue of 'Studies in Philosophy and Education' on 'Education, Conflict and the Political' (Ruitenberg 2011), Biesta, Todd and Säfström draw on the democracy theories developed by Jacques Rancière and Chantal Mouffe as they try to move beyond a socialization perspective on citizenship education. Vital to this attempt is (1) Rancière's radical interpretation of equality, (2) both authors' understanding of democracy as a disruption of the existing order and (3) their emphasis on the importance of dissensus. Within the context of this article, we

draw on these three crucial theoretical aspects but do not discuss these theories extensively.

Rancière's egalitarian view is reflected in his definition of democracy as 'the power of those who have no specific qualification for ruling, except the fact of having no qualification' (Rancière 2004, 305 in Simons and Masschelein 2010, 593). Mouffe and Rancière both emphasize the limitations of an 'ordered' understanding of democratic politics (Biesta 2011a). For Rancière (1999; 1995b), democratic politics should be understood as a process of 'subjectification' through which new ways of doing and being come into existence. Subjectification differs from identification, which is a process of taking up an identity within the existing order. Subjectification, on the other hand, always involves 'disidentification', embracing a way of being that had no place in the existing order of things. Subjectification is therefore a supplement to this order (Rancière 2003), because it adds something to it and, in doing so, also divides the existing order. Although Mouffe (1993) recognizes the importance of order for the everyday democratic conduct of our lives, she stresses that any political order can only exist because of a division between 'inside' and 'outside'. This division is itself the most fundamental political 'moment'. Those placed outside the political community, Mouffe (2005) argues, are not excluded because they lack rationality or morality but because their political values are different from those held by insiders. The fact that some are included and others are excluded is thus political in nature. It is the effect of power, of the particular hegemonic construction of inside and outside. However Mouffe (2005, 120) does not advocate 'pluralism without any frontiers', considering all demands in a given society legitimate. The boundaries of the democratic community, she argues, are based on a conflictual 'consensus about the ethico-political values of liberty and equality for all' (Mouffe 2005, 120), i.e. a consensus about those values and the possibility of dissent about the interpretation of them. Mouffe thus separates those who plainly reject these

values and those who recognize them but are willing to struggle about the interpretation. Rancière is more radical, in claiming that the essence of democratic politics is the participation of those on the outside, who even hold values that are not recognizable for those on the inside (Panagia 2009). Or as he puts it: 'It makes visible what had no business being seen, and makes heard a discourse where once there was only a place for noise' (Rancière 2003, 30 in Biesta 2011b, 2). By engaging in this act of impropriety, they become political subjects and disrupt 'the framing forces that sustain continuity within a system'. Both Mouffe and Rancière thus reject a consensual understanding of democratic politics. For Rancière, politics is 'dissensus'. Mouffe (2005) criticizes a rationalist approach that denies the ineradicable character of antagonism and the existence of conflicts for which a rational solution can never be found. Democratic politics always requires making choices between conflicting alternatives. It is matter of passion and commitment, arising from people's dreams and desires. Its aim is to transform antagonism into agonism. Antagonism is a struggle between enemies who do not have any common basis whereas agonism is a struggle between conflicting parties who acknowledge the legitimacy of their adversaries even though they realise that there is no rational solution for the conflict at stake. Transforming antagonism into agonism requires a common symbolic space where conflict can emerge.

The theories put forward by Mouffe and Rancière have inspired Biesta, Todd and Säfström to develop ideas about citizenship education corresponding to what we have referred to as a 'citizenship-as-practice' perspective, which challenges the assumption of a linear, instrumental relationship between learning, citizenship, and democracy. Citizenship education is then a civic learning that is intrinsically related to the experiment of democracy in a non-linear way, that is: 'it does not lead [...] from a state of not being a citizen to being a citizen, but fluctuates with people's actual experiences of citizenship and with their engagement in

democratic experiments' (Biesta 2011b, 6). This creates a space for a 'subjectification conception' of civic learning (Biesta 2011a) that is opposed to the dominant socialization conception in many respects. Civic learning as subjectification is not aimed at the acquisition of particular knowledge, skills, competences, or dispositions but has to do with an exposure to and engagement with practices where 'public solutions are sought, negotiated and agreed for private troubles' (Bauman 2000, 39 in Biesta 2011b, 6). Those solutions cannot be determined in advance but require, again and again, an experimental engagement. Past experiences of engagement continue to play a role in future experiences and actions, and in this sense it is also cumulative process. Learning, then, stems from a 'desire for democracy', from the will to engage in debates and actions that may enhance the quality of our society. From this point of view, learning for participation is not the first aim in democratic processes. Nevertheless, individuals will most probably learn from democratic participation. It is this very engagement that is 'subjectifying': it is a process in and through which subjectivity is established and new ways of doing and being come into existence.

Säfström (2011) develops an analogous argument by distinguishing between 'schooling' and 'education'. Schooling, he argues, is based on the assumption that teaching and learning reveal the inner truth of society, in which one is supposed to occupy a predetermined place corresponding to that truth. Through schooling, the individual is introduced into a certain regularity and social order. Education, in contrast, enables us to emancipate ourselves, that is, it offers us the possibility of disidentification from the existing order. This freedom, Säfström emphasizes, is not total freedom but one that is always bound to un-freedom and always negotiated in ambiguous contexts where a plurality of views is articulated. This requires a space for conflict as an integral part of learning. Todd and Säfström (2008) argue that 'education needs to be infused with a new ethical and political

language for taking conflict seriously’. This involves turning antagonism into agonism and providing a space for learners to express a plurality of views and, at the same time, to connect these views to larger political articulations. However, as the authors emphasize, this is not an ‘everything goes’ approach.

‘This does not mean accepting, acquiescing to, agreeing with, or merely tolerating different views; this would be absurd. However, it does require a sustained openness to listen to other perspectives and to counter and respond. It requires treating each other as legitimate adversaries who are engaged in debate and struggle over meaning within a set of contesting norms and competing perspectives.’ (Todd 2010, 226)

What is needed, then, is an openness to what is new, foreign, and totally different (Todd 2001).

Citizenship-as-achievement	Citizenship-as-practice
Socialization	Subjectification
Identification	Dis-identification
Reproduction of existing order	Interruption of existing order
Consensus oriented	Conflict oriented
Antagonism	Agonism
Inequality	Equality
Linear process	Cumulative process
Schooling	Education

Table 1: citizenship-as-achievement and citizenship-as-practice

Learning from sustainable development

Also in environmental education and in the ESD literature, the notion of ‘schooling’ is increasingly challenged (Wals 2010). Researchers point at the widely accepted observation that we do not and cannot know what the most sustainable way of living is. They emphasize the importance of a pluralistic approach that aims

at acknowledging, stimulating, and engaging divergent perspectives, views and values (e.g. Öhman 2006; Rudsberg and Öhman 2010; Sandell and Öhman 2010; Jickling and Wals 2007; Wals 2010). Yet, as was mentioned at the beginning of this article, a plea for pluralism presents a paradox. A search for pluralism does not self-evidently enhance sustainability. If all learning outcomes are considered equally valid as long as they have emerged from a pluralistic process, this might even lead to an ‘anything goes’ relativism (Wals 2010). This is problematic since it prevents legitimate criticism of erroneous views and opinions. As Læssøe (2007; 2010) emphasizes, many of the practices of citizen participation and ESD do not even experiment with this tension between pluralism and relativism as they are oriented towards teaching a consensus. Conflicts relating to the values implied in sustainable development are marginalized. This exclusion of dissent and space for collective debate not only neglects the far-reaching impact of sustainability issues but also prevents the learners’ knowledge, values and perceptions from being reflected on *and* challenged. In the remainder of this article, we show how a ‘citizenship-as-practice’ perspective considers this tension between pluralism and relativism at the core of educational practices and thus offers new insights for ESD, both on a theoretical and a practical level.

As both Rancière and Mouffe argue, democracy always involves contrasting options, dilemmas or conflicts. This demands public channels through which collective passions can express themselves on issues. In the context of sustainability, transparent and uncontested facts are rare: experts lack insight into the complex web of causes and effects and it is not clear who (or which groups) will suffer from the consequences (Dijstelbloem 2007). Nevertheless, those consequences are utmost far-reaching and cause social controversies. Researchers as Marres (2005), Dijstelbloem (2007), Simons and Masschelein (2009) indicate that because these issues cannot be dealt with by existing institutions nor by the available expertise, they can develop as ‘public issues’. The

concept of 'public' is in line here with Dewey (1954, 15-16), who defined it as 'all those who are affected by the indirect consequences of transactions, to such an extent that it is deemed necessary to have those consequences systematically cared for'. For Latour (2005a) such issues are 'matters of concern' rather than 'matters of fact'. The people raising concerns about these issues are transformed into a 'public of equals' (Marres 2005; Simons and Masschelein 2009). A lack of particular competences can no longer serve as a ground for excluding individuals and groups from being involved, from being acknowledged as a legitimate part of the public. Such issues therefore demand educational processes where citizens engage with, respond to, and act in confrontation with the issues at stake. Starting from this perspective of 'citizenship-as-practice' learning *from* sustainable development is gaining significance in comparison with learning *for* sustainable development.

Learning *from* sustainable development shifts the focus from the competences that citizens must acquire to the democratic nature of educational spaces and practices. Issues of sustainability are invariably situated in a field of tension between 'trajectories of issue formation' aimed at either 'public-ization' or at 'privatization' (Marres 2005). Privatization prevents the involvement of 'outsiders' and makes these issues inaccessible. Such threats to public-ization can stem from 'the logic of the market,' from 'the private domain' (Biesta 2011b) or from scientific claims that ignore the debatable nature of expertise. In contrast, a sustained effort to public-ize sustainability issues, acknowledges the democratic paradox described above. This alternative approach to ESD focuses on how people may learn, again and again, in response to the ambiguities and differences they encounter when facing contemporary sustainability issues. This is not a process of schooling but an educational practice, acknowledging the plurality of voices and the controversy surrounding many sustainability issues without resorting to an 'anything goes' relativism. Both Mouffe and Rancière's understanding of

democracy as a disruption of the existing order can inform educational processes to address, explore, and articulate tensions between, on the one hand, a plurality of views, values and knowledge claims concerning the issues at stake and, on the other hand, the sense of urgency brought about by their far-reaching effects. Learning from sustainable development is then a process in which people are willing to be surprised by others' points of view and to face the ambivalences that result from this.

ESD has at least in three different ways an important role to play in making sustainability issues public. Firstly, public-ization is related to whether – and how – a 'public of equals' organizes itself, i.e. to which actors and points of view are considered legitimate and which are not. Educational practices aiming at public-ization continuously strive for opening up issues for public involvement and prevent the exclusion of individuals, groups, opinions, and arguments. This implies continuously balancing between diverse voices. It requires a sustained attentiveness in order to prevent that actors either claim the issue at stake or shirk responsibility by rejecting involvement. Secondly, public-ization has to do with the extent to which practices of interaction provide space for divergent opinions, values, and points-of-view. An openness to listen to other perspectives and to counter and respond is not something that one can learn through instruction, yet it is possible to be attentive to those moments in which such an openness emerges, to the moments where learners 'respond to another's passionate position with generosity and welcome – even when, and perhaps especially when, they disagree with this very position' (Todd and Säfström 2008). This implies that conflicts are articulated rather than resolved or avoided and that they are dealt with in political terms ('power', 'hegemony', 'conflict') instead of in moral ('good' vs. 'bad') or rational ('right' vs. 'wrong') terms. Thirdly, public-ization is affected by the extent to which sustainability issues are claimed through specific expertise incorporated in educational tools and instruments or in the

discourses on the issue at stake. Such claims in the form of, for instance, standardized procedures, exhibition displays presenting expertise-based information, blanks exercises or concepts such as the ecological footprint, diminish the opportunities for the learners to voice their own stories, opinions, and values and prevents them from contributing to the learning process from their own perspective. Instead of universally applicable, sustainability claims are always contextual and subject to social and political struggle. Public-izing sustainability issues is a matter of representing them as a continuous quest rather than as indisputable targets that can be anticipated, planned, and regulated according to predetermined guidelines. Learning processes, then, are not aimed at predetermined outcome, for instance in the form of knowledge, skills, or behaviour but rather understood as ‘posing difficult questions’ (Biesta 2006) with regard to the issue at stake.

Learning <i>for</i> sustainable development	Learning <i>from</i> sustainable development
Indisputable matters-of-fact	Puzzling matters-of-concern
Driven by clear knowledge	Driven by concern and commitment
Moral/rational language	Ethical and political language
Conflict resolution/aversion	Conflict articulation
Indisputable targets	Continuous quest
Universal sustainability claims	Contextual sustainability claims
Predetermined answers	Difficult questions

Table 2: ‘learning *for* sustainable development’ and ‘learning *from* sustainable development’

Conclusion

This article aims to contribute to an important debate in the field of environmental education and ESD, i.e. the discussion about the tension between a normative and a pluralistic approach (Rudsberg and Öhman 2010). We have tried to fertilize this debate by presenting an alternative view on the relation between

education, citizenship, and democracy and by proposing a democratic perspective that emphasizes concrete issues and the importance of creating spaces and practices in which a public of equals can emerge. The scope of this paper is limited to the articulation of an alternative theoretical way of looking at environmental education and ESD. We wanted to emphasize the importance of analyzing the democratic character of educational *practices* instead of merely focusing on the acquisition of individual *competences*. With the elaborated theoretical perspective we aim to inspire environmental education and ESD researchers to further empirically explore the issue of democracy in educational processes that address sustainability issues. It can stimulate researchers to understand how the use of particular educational tools, the kind of interaction and the diversity of voices stimulate 'public-izing' as well as 'privatizing' tendencies within practices of ESD.

Education and sustainability issues: an analysis of publics-in-the-making¹⁵

In contemporary society, learning emerges as a solution for numerous social and political problems (Biesta 2004; Simons and Masschelein 2009). Individual learners should acquire the ‘proper’ knowledge, insights, skills, and attitudes in order to ‘learn’ to adapt their behaviour to what is considered desirable and make themselves competent to deal with the given challenges. Hence, experts and expertise play an ever more important part. This propensity applies to sustainable development in particular¹⁶. The dominant discourse on education for sustainable development (ESD) defines issues of sustainability as matters of individual learning, as problems that can be tackled by applying the proper learning strategies (Van Poeck and Vandenabeele 2012). In policy discourse as well as in

¹⁵ This manuscript – co-authored by Joke Vandenabeele – has been accepted for publication in ‘Learning in public places. Civic learning, democracy and the public sphere’, Biesta G., De Bie M., Wildemeersch D. (Eds.), Springer. We owe thanks to the editors of the book as well as the participants of the doctoral colloquium organised by the Centre for Philosophy of Education (Institute of Education, London) and the Laboratory of Education and Society (KU Leuven) – in particular Maarten Simons and Jan Masschelein – for their valuable comments on an earlier draft of this book chapter.

¹⁶ Although ‘sustainable development’ is omnipresent in policy discourses, the concept remains largely contested (see e.g. Bruyninckx 2006). Critics consider it a vague catch all term susceptible to divergent interpretations. Its meaning is highly ambiguous as the concept conjoins profoundly contradictory meanings. However, this shallow consensus conceals convictions and interests that are still basically antagonistic. Sustainable development is thus the subject of a continuous, more or less explicit struggle over divergent interpretations. We decided to use this problematic concept nonetheless as a key notion in this chapter because it indeed largely affects policy discourses as well as educational practices, particularly in the field of environmental education. Yet, it is important to emphasise that we do not put forward one particular interpretation of how a sustainable society should look like. On the contrary, what our analysis reveals is precisely how educational practices can deal very differently with the ambiguity inherent in the concept and the struggle over diverse interpretations it brings about.

academic literature, ESD is mainly seen as an instrument to foster the values and principles of sustainable development, to promote corresponding behavioural changes, and to qualify people for the role of active participants that contribute to the democratic realisation of sustainable development. This framing of social and political problems as learning problems is reinforced by the increasing hegemony of the discourse of 'ecological modernisation' (Hajer 1995; Læssøe 2010). An ecological modernisation perspective acknowledges the structural character of the ecological crisis, yet assumes that the existing political, economic, and social institutions can internalise the care for the environment. A fundamental idea is the possibility of reconciling economic growth, techno-scientific innovations, and the solution of ecological problems. Within this discourse everyone is expected to do their bit and the environmental challenge is considered a positive-sum-game depending on the participation of every individual, firm, and country as allies rather than as adversaries.

Framing sustainable development as a learning problem faced by individuals reflects what Biesta (Chapter 1) calls a socialisation conception of civic learning, assuming an instrumental relationship between learning, citizenship, and democracy. Education, then, is about learning for future citizenship. Yet, reducing civic learning to the socialisation of everyone into the same standard fails to acknowledge citizenship as an essentially contested practice and tends to exclude marginalised voices and alternative arguments and points of view. This is particularly problematic in the context of sustainability issues that are pre-eminently open to uncertainty and contestation and characterised by strongly intertwined, often irreconcilable values, interests and knowledge claims. Critics have raised the concern that education for sustainable development – like education *for* anything else – tends to reduce education to a mere instrument for promoting a specific but implicitly taken for granted form of 'sustainable' behaviour (Jickling 1994). A sustainable society then emerges as something that is

– or, at least, can be – well-known and accordingly pursued systematically. In this chapter, we want to articulate a different perspective on ESD – labelled elsewhere (Van Poeck and Vandenabeele 2012) as ‘learning *from* sustainable development’ as opposed to learning for sustainable development –, one that attempts to move beyond the omnipresent socialisation perspective and leaves room for a struggle over divergent interpretations of what can be regarded ‘sustainable’ in face of concrete issues.

We are inspired by Biesta’s idea of learning *from* current citizenship, incorporated in his subjectification conception of civic learning. Learning, then, is not aimed at the acquisition of particular knowledge, skills, competences, or dispositions but stems from an exposure to and engagement with practices in which democratic citizenship can develop and where public solutions for private troubles are sought and negotiated. With respect to ESD a democratic approach is broadly regarded as preferable. Yet, democratic practices do not as a matter of course prevent sustainability problems and serve ‘the common good’. This paradox between the sense of urgency emerging from a deep concern about the state of the planet and the living conditions of its inhabitants on the one hand and the conviction that it is wrong to persuade people to adopt pre- and expert-determined ways of thinking and acting on the other (Wals 2010) brings about an ambiguous relation between democracy and sustainable development (Læssøe 2007). If all learning outcomes are considered equally valid as long as they have emerged from a democratic process, this might lead to an ‘anything goes’ relativism which is problematic since it prevents legitimate criticism of erroneous views and opinions and runs the risk of neglecting the far-reaching implications of many sustainability issues and the injustices they often bring about.

Researching education in the light of public issues

This ambiguous relation between democracy and sustainability underlines the need for an alternative perspective on ESD, one that enables to understand how educational processes can move beyond a socialisation perspective without falling into undue relativism. Therefore, we introduce the idea of ‘learning from sustainable development’ understood as an educational practice presenting sustainability issues as ‘public issues’, as matters of public concern. In the context of sustainability, transparent and uncontested facts are rare. Sustainability issues are characterised by uncertain expert knowledge and a lack of undisputed normative frameworks for ethical decision-making. They are so complex, entangled, uncertain, and contested that they resist being treated as matters of fact (Latour 2004). Hence, they do not fit within existing routines and traditional institutions are inadequate to deal with them. When neither the existing policy order, nor the available expertise are able to claim a problem, it can develop as a ‘public issue’ if the diverse actors affected by it organise themselves as a ‘public’ (Marres 2005; Simons and Masschelein 2009). The issue then becomes a matter of concern (Latour 2004) that, because of its nature, blurs the traditional boundaries between those who know and those who do not (yet) know or between views, questions and interests taken into account and those not taken into account. Precisely these boundaries are implicitly taken for granted in a socialisation perspective on ESD. Therefore, we focus on how a public might emerge within educational practices as a point of departure to further understand how these practices can fully acknowledge the democratic paradox and go to the core of the tension between democracy and sustainable development.

Drawing on the insights of Dewey, Marres (2005, 47) explains how the specificity of the public rests on the particular way in which it is implicated in issues, or, in her words, how ‘issues call publics into being’. In Dewey’s account, a public consists of actors who are affected by particular actions or events while they do

not have direct influence on them. An issue qualifies as a public affair, then, if the spread of the effects of a given action is far enough to substantially affect actors who are not directly involved in the action. If these actors are to address the issue at stake, they must organise into a public. Such a public is, thus, *caught up* in the affair. Latour, too, argues that our globalised world is characterised by the intimate entanglement of a variety of actors that are, willingly or unwillingly, connected by the expansion of all kinds of ‘makeshift assemblies’ such as markets, technologies, science, ecological crises, wars and terrorist networks (Latour 2005a, 27). Those many differing assemblages are *already* connecting people no matter how much they don’t feel assembled by any common dome. Our relation to public issues, he argues, should thus be understood in terms of ‘attachment’. This notion of attachment is used by actor network theorists¹⁷ to refer to a special relation between human and nonhuman entities. Attachment, in this account, is a mode of ‘being affected by’ whereby actors are both *actively committed* to an object of passion and *dependent* on it (Marres 2005). They must do a lot of work so as to create the situation in which they can be overtaken by the object while, at the same time, the object binds them in the sense that their pleasure and perhaps even the meaningfulness of their world is conditioned by it. Starting from these attachments, Marres argues that one cannot adequately define a public by merely referring to actors that are commonly implicated in an issue. The fact that actors are all affected by the issue at stake is not a sufficient characterisation for it. She emphasises that actors are not only jointly but also *antagonistically* implicated in public issues: they are bound together by mutual exclusivities between various

¹⁷ Actor Network Theory (ANT) is an approach that evolved out of Science and Technology Studies. Authors such as Bruno Latour, Michel Callon and John Law developed a distinctive approach to social theory and research characterised by a constructivist perspective (avoidance of essentialist explanations), a ‘material-semiotic’ method (mapping relations that are simultaneously material and semiotic) and an extension of the understanding of the social by focussing on networks of human as well as nonhuman actors (thus acknowledging the agency of nonhumans, their power to transform society).

attachments. 'They come together in controversy because they are divided by the issue at stake' (Marres 2005, 128). Obviously, such a public cannot be conceived of as a *social* community¹⁸. On the contrary, a public comes into being precisely when no social community exists that may take care of the issue at stake. The task of the public is thus to take 'care of the serious trouble in which those who do not necessarily share a way of life are collectively implicated' (Marres 2005, 56). A public is therefore not to be understood as a sociable collective, a convivial get-together of people that share a lifestyle or a commitment. Being jointly implicated in an affair is not necessarily based on 'shared interests'. Rather, what binds actors is that, in order for them to take care of an issue, they must take into account the effect it has on others. It is, thus, the *issue* that brings actors together, not the bonds of a shared form of life. And these issues transgress the boundaries of existing social communities.

As a conceptual framework to guide our investigation, we draw on Marres' distinction between the 'privatisation' and 'public-isation' of issues. She defines public-isation as an attempt to articulate issues, draw actors into it and formulate a possible settlement for it. In contrast to privatisation, public-isation implies the broadening instead of limiting of the involvement of actors in a given affair. Yet, public-isation cannot be reduced to the inclusion of actors since such an approach would fail to acknowledge the issue and its content as a crucial dimension for public involvement. Therefore, public-isation also entails the proliferation of conflict, making room for contestation and controversy as an occasion to enact the irreconcilability of the actors' attachments. Privatisation, by contrast, is

¹⁸ In 'No Issue, No Public' Marres (2005) goes into the concept of 'community' in the light of public issues. She characterises Dewey's notion of the public as 'a community of strangers' and criticises his ambiguous account of community life. Although this discussion is utmost relevant in the context of ESD, we cannot elaborate it within the scope of this book chapter. By introducing the concept nonetheless, we want to emphasise that in face of public issues, a public cannot be understood as a social community / sociable collective.

characterised by the containment of conflict and contestation. Instead of paying attention to antagonistic attachments, privatisation limits the scope to issue definitions that assemble shared attachments. In doing so, the exclusivity among the multiplicity of concerns, claims and ideals is sidestepped. Yet, it is precisely such sustained attentiveness to joint and antagonistic attachments to issues that goes to the core of the democratic paradox we described. Marres emphasises that a public does not emerge 'out of the blue'. Organising a public around an issue takes time and effort. Actors have to be drawn in and work has to be done in the sense that a 'public-in-the-making' must engage in the public-isation of the issue, in articulating the joint and antagonistic attachments at stake. This 'work' is the focus of the case study we present below: we analyse how such publics-in-the-making engage in this endeavour and whether (and, if so, how) a public is composed around the sustainability issues that are at stake within two different practices of ESD. An attempt to move beyond a socialisation perspective requires a change in research focus shifting attention from examining the acquisition of individual competences to analysing concrete *practices*. An analysis of publics-in-the-making allows for such an alternative perspective on educational practices.

In order to understand how publics-in-the-making engage in privatising and public-ising practices related to the issues at stake we developed an analytical framework inspired by the Policy Arrangements Approach (PAA) (Arts et al. 2006). As Latour (2005b) argues, a public organises itself within an actor-network, that is, through interactions of human and nonhuman actors. Using the PAA we want to reveal such actor-networks by analysing practices of ESD on four closely intertwined dimensions: the actors involved and their coalitions, the resources that are mobilised (educational tools, methodologies, and activities), the formal and informal rules of interaction, and the discourses on sustainable development and ESD. Furthermore, the PAA allows us to examine how actors engaging in such practices are on the one hand affected by long-term, structural developments

(such as the above mentioned tendency to frame social and political problems as learning problems as well as the increasing influence of ecological modernisation) but are, on the other hand, able to develop alternative practices and discourses. By analysing this duality of actor and structure, as well as both the content and organisation of these practices (cf. four dimensions) we seek to reveal whether and how a public is composed within the two cases and how this affects the way in which sustainability emerges as an issue of public concern. Our aim is not to characterise the two cases as either 'privatising' or 'public-ising' practices but rather to contribute to a better understanding of what it means and requires to deal with the issue of sustainability in ESD and of how these practices can foster a broad involvement of actors and the proliferation of contestation and controversy.

Composing a public around sustainability issues: analysis of two cases

We conducted a multiple case study in both formal and non-formal learning settings. In the remainder of this chapter, we describe and analyse two diverging educational practices: the project 'Environmental Performance at School' (incl. six participating schools) and a 'regional centre for action, culture, and youth'. Data are collected by means of document analysis (55 documents), audio-recorded in depth interviews (10) and video-taped observations (25). The data have been analysed using the qualitative analysis software QSR NVivo.

The Environment, Nature and Energy Department of the Flemish government established an environmental management project for kindergarten, primary and secondary schools: 'Milieuzorg Op School' (MOS) or Environmental Performance at School. The project attempts to raise pupils' awareness of environmental problems through the school's own environment. A school entering the MOS project, commits itself to developing environmental performance activities in order to become an eco-friendly and sustainable school. Currently, nearly 4000

schools (74% of the Flemish schools) participate in the project. MOS coaches support schools by giving them teaching aids, examples of good practice, training and advice. As an incentive MOS introduced labels as awards for good work. The 'MOS logo' is a three-level quality label. The criteria to receive a first, a second or a third logo are the same, but the requirements to be met become more stringent each time. To obtain a logo, schools must realise both educational and environmental benefits in connection with the theme(s) chosen (water, energy, waste, mobility, greening) and take into account the following process criteria: view and planning, pupil involvement, support, communication, and embedding.

't Uilekot' describes itself as a 'regional centre for action, culture, and youth'. The centre consistently addresses environmental issues in the context of international solidarity and social justice. It runs a café and develops activities in four domains: ecology (e.g. supporting resident's associations, organising political actions, guided tours of the wastewater treatment plant or ecological garden, making films about ecological issues), international solidarity (e.g. action and education concerning peace, racism, and development cooperation, selling fair trade products), culture (e.g. organising concerts, literary cafés, theatre, and expositions, selling second hand books and CDs) and youth work (e.g. workshops, courses, excursions, holiday camps, a pupils' parliament).

Actors and coalitions

The document analysis and interviews revealed that an abundance of actors is involved in the MOS project, which reflects a concern for broadening the involvement of actors. Four civil servants of the Flemish government coordinate the project under the authority of the Minister of Environment. An advisory board consisting of representatives of the Environment, Nature and Energy Department, the Department of Education and Training, the Provinces, educational institutions, etc. formulates advisory opinions concerning the overall management of the

project. Sixteen provincial MOS coaches visit and support the participating schools. At the school level, a crucial role is attributed to the teachers. They have to put MOS into practice and translate the project's aims into educational initiatives for pupils. Usually, one teacher or a group of colleagues serve as a focal point for MOS. The headmaster/-mistress plays an influential part in whether or not to support and facilitate the project, take decisions, and consider or reject proposals. As suggested in the project's guidelines, the administrative and maintenance staff often is involved through practical and technical tasks and most schools develop collaborations with partners such as local authority services, NGOs, and relevant actors in the school's neighbourhood. The project's process criteria, guidelines, and the advices given by the coaches or included in the manuals seek to broaden the involvement of a variety of actors that can bring in expertise and suggestions and contribute to environmental performance activities concerning the five MOS themes.

In line with this, a key role is reserved for the pupils. They are MOS' ultimate target group and 'pupil involvement / participation' is one of the project's process criteria. Pupils are involved in the project through lessons or by participating in environmental performance activities. Furthermore, the project urges schools to engage (a group of) pupils more intensively. We found that this is predominantly applied through formal and task-oriented structures, procedures, and tools such as 'MOS councils', working groups with representatives of all classes, pupils' councils, elections for the MOS council, surveys, suggestion boxes, etc. Exceptionally, more informal participatory practices occur.

'In the group discussions, there they can certainly say what they want to be rid of. Yes. It's possible that a child saw things, images of, of deforestation or of drought there in Peru because we muck up... It can happen that a child is worried about it and brings this in in the discussion. If you feel as a teacher that other children,

too...It's possible that, that this is the start for working on it for two or three weeks.'

Almost all interviewees remarked that realising this participation criterion is very difficult. Furthermore, the participatory ambitions differ a lot among the varied MOS schools. Complaints were frequently voiced about the lack of commitment on the part of the majority of pupils and teachers. Respondents remarked that it is difficult to motivate people for the project. Since not many people spontaneously find it appealing teachers as well as pupils are regularly designated as members of a working group or as a focal point instead of volunteering for it.

'Working groups like sports, those are the things people like. But who is really engaged for the environment anyway? Except for those few green people. It's not sexy.'

The coordinator and MOS-coaches we interviewed reported that 'real participation' is rare. They presume that teachers are often afraid to lose control and to (partly) give up power. The coordinator described such 'real participation' as the involvement of pupils throughout the whole process and specifies that they are faced then with broad questions such as: what do we find here? Is this a problem? Why is it a problem? Who suffers from it? Who benefits from it? What can we do about it? What are the possible solutions? What is the result of our actions? Did we expect this result? Are there any other actions required? Etc. Our analysis of documents, observations, and interviews with MOS teachers confirms the coordinator's and coaches' criticism. We found that participation is often limited to carrying out practical tasks (e.g. being responsible for closing doors and putting the lights off, maintaining the compost heap, measuring the amount of waste, water- or power consumption, checking the compliance with environmental management measures), delivering messages to fellow pupils (e.g. reporting the outcomes of working group meetings, making posters and drawings, writing poems, creating slogans), and having a say in decisions that are only

indirectly connected with the sustainability issue at stake and therefore rather tend to distract attention from it (e.g. trivia regarding the organisation of happenings such as a voting whether or not the pupils would make noise during a parade in the neighbourhood and a brainstorm about the means they could use for this). Hence, sustainability is presented as something that is known, uncontested and reducible to compliance with environmental management rules at school and ecologically sound behaviour. Participation, then, is mainly a matter of becoming a member of a particular social community that shares a commitment to environmental performance at school and engages in finding ways to contribute to this. Yet, the questions raised by the coordinator do reflect another perspective on participation, one that acknowledges the importance to take care of sustainability issues with the openness to take into account the effect the issue and the actions that are undertaken have on others.

The regional centre for action, culture, and youth has about 300 sustaining members and 30 to 40 volunteers that run the café and / or participate in working groups to prepare actions, organise activities, etc. The centre employs three (part time) staff members. Activities are organised for children / youth as well as for adults. Just like the MOS-project, the centre seeks to involve a variety of actors, yet, in a very different way. Here, the emphasis is on how people are, directly or indirectly, deeply (and often unequally) afflicted by sustainability issues. By collaborating with poverty organisations, community arts projects, unions, etc. they deliberately try to reach vulnerable people such as poor persons, illegal foreigners, and people suffering the consequences of sustainability issues. An interview with a staff member, the document analysis as well as several observations showed the centre's aversion to forcing taken-for-granted top-down measures or solutions upon people. It rather seeks to build coalitions with them, looking for solutions together and supporting initiatives started by people that are concerned about or affected by sustainability issues. For instance, when the

centre organised a concert, one of the musicians turned out to be a fisherman who used sustainable techniques. He talked about his experience that it was utmost difficult to stand up to the competition with the fleet using common, intensive fishing methods and that he started a petition striving for an inshore three miles zone for sustainable fishery. This encounter was the trigger for making the documentary 'Fish and Run'. It shows the centre's openness to the entrance of new actors into the public-in-the-making.

'Euhm, most people here hate... discussions without a basis. Nobody feels like, euhm, going to a conference... about sustainable fishery where... three minister's advisors, three civil servants and seven professors come to explain how it must, how it all works. That doesn't match reality. But if people who are engaged on it say, like, I want to start a petition, then we say: man, this is terribly interesting. [...] Then we say: they are mates. We're going to give them a boost. They can count on us. That's what we want to be engaged in.'

This particular way of broadening the public-in-the-making, starting from ad hoc collaboration with concerned people, affects the way in which sustainability issues are dealt with. The very particular concern of the fisherman and the idea he strived for (in other words: his 'attachments') were acknowledged, examined further, complemented, refuted, and adjusted by others' points of view. Thus, making the film became a quest for a sustainable future for the fish as well as the fishermen. The issue of sustainable fishery was no longer a matter of implementing well-known solutions but was presented as a matter of concern in which a multitude of attachments are caught up.

Besides collaborating directly with actors affected by sustainability issues, the centre also consistently attempts to emphasise their attachments, perspectives, experiences, and concerns. 'Giving voice to the voiceless' is a continuous and deliberate endeavour frequently reflected in the texts and films they have published, in the arguments used in debates and actions, etc. Through diverging

initiatives, they have focused for instance on the fishermen mentioned above, on poor people facing difficulties to pay their energy bills yet for whom energy-saving measures are unaffordable, and on people in the South suffering by the consequences of consumption in affluent countries. Social commitment and emotional involvement with these people were indicated as an important underlying motive for action.

'Those are the people you love. [...] It moves, it still deeply moves me. Also if you see... Even if I watch the film for the twentieth time, if it's a while ago, I still watch it indignantly. And I think like hey, this system sucks, it's a fucking unjust society, I don't wanna have anything to do with it....'

We repeatedly observed this effort to draw in actors affected by sustainability issues and their attachments during debates and actions concerning the sustainability label FSC (Forest Stewardship Council). The centre made a film about it ('Sustainable on Paper') and discovered that the large scale plantations required to meet the growth of paper and wood consumption worldwide (although they are FSC certified) destructively affect the life and environment of local people. Whereas representatives of FSC recognised the problems revealed in the film but continuously referred to procedures for stakeholder consultation and reaching consensus amongst the members of FSC, staff members and volunteers of the centre consistently expressed their concern about the suffering people.

'Like you and me, we have the time to hold a debate on it every year. That woman whose son is out of a job, she doesn't have the time. She wants a solution, right now. Those 22.000 people in Uganda who are displaced, they don't wait for [the certification agency] to arrive there.'

In doing so, they emphasised that sustainable forestry is not merely a matter of gathering and applying the proper expertise through adequate procedures but requires that the concerns and attachments of the people affected by it are taken into account. Yet, as we argued, drawing in the actors that are affected by an

issue is not a sufficient characterisation of the public-isation of the issue. Therefore, in the next section we will analyse whether or not a multiplicity of attachments (and, thus, conflict, contestation, and controversy) can emerge and how this is affected by the kinds of interactional practices that take place

Rules of interaction

Indeed – especially in the centre, but also in MOS schools – we observed interactional practices that encouraged participants to voice their attachments such as asking open questions to probe people’s opinions, emotions, concerns, etc. For example, at the start of the first day of the centre’s youth camp about ‘the city of dreams’, the instructor asked the children to talk about their dreams and desires and about what made them happy, sad, or angry.

‘If you would be God, what would you change in the world? ... First for yourself and then for the world. What would you change for yourself?’

This kind of questions contrast sharply with another frequently used type (particularly though not exclusively in MOS schools), one that rather prevents attachments from being expressed: asking questions to elicit an answer that one has already determined in advance. For instance, on World Water Day two pupils of a MOS-school counted the number of drink cartons and cans the children brought to school. The day before, they were asked to bring only refillable bottles with water.

- Teacher: ‘What do we try to make you do?’
- Pupil 1: ‘Drinking water.’
- Teacher: ‘No. What do we try to teach you about all that waste?’
- Pupil 2: ‘That we put it in the right rubbish bin.’
- Teacher: ‘No. We just have to see that we have to sort out less, that there’s not so much waste.’

Another interactional practice that fosters the utterance of divergent attachments is the discussion of sustainability issues. We observed this frequently in the centre but never in MOS schools. During a debate and an action concerning the FSC label, during the shootings for the documentary 'Fish and Run', the pupil's parliament, the youth camp and a working group meeting, plenty of time was taken for in-depth discussions. Divergent points of view were elaborated and clarified, participants frequently objected to each other's opinions and they were given the opportunity to ask questions and / or to answer them extensively. Not only did those discussions enable a multiplicity of attachments to be expressed, they also served as a forum for criticizing and challenging each other's opinions or knowledge claims. This was made possible by the opportunities for objection, by keeping on asking questions in order to challenge people to clarify, refine, or revise their arguments as well as by calling people to account regarding the consequences of their own opinions or behaviour. For instance, during the youth camp some children talked about their dreams in a rather self-centred way, only expressing consumptive desires regarding e.g. games consoles. Later on, the instructor returned to it when they discussed the slashing of rainforests out of avarice:

'Because those rich people only think about themselves, just like you only think about your Will, they too only...'

These regularly occurring challenging kinds of interaction are a striking contrast with the restraint concerning accusations that we found within the MOS project.

'Let's all do our bit and see how we can do better without condemning each other or starting to do frenetic, euhm, yes, or accusing each other or...'

These observations as well as explicit remarks during the interview with the staff member revealed that the centre shows great openness to contestation and controversy. Activities are often aimed at discussion and at the explicit

articulation and clarification of divergent opinions. Not only is conflict regarded legitimate, it is considered indispensable in order to reform society.

‘Basically, every deviating opinion is a contribution to the debate. That’s how you deal with it internally or, euhm, externally with other organisations... Just... more than half of social and political life doesn’t think this way. They can’t stand it anymore. Instead of viewing a different opinion as a contribution to the debate, as we do, they consider it a sin.’

In contrast, both observations and interviews revealed that the MOS project generally aims at fostering consensus rather than the sharp articulation of dissent.

‘And sometimes you have to distil the essences from the variety of opinions. Like okay, we don’t really know if it happens there too, but do you think that the environment, in a very general... do you think that the environment ought to be protected? Just thinking out loud. Often, opinions contain essences, and those essences are precisely the compromises.’

Nevertheless, the way in which this pursuit of consensus is dealt with differs strongly at the level of individual schools. One respondent of a MOS school explicitly defines deviating points of view as essential for democracy and an enrichment of the educational process. Discussing the variety of opinions is therefore considered an essential part of the learning process. In two other schools, yet, the absence of contestation seems to be easily taken for granted.

‘Also, our school regulations and so on, it says what’s our view on MOS. So, if parents read this, they must approve of it, don’t they.’

One of the teachers we interviewed even indicated repeatedly that deviating opinions did not occur concerning the MOS project. Yet, when we observed an action in this school during which the compliance with waste reduction measures was checked, several pupils obviously displayed disagreement. The teachers and pupils organising the action ignored the critical comments. On other occasions too, the school aimed at avoiding discussion. We observed a MOS council where

teachers conferred on an action to check the use of bicycle lights. They expected pupils to start an argument about whether or not it would be bright enough to put off their lights.

- *Teacher 1: ‘Yes, but if you are there with the pupils and they say like, Madam, look, it’s bright enough, I won’t give you my school diary...’*
- *Teacher 2: ‘Yes, but, no discussion, right? That’s just the way it is.’*
- *Teacher 3: ‘No discussion...’ [...]*
- *Teacher 2: ‘It’s beyond discussion, I tell them. They have to be switched on.’*

Although in a general sense most respondents said that they consider contestation legitimate, it is sometimes treated as irrational when it comes to concrete issues. Consequently, trying to convince people with deviating opinions by providing (more) information is a strategy that is often applied. For instance, one of the MOS coaches mentioned a discussion in a school striving for a third MOS label concerning the choice between reusable bottles or recyclable drink cartons:

‘And they still argued about shall we go over to glass or just muddle on with the drink cartons. Come on, it was a heated discussion there. I thought well now, a school on that level, should this still be under discussion here in this meeting?’

He responded to the situation by explaining ‘Lansink’s Ladder’, a hierarchy in waste management recommending re-use over recycling.

We found that contestation and controversy regularly occur within the MOS project as well as in the regional centre for action, culture, and youth. Yet, our analysis of the interactions shows how both cases handle manifestations of dissent differently. In line with the MOS project’s task-oriented focus on promoting educational as well as environmental benefits we mainly observed a pursuit of consensus and of the containment of conflict. On the contrary, the

centre regularly fostered the proliferation of conflict by going into antagonistic attachments.

Resources

We analyse the use of educational tools, methodologies, and activities in order to understand how expertise is drawn into publics-in-the-making through knowledge claims incorporated in the use or development of these resources and the way in which they are treated. This also affects the proliferation or containment of contestation and controversy.

Both cases make an appeal to expertise within their educational practices. Experts are deployed for giving advice, bringing in all kinds of expertise and sometimes to judge issues based on proper knowledge. Nevertheless, interviewees of the MOS project emphasised that expertise is neither unerring nor neutral. For the centre too, it is deemed necessary to take into account layman's knowledge as well.

'Let the people speak, euhm, who are hands-on experts, euhm, or those who are involved or damaged, instead of, euhm, inviting the 77th expert. What doesn't mean that experts... don't have a part in it, right, but combine it then. See that there are also people with some sound... common sense.'

Furthermore, the centre and one of the MOS schools also deliberately aim at building expertise themselves. Engaging pupils and teachers in developing expertise concerning sustainability issues, the MOS teacher argues, contributes to fostering commitment. The centre aims at developing expertise through action and research in collaboration with the people affected by sustainability issues.

Whereas the role of experts thus seems to be rather limited, our analysis of the resources dimension shows that they can also enter the public-in-the-making through the use or development of educational tools, indicators, methodologies, and activities. This affects whether the involvement (here understood as active contribution) of actors is broadened or otherwise limited as well as whether

controversy over knowledge claims is proliferated or contained. The interviews, observations, and document analysis revealed that the resources that were used indeed varied strongly in this regard. Generally speaking, we found devices that were open to the involvement of actors and to contestation and controversy (e.g. working group meetings, drawing one's city of dreams, informal conversations) chiefly in the centre and devices that tended to prevent involvement and contestation (e.g. tests with water according to well-defined procedures, forms for completion, punishments and rewards related to environmental management precepts) more frequently in the MOS project. Yet, in both cases mixed forms (e.g. watching and discussing films, guided tours, role-playing, reflecting on pictures of sustainability issues) appeared.

Whereas within the MOS project a selection of educational tools and methodologies is suggested in the thematic manuals for schools, the centre prefers direct and spontaneous conversations over the use of educational tools and methodologies.

'Throw away all those toolkits, methodologies and educational games [...] and just talk with people about the things you want to talk about, right, instead of... rendering education infantile so that euhm, it becomes a schoolish affair that straitjackets people.'

The centre emphasises the importance of the café in this respect. The informal meeting place is particularly appreciated because of its contribution to informal discussions at the bar, frequently bringing about new actions or other educational initiatives. MOS schools, too, pay attention to the material learning environment. For example, two of the six analysed schools as well as several schools that were discussed during the judging of the MOS labels have a school garden offering the pupils vegetable gardens to maintain, a stretch of woods to play in, a particular biotope to study, animals to take care of, etc. This enables children to experience and discover nature in a more or less unorganised way. The café as well as the

school gardens provide a space for a variety of actors to get involved and for a multiplicity of attachments to be experienced, clarified, articulated, and contested.

Not only the selection of educational tools but also the way in which they are developed affects this space for diverse actors and attachments. We have already mentioned the centre's films. Shooting and editing such a documentary offers opportunities to develop and express one's attachments concerning the issue at stake. Yet, this chance is predominantly reserved for the staff members here. Within the MOS project, pupils are regularly involved in creating educational tools such as posters, brochures, and texts but the extent to which they can express their attachments and confront them with each other varies strongly. Sometimes pupils are completely left free to write a poem or a text about a sustainability issue. On the other hand, we analysed for instance an 'Ecological Footprint Booklet' consisting of precepts and drawings. It was the teachers who searched and selected suitable suggestions to reduce one's ecological footprint whereas the pupil's role was limited to provide each precept with a matching drawing.

The ecological footprint is a well-known example of a very particular kind of educational tool, namely all kinds of indicators or measuring instruments regarding sustainability. Within the MOS project, specific measuring instruments are developed in order to monitor the realisation of environmental benefits in schools. The ecological footprint, too, is frequently used in different ways. Several of the interviewed teachers emphasised its employability in order to raise awareness about our ecological impact. Frequently, this goes together with the use of educational games or other tools providing well-defined behavioural precepts aimed at reducing pupils' footprints. One teacher explained that she uses the concept within religious education to address the issues of social justice and solidarity in the context of sustainable development. She particularly emphasises the unequal distribution of ecological footprints and discusses with

students what it would mean to live within the limits of a global average fair share.

Discourses

Finally, analysing which particular discourses on sustainable development and ESD are nourished in both cases enables us to understand further how they deal with contestation and controversy as well as which attachments are taken into account within a public-in-the-making.

In both cases, interviews revealed that the term 'sustainable development' is widely considered an unusable concept. For the centre, it is a meaningless catch all term susceptible to divergent interpretations.

'Under the veil of sustainability, euhm... FSC cultivates plantations that are monocultures, hectares in size, and Indians are driven away from their land... So, that term means nothing to me.'

Therefore, as we have already shown above, the centre prefers to start from concrete sustainability issues about which people are concerned. Sustainability, then, is a continuous quest for what could be regarded 'sustainable' in these concrete situations. MOS teachers repeatedly indicated that the concept is too difficult to understand for children and youngsters. As a result, they prefer to translate it into concrete subject matters, rules, and practices starting from the five themes the project puts forward. In order to explain the content to young children, mascots are regularly used.

'It is euhm, if we tell the children like Max is coming, then they know immediately what it is about, right, or Max asked to close the windows. And the children use it at home too, you know, like mom, we're not acting okay, Max won't be pleased now. Just to... for the children, well, the youngest anyway...'

Here, sustainability is easily translated into a matter of 'do's and don'ts' that limit the space for contestation and controversy.

Both cases differ strongly with regard to how they conceive the pursuit of sustainable development. In line with the focus on do's and don'ts MOS understands sustainable development as the result of individual efforts.

'We want to keep on, euhm... spreading the positive message that, if everybody would to their bit, that there are still plenty of possibilities for a splendid future for the children.'

For the centre, realising sustainability implies a political struggle. This provides space for conflict over antagonistic attachments. The centre indicates that it explicitly pays attention to power relations and ethical considerations regarding injustices brought about by ecological issues.

'We want to build kind of a counterforce. We are, we are largely convinced that it is not... through lobbying, or through... persuasion that you can change things somehow but, but through, well, power is a dirty word, but anyway, through your own force, as a group or euhm, also as a group of victims or a target group.'

With regard to the purposes of ESD, the centre's discourse is that ESD should especially aim at arousing interest for sustainability issues, gathering and inciting people to action and to play their part as critical citizens, helping those suffering from sustainability issues, and evoking questions.

'Kind of deliberately, we choose from the start not to offer solutions. 'Cause, because we... always are a group that wants to ask questions, right, people have to think for themselves and decide what they... We won't serve ideology... or solutions. And for a lot of people currently, in comparison with twenty years ago, it's not easy anymore. And they said... well, I thought I would get the solutions, and now I have even more questions than before... But I think, I think it's good. So if you can make people think and ask questions, than it's okay.'

For MOS, the principal purposes of ESD are to foster changes in behaviour and attitudes, raising awareness, realizing environmental benefits and creating support for environmental management measures.

'You could call it knowledge, in a sense, but I think it's more important to change behaviour, too, and eh, change attitudes. I think that's more important than general knowledge about waste, waste-disposal and so on, or sorting waste. How you must sort it is important, of course, but it's more important that you just breed that behaviour, that you'll do everything you can.'

Most respondents of the MOS project argued that they want to prepare children and youngsters for their future role in society.

'Raising our children's awareness, especially, making them much more aware of everything... Yes. Actually, preparing them a bit already, for society, what they can already bring in, qua environment, health... et cetera, safety, euhm... It's now that we have to teach our children, right.'

Our analysis of the discourses on sustainability and ESD reveals how sustainability issues can be presented as well-known matters translatable into behavioural precepts and proper attitudes everyone should adopt unanimously or otherwise as disputed matters that require a continuous quest for and struggle over what is 'sustainable' in real situations causing people's concern.

Concluding remarks

In this chapter, we wanted to inquire into whether (and, if so, how) a public is composed around the sustainability issues that are at stake within two different practices of ESD. We analysed how publics-in-the-making engaged in the endeavour to present these issues as 'public issues'. More specifically we wanted to understand how the arrangement of educational practices contributed to the 'privatisation' or otherwise 'public-isation' of issues. The four dimensions of the PAA turned out to be an adequate framework to take into account the variety of actors in the actor-network within which publics-in-the-making organise themselves. Furthermore, our analysis reveals the duality of actors and structure. Although the structural development of framing sustainability as a learning

problem as well as the discourse of ecological modernisation tend to prevent the emergence of sustainability issues as public issues, we found that actors within educational practices can enable that in particular moments and places issues can emerge as a matter of public concern. As Marres (2005) argues, organising a public around issues takes time and effort: a public-in-the-making must engage in articulating joint and antagonistic attachments through which actors are caught up in the issue. A sustained focus on those joint and antagonistic attachments is crucial to move beyond a socialisation perspective on ESD without falling into undue relativism (and, thus, to take seriously the democratic paradox). At particular moments, the cases indeed seemed to engage in such an articulation. Nevertheless, it requires a continuous vigilance so as to prevent that one falls into one pole of the democratic paradox, for instance by reducing participation to building a (task oriented) social community in order to deal efficiently with the urgency of sustainability issues or to the (procedural) involvement of (affected) actors without the attempt to articulate their diverse, mutually exclusive attachments.

By analysing the involvement of actors, the interactional practices, the use and development of educational resources and the discourses that are nourished we aimed at examining the cases as practices in which the privatisation as well as public-isation of sustainability issues take shape. Our aim was to further understand how education can emerge as a 'public space' in the context of ESD. In public-ising practices of ESD, education is not aimed at socialisation but creates a space for subjectivation. Simons and Masschelein (2010a) introduced the concept of 'pedagogic subjectivation', understood as an experience of potentiality, a strong experience that one 'is able' (to do something, to know something, to speak about something ...).

'[P]edagogic subjectivation includes engagement with 'school material' (texts, books ...) that one has at one's disposal. Teachers can turn this material into a

'thing-in-common', in the face of which others are perceived as equals and an experience of 'being able to' can emerge. This experience, we suggest, is the experience of students' leaving the family and entering the school: not as a selection or qualification machinery but as a 'public space' because one is equally exposed to a thing-in-common.' (Simons and Masschelein 2010a, 601)

The 'thing in common' in the case of ESD is the issue at stake and the joint and antagonistic attachments it brings about.

Revisiting the democratic paradox of environmental education:
sustainability issues as matters of concern¹⁹

Introduction

Contemporary ecological issues such as climate change, nuclear waste, GMOs, overpopulation and decreasing biodiversity are characterised by diverging and often irreconcilable values, interests and knowledge claims and therefore open to uncertainty and contestation. Rather than seeing this contested character of sustainability issues as an impediment to their solution, this article will follow a recent strand of political thought (see e.g. Mouffe 2005; Swyngedouw 2007; Goeminne 2012) in embracing the idea that struggle and dissensus are indispensable ingredients in framing genuine political questions of who gets what, when and how. As will become clear throughout this article, we believe this contested character should also be at the heart of environmental education (EE) and education for sustainable development (ESD). Researchers in the field of EE and ESD emphasise that there are many ideas about what is 'sustainable' (Wals 2010a). Yet, none of them can be authoritatively prescribed because we do not and cannot know for sure what the most sustainable way of living is. This observation has tremendous implications for education, Wals argues.

'In fact it puts into question the whole notion of "teaching". After all, there is no longer something to be taught that is universally agreed upon or that can be universally applied. There are too many realities out there and, to make things worse, these realities shift and transform constantly.' (Wals 2010a, 144)

¹⁹ This manuscript – co-authored by Gert Goeminne and Joke Vandenabeele – has been submitted to *Environmental Education Research*.

Wals (2010a) and Læssøe (2007) argue that we face here a paradox between, on the one hand, the sense of urgency emerging from a deep concern about the far-reaching implications of many sustainability issues and the injustices they often bring about and, on the other hand, restraints – based on pluralistic values – against education as an instrument to foster predetermined ways of thinking and acting. This paradox brings about an ambiguous relation between democracy and sustainable development and nourishes a long-lasting debate in the field of EE and ESD about the tension between a normative and pluralistic approach (e.g. Jickling 1994; Sauvé 1999; Wals and Jickling 2002; Vare and Scott 200; Wals 2010). Whereas this debate is characterised by a variety of nuanced positions, its contours are nevertheless defined by a sharp opposition between two extremes: on the one hand, an instrumental approach that sees the factual account of the state of the planet as a non-negotiable basis for normative guidelines on how to think and act and, on the other hand, a pluralistic approach that understands pluralism as a sheer fact of plurality, resulting in a relativistic tolerance that grants every opinion equal value.

With this article we examine how educational practices are struggling with the democratic paradox and the ambiguities it brings about and how they are searching for ways to deal with it. As a theoretical framework we draw on Bruno Latour's distinction between 'matters of fact' and 'matters of concern'. Consequently, we show how a perspective built on the concept of matters of concern and its corollary notion of attachments enables a better understanding of how the three educational practices we analysed in a multiple case study deal with the democratic paradox in EE and ESD. This finally brings us to argue for an alternative perspective on EE and ESD, one that moves beyond an omnipresent instrumental perspective on education in terms of socialisation (Van Poeck and Vandenabeele 2012).

Matters of fact and matters of concern

In our view the democratic paradox in EE and ESD, is deeply rooted in the metaphysical and ontological options that are dominant in our Western society and that are based on a frame of thought in which subjectivity and objectivity are seen as mutually exclusive. It is this strict ontological division between the non-human object and the human subject and its corresponding epistemology of represented facts and values that Latour has called the 'Modern Constitution'. Indeed, the democratic paradox that we see present in EE and ESD closely echoes Latour's observation that the political order of the Modern Constitution has

'(...) two chambers, the first one, called Science capital S, that is said not to do politics but which takes all of the important decisions, and the other, called Politics, that is said to make the decisions but that is left with nothing but passions and interests.' (Latour 1998, 104)

Latour (2004, 2005a, 2010) uses the term matters of fact to refer to approaches to reality in terms of facts that 'speak by themselves' and are beyond dispute, 'embedded in a *res extensa* devoid of any meaning, except that of being the ultimate reality' (Latour 2010a, 476). Such facts tend to serve as a standard to distinguish between what can be and what cannot be discussed, between on the one hand 'the truth', captured in undisputable facts which some enlightened people have unmediated access to and on the other hand disputable human assertions, opinions and values (see also Decuypere et al. 2011; Goeminne and François 2010).

Yet, Latour argues, within a context of the proliferation of scientific controversies transparent, unmediated, undisputable facts have become rarer and rarer.

'[W]hat allowed historians, philosophers, humanists, and critics to trace the difference between modern and premodern, namely, the sudden and somewhat miraculous appearance of matters of fact, is now thrown into doubt with the

merging of matters of fact into highly complex, historically situated, richly diverse matters of concern.' (Latour 2004, 237)

Especially in the context of sustainability, the issues at stake do not fit one particular concept of the common good but are, on the contrary, open to divergent understandings of morality. At this point, Latour introduces the concept of matters of concern to refer to these highly complex, uncertain, contested, historically situated, far reaching, risky and richly diverse states of affairs in which human and nonhuman entities are intimately entangled. Yet, he emphasises, matters of concern never occupy the two positions left for them within such a two-tiered world of facts and values (Latour 2004). We face a proliferation of states of affairs that neither fit in the list of 'mere' values, opinions, preferences, etc. nor in the list of undisputable facts. Thus, he proposes: 'To the fact position, to the fairy position, why not add a third position, a *fair* position?' (Latour 2004, 243). It is at this fair position that he situates matters of concern. Not to direct attention away from facts, he emphasises, but rather as an attempt to get closer to them, 'to see through them the reality that request[s] a new respectful realist attitude' (Latour 2004, 244). Not to fight empiricism but to renew it by cultivating 'a stubbornly realist attitude' (Latour 2004, 231) dealing with matters of concern instead of matters of fact. After all, Latour argues, reality is not defined by matters of fact. Matters of fact are only very partial renderings of matters of concern.

In this respect, it is important to see that in playing with the notions of matter of fact and matter of concern, Latour has a double effect in mind. As argued, he uses the concept of matter of concern (in parallel with the notion of 'hybrid') to point towards the complex interdependencies between nature and society that make up current sustainability and other contested issues (Latour 2010a). However, Latour also uses the concept to explicitate his constructivist stance vis-à-vis science, claiming that scientific matters of fact are always also matters of concern, that is to say compositions, gatherings, assemblies, issues of some sort (Latour

2010b, 72-84). 'A matter of concern', he writes, 'is what happens to a matter of fact when you add to it its whole scenography, much like you would do by shifting your attention from the stage to the whole machinery of a theatre' (Latour 2008, 39). And he adds that this is precisely what happened to science when the latter was seized by the constructivist field of Science and Technology Studies (STS). Crucial to Latour's argument is that both modes of using his notion of matter of concern are ultimately connected through a question of concern that addresses the quality of the construction at stake: 'what is it that we should be concerned about?' In this way it also substitutes the dichotomous question whether something is constructed or not with the more apt and nuanced consideration whether something is 'well or badly constructed' (Latour 2010a, 474). Both in the societal sphere, as well as within the disciplinary contours of science, the notion of matter of concern points towards the particular ways in which people are concerned with an issue or topic of consideration. The notion of concern, Latour further argues, should be understood in terms of 'attachment'. Our globalised world is characterised by the intimate entanglement of a variety of actors that are, willingly or unwillingly, connected by the expansion of all kinds of 'makeshift assemblies' such as markets, technologies, science, ecological crises, wars and terrorist networks (Latour 2005a, 27). Those many differing assemblages are *already* connecting people no matter how much they don't feel assembled by any common dome. Noortje Marres (2005) explains actor network theorists' (such as Latour) notion of attachment as a special relation between human and nonhuman entities, a mode of 'being affected by' whereby actors are both actively committed to an object of passion and dependent on it. She argues how these actors must do a lot of work so as to create the situation in which they can be overtaken by the object while, at the same time, the object binds them in the sense that their pleasure and perhaps even the meaningfulness of their world is conditioned by it.

In this respect, and in line with the double use Latour makes of 'matters of concern', the numerous laboratory studies within the field of STS can be regarded as so many illustrations of scientists being actively involved in a continuous interplay between problem framing and solution framing. This interplay is driven by scientists' active commitment to the 'makeshift assembly' that is their object of study; at the same time it is conditioned on the meaningfulness of an emerging paradigmatic world. The history of climate modelling, for instance, shows how particular contextually bound concerns such as globalism, prediction and simulation gave rise to a 'state of affectedness' between the makeshift issue of a 'global climate' on the one hand and a bunch of 'climate modellers' on the other hand. This state of affectedness gradually led to the current scientific understanding of climate change as a global scale problem caused by the universal physical properties of greenhouse gasses (Goeminne forthcoming).

In turn, and traversing again the disciplinary contours of science into the public sphere, global climate change became a matter of societal concern as it brought a public into existence through various kinds of attachments ranging from the economic interests of the automobile industry over Western consumers' association of materialism with the idea of the good life to Maldivians' fear of losing their habitat to rising sea levels. As Marres (2010, 201-202) argues, 'this state of 'affectedness' cannot be adequately understood in factual terms only but also refers to the affective states of being touched, implicated, and indeed moved in the sense of being mobilised by public affairs'.

A focus on attachments helps us to understand how actors are not only jointly but also *antagonistically* implicated in matters of concern: they have divergent attachments and are thus bound together by mutual exclusivities between these various attachments. 'The great merit of controversy', Marres says accordingly, 'is that it provides an occasion to enact the irreconcilability of actors' attachments' (Marres 2005, 127). In our view, such a positively understood role of contestation

– more particularly the enactment, exploration, and confrontation of mutually exclusive attachments – in the mobilisation of a public also poses a major challenge for EE and ESD. Since it are precisely such joint and antagonistic attachments that are so difficult to deal with in practices of EE and ESD, we appeal to Latour’s concept of matters of concern as an attempt to put the democratic paradox and the tension between an instrumental and a pluralistic approach in a different light.

Case study

In this section, we present an analysis of three cases focusing on how these diverse educational practices deal with the ecological issues they address. The central aim of our analysis is to grasp the specific educational dynamics and to deepen our understanding of what it means to address sustainability issues as matters of concern within educational processes. On the one hand, we focus on whether (and how) a multiplicity of attachments comes to the fore and how they are dealt with. On the other hand we examine whether (and how) the issues at stake are, at particular moments, approached from a fact, fairy or fair position. Therefore, we analysed the interactions between the actors involved, the discourses on education and the issue at stake as well as the didactic tools and instruments that shape the practices. We selected three Belgian cases that vary with regard to the kind of educational practices they develop (nature excursions, workshops that promote ecological behavioural change and making documentary films) as well as the content/issues they address (biodiversity, climate change, ecological footprint, sustainable fishery, waste, sustainable forestry, energy saving, etc.). Data are collected by means of document analysis (7 documents), audio-recorded in depth interviews (5) and video-taped observations (12). The data have been analysed using the qualitative analysis software QSR NVivo.

Workshops

The first case we studied consists of workshops to promote ecological behaviour change organised by Ecolife. The organisation describes its mission statement as follows: 'Ecolife is a social environmental organisation that strives for a sustainable world by means of ecological behaviour change. Ecolife demonstrates the benefits of an ecologically sound lifestyle by offering tools and coaching for diverse target groups.' The organisation offers workshops for non-profit organisations, public services, companies, and consumers throughout Flanders (the Dutch-speaking part of Belgium). We interviewed Ecolife's director and an educational staff member and observed a workshop 'Ecodriving' for public servants, an 'Ecoteam@work'-workshop in an enterprise, an 'Ecodriving'-introduction at an event for college students, a workshop 'Ecological footprint' in another enterprise and a workshop about energy saving for poor people organised by a social service department of a town.

A multiplicity of attachments? The mission statement quoted above reveals what we could consider to be the most important attachment of Ecolife as an organisation: 'the planet', or, more precisely, an image of what they regard as a 'sustainable world' and the ecologically sound lifestyles that go with it. As we explained, an attachment involves active commitment towards as well as dependency on the object of passion. Indeed, the *raison d'être* of Ecolife is precisely the pursuit of sustainability and ecologically sound behaviour and a lot of effort is undertaken in order to realise this endeavour by deploying diverse tools and coaching activities. Such an attachment to the planet has also been voiced by both the director and the educational staff member we interviewed as well as by the free-lance educators who coached the workshops we observed. They too want to contribute to such a sustainable world and express their active engagement in pursuing as many people as possible to help realising it.

'I find it quite a challenge to, with the environmental movement, well ... that we may increase our presence in people's lives even further ... or increase our access to their lives. [...] Yes, I must say it often strikes me that I think, gee, it's such a pity we don't reach a larger number of people'.

During the observations, we noticed on several occasions that the participants also voiced their own, often diverse attachments. We distinguished three kinds of such utterances. First, we observed some manifestations of a similar attachment to the planet and the ambition to foster sustainable lifestyles as embraced by Ecolife. This was the case during the Ecoteam@work as well as the Ecological Footprint workshop. During the Ecoteam@work, participants brainstormed and discussed about possibilities of encouraging colleagues to realise environmental benefits. The need to engage as many colleagues as possible was thereby repeatedly emphasised. While observing the Ecological Footprint workshop, we noticed shocked and indignant (verbal and non-verbal) reactions while the educator elaborated upon the ecological footprint of an average Belgian²⁰. More explicitly, an attachment to the care for the planet – connected to concerns about global equity and social justice – came to the fore with regard to the dissipation of food and water in affluent countries.

- *'Woman 1: This is also very important, something to reflect on: the average amount of food thrown away by the average Belgian could save us 800 m².*
- *Educator: What may be the causes of that? It's not just because of yourself. It may well be that you're doing the right thing but there's also mass catering*

²⁰ The ecological footprint is a standardised measure of human demand on nature representing the amount of biologically productive land and sea area necessary to supply the resources a human population and to assimilate associated waste (Wikipedia, The Free Encyclopedia, s.v. Ecological Footprint). With respect to the argument of this paper, it is interesting to observe that the ecological footprint concept, while it has been scientifically developed as an objective measure for sustainability, is mostly used for campaigning and educational purposes. Here, and as illustrated in this paper, the ecological footprint is typically used in an instrumental way serving as a matter of factual, non-negotiable basis for normative guidelines.

and roadside restaurants. If you could just see the quantities thrown away by department stores. Tremendous.

- *Woman 2: That's recently been on telly, hasn't it?*
- *Educator: That's really sinister. And it isn't any different here in Belgium.*
- *Woman 2: But that's a bit the problem with luxurious countries, I think.*
- *Educator: Do you remember the example of the melon?*
- *Woman 2: Yes, melons that didn't have the right shape were simply thrown away.*
- *Educator: So they come off the land and are thrown away just like that.*
- *Woman 2: That was something, wasn't it?*
- *Woman 3: The owners argued that their customers would shop somewhere else if they didn't.*
- *Educator: The conclusion we must draw from this is that we should reflect on our buying behaviour.'*

A second type of observations concerns the reference to other considerations and priorities when participants were confronted with concrete behaviour precepts. While these participants did not necessarily reject an attachment to 'a more sustainable world' at a general level, their comments did voice other – and sometimes conflicting – attachments that they found to be neglected by the suggested behavioural changes: e.g. an attachment to fast cars, a convenient life, safety (of one's children), etc. We observed such expressions during all the workshops we attended. For instance:

- *'Woman 1: One obvious improvement would be to bike or walk short distances.*
- *Educator: What would you consider a short distance?*
- *Woman 1: Going to the bakery, for instance.*
- *Educator: How much is that in miles?*
- *Woman 1: One and a half?*

- *Educator: No, let me help you out: in fact, we should bike any distances under 3 miles.*
- *Woman 2: You're kidding me! [laughter]*
- *Educator: Why 3 miles? Because cars consume most over short distances. [...]*
- *Woman 1: Then we also had to say why we found it difficult [as part of the exercise preceding this discussion]. We found it can be time-consuming at times.*
- *Educator: Remember the word I just used: planning?*
- *Woman 1: Yes, but still. Our kids, too. [...] That's why we thought it's not so convenient when you've got kids. In our view, a cart like that is more dangerous and a delivery trike is expensive. We've agreed among ourselves to use our bikes once our kids have grown.'*

A third kind of interventions we observed were utterances of denying, laughing away and rejecting Ecolife's attachment to the planet. Such manifestations emerged during the Ecodriving event for college students, ranging from informal, giggly remarks to consciously and explicitly rejecting ecological values.

- *'Student 3: How does this thing here work?*
- *Student 4: Step on the gas, step on the gas! [laughter]*
- *Student 3: [reads from the screen] "a bit too fast, you're speeding". What do I care... Let's go!*

He beeps the horn and gets stuck... keeps beeping and laughs. He explores the consequences of having an accident. The educator says it doesn't make much difference in this simulator: "A beautiful world, wouldn't you say?" Once the ride is over, the students go away. They have left behind the leaflet with suggestions that was given them.'

We noticed that, when confronted with such diverse and antagonistic attachments, the educators react in the way in which it is expected by Ecolife: they do not act on the defensive nor do they enter at length into the matter of disagreement. As the interviewees explained, the organisation is reluctant

towards confrontation, moralising and ideological discussions and prefers to remain implicit about values and power relations.

'Gosh, in fact I think it's no problem when people, uh, say "yes, but I've heard different stories, you know?" or "I don't believe in that". I think it's everybody's good right to act or think that way, I only think they shouldn't have a dominating effect on the group, which can be hard to avoid [...]. They can be quick to determine the atmosphere and I think that's something we should avoid, that somebody determines the general mood simply by saying "oh well, it'll probably not be that bad" or "it'll probably not be true". And yes, I also think ... which is hard indeed, or something to consider, I think, that the educators, well, should ensure they monitor this process.'

The educational staff member argued that it is 'not pleasant' for people to be explicitly confronted with the 'difficult issues' Ecolife addresses and that the educational settings in which they operate often lack the time and occasion for profound discussions. Nevertheless, we observed at least one occasion, during the Ecodriving event, in which a student – although he had obviously other attachments than the care for the planet – clearly showed openness towards discussion and dialogue and made an effort to understand and experience Ecolife's perspective and to elaborate on his own attachments and considerations.

- *'Student 14: We are automotive students, which means we love anything that makes noise and moves forward and consumes as much as possible and preferably emits as much as possible.*
- *Educator: [laughs] Well, it all depends on what you think's important in life, doesn't it?*
- *Student 15: How about a speeding test?*
- *Student 16: Or a consuming test?*

The other students in the group laugh, except student 14. He wants to give it a try.

- *Student 14: I'm going to make a serious effort. After all, we're here for a reason...*

He sits down at the wheel. After his ride, the educator and the student evaluate his report. He has consumed 5.5 gallons. He's not happy with this score. The educator says he hardly shifted gears. He decides to try again. This time consumption has dropped to 1.5 gallons.

- *Educator: See what you achieve when you use your gears right? Very good, man!*
- *Student 14: Exemplary.*
- *Educator: Now you know you can do it [...]. [She hands him a leaflet] [...]*
- *Educator: Don't forget, the idea is to apply what you've learned.*
- *[...]*
- *Student 14: I'll leave the leaflet here because it'll probably be of little use to me anyway. The thing is that... our problem... I'm only a fresh driver so I have no intention of adapting my style for environmental reasons. I'm far too young and too crazy for that. Perhaps in...*
- *Educator: You still want to enjoy it, don't you, enjoy accelerating?*
- *Student 14: Yeah, yeah, of course. We still enjoy driving. Perhaps 10 years from now we'll also be trying to minimise costs. But we haven't reached that stage yet. As automotive students, if we wouldn't be passionate... There is one of us in our class who advocates green cars. The others don't. We're 24 and one is for green cars. [...]*
- *Educator: But I, uh, don't forget it's you. It's you who are at the... I'm not telling you how to drive.*
- *Student 14: No, but to me, personally, it's irrelevant. Environmentally, it makes sense in a way.*

The educator turns round and begins to help another student.

- *Student 14: I can't say I can be bothered... Anyway, thanks.*

They leave.

Ecolife's reluctance to thoroughly pay attention to antagonistic attachments is in line with its discourse on sustainable development as 'a positive story' that creates opportunities for win-win situations. We found this discourse explicitly in

the analysis of the interviews and in a more implicit way, it came to the fore during the observations as well as in the documents.

A fact, fairy, or fair position? Besides analysing whether and how a multitude of attachments came to the fore in the workshops, we aimed at exploring and understanding how the issues at stake are approached from a fact position (thus, as matter of fact), a fairy position (thus, as mere opinion and preference) or a fair position (as matters of concern). We found that Ecolife takes a position between facts and opinions/preferences. As such, the democratic paradox appeared to be tangibly present in the interviews as well as in the workshops we observed. On the one hand, the educational staff member for instance repeatedly indicated that the issues they address are related to the pre-eminently political and ethical question of 'the good life'. On the other hand, yet, this question seems to be answered beforehand and is translated into very concrete 'do's and don'ts'.

'One thing [we] also want to make very clear, I believe, is that not having a car or not driving a car doesn't make you unhappy. I mean... you can have a perfectly good life, for instance, without all those material things that involve such a burden or without having to travel by air at least once a year. That's in fact what we're trying to convey and perhaps we aren't paying particular attention to this or aren't saying this in so many words. [...] Basically, the idea is to come up with suggestions for people to take action, which means you should be very concrete and particular, uh, and take it beyond the merely theoretical.'

Thus, Ecolife is oscillating between matters of opinion and preference inherent in the question of the good life and matters of fact that are used to underpin the proposition of do's and don'ts. A crucial instrument with regard to the latter is the concept of the ecological footprint. Ecolife emphasises its expertise in this domain as well as the importance to take into account 'exact facts and figures'. Therefore, the organisation relies on the ecological footprint and the sustainability standards derived from it to develop measurable indicators and to translate them into tools

(such as ecological footprint calculators and carbon footprint calculators) as well as behavioural precepts to reduce people's environmental impact. Taking this fact position as a point of departure brings about a profound ambiguity since, at the same time, Ecolife also approaches the issues at stake from a fairly position emphasising that participants have to make their own choices in accordance with their personal values and opinions. Yet, all the same the urgent need of reducing ecological footprints is put forward. Thus, participants get the message that it is up to them to decide but that the suggested behavioural precepts are, after all, not as free of obligations as they might have appeared to be. As already mentioned, this ambiguous stance came to the fore in the interviews as well as during the observations, particularly in the workshop about the ecological footprint.

'So, as Belgians, what do we need to survive if we go on like this? Five planets Earth, that's what we'd need, in this way. Rather shocking, perhaps, but it's the truth. So the question is whether we can carry on the way we are doing. That's something you have to answer yourself... I'm not going to give you the answer.'

After this explanation, the course of the workshop was devoted to precepts aiming at reducing the participants' footprint. Ecolife indeed particularly aims at presenting concrete solutions for ecological problems in order to enable individuals to contribute to a more sustainable world. This aim is reflected in the educational materials that are used in the workshops such as calculators, cards with tips, demonstration boxes, quiz cards with right-or-wrong questions, and Ecodriving-simulators. Particularly the latter is used as an attempt to meticulously steer the participants' (driving) behaviour in a predetermined, desirable direction. The users continuously receive instructions during the ride ('change gear', 'you drive too fast') as well as a detailed report on their performance afterwards.

A similar ambiguity emerged with regard to how Ecolife deals with the transfer of knowledge and the contestation of knowledge claims by participants. As the

interviewees explained and as we noticed during the workshops, Ecolife particularly conveys technical and factual knowledge focusing on how particular products, tools and behaviours relate to sustainability standards. Regularly we observed how participants voiced critical comments with regard to such matter-of-factual knowledge claims, thereby emphasising that knowledge concerning the issues at stake is often 'very difficult' to deal with. They refer to contestation of knowledge claims from a normative/political (cf. the references to other considerations and priorities) as well as from a scientific/technical perspective. Examples of the latter we observed during the workshops about Ecodriving and the ecological footprint.

- *'Woman 1: But doesn't the production of solar panels also involve quite a lot...?*
- *Teacher: PV cells are made of silicon, which of course is a contaminant. Yes, you're right. But any device has its pros and cons. What's the advantage of having a car?*
- *Woman 1: Yes, but no. I'd like to know, about your, about the fact that people opt for solar panels, where do we draw the line for those panels? At the end of the day, what they produce in ecological energy is greater than the production of those...*
- *Teacher: Yes, but, after all, it is and will always be your choice. That's what I'd like to point out. It's true what you're saying. Photovoltaic cells involve pollution. But then again, what about nuclear energy? And mineral oil? So, it's a choice.*
- *Man 1: I'd like to respond to that. An acquaintance of my mother's is a representative of a solar panel company and she asked him if she should buy any. He said she'd better wait another five years.*
- *Teacher: Possibly, yes.*
- *Man 1: Why? Because in five years' time the yield of today's panels will be next to nothing.*

- *Teacher: Uh, I'm afraid I cannot agree with that. Companies in Belgium currently have a legal duty to warrant their solar panel systems for twenty years.'*

This excerpt illustrates the two observed ways in which the coaches deal with these kinds of contestation. On the one hand, they take the fairy position referring to personal opinions, values, and preferences ('it is your choice'). On the other hand – and, as we see in the excerpt above, often simultaneously – the coaches also firmly take a fact position by dealing with dissensus and contestation from a rationalist perspective, referring to facts that are assumed to 'speak by themselves'. Thus, here too, it becomes clear how Ecolife oscillates between the fact and the fairy position. The educational staff member we interviewed seems to genuinely struggle with this ambiguous position, particularly with the sense that the individual behavioural precepts (that are assumed to be based on matters of fact) offer only very partial perspectives on reality. Her reflections reveal how the quest for a fair position emerges as a difficult endeavour within educational practices.

'I must say, well, I think it's increasingly difficult, but perhaps that's personal, to keep telling the story of, look, it does make perfect sense when we're all more environmentally friendly in what we do. But you do need a structured approach to support all that, and it's taking far too long to achieve that, which is quite frustrating because you can't keep on relying on people's goodwill, that they'll travel by train rather than by air when the train is five times as expensive - well, that, I think, is one of the difficult parts of my job, that you're constantly trying to think of new positives to make people enthusiastic and, well, etcetera. At the same time, there are so many things that go wrong and that are beyond your control as an individual...'

Nature excursions

The second case is an environmental education centre attached to a nature reserve of 230 hectares in the city of Ghent. The centre offers guided nature excursions for primary and secondary school pupils and college- and university students. We interviewed the centre's director and an educational staff member and observed three excursions: an autumn walk in the reserve for primary school pupils and two activities to study the biotope for secondary school pupils: an excursion consisting of 21 exercises that groups of 2 pupils carry out on their own as well as a combination of a guided springtime walk in the reserve and a biological water analysis activity.

A multiplicity of attachments? The main attachment of the EE centre as an organisation is 'nature'. Actually, the mere coming into existence of the centre is found upon the commitment of scientists and local conservationists to the particular piece of nature in which the centre is located.

'The natural reserve, yes, we've had it... for a very long time, and yes, in the eighties it was pointed out, there was this botanist from the university and he discovered valuable grasslands and explained us how to, uh, observe nature and, and he pointed out that it needed protection. So, uh, that's how a local action group came about which has now become [a department of the largest natural society in Flanders] but at the time they launched a campaign to persuade the local authorities to, uh, to buy this area. And, yes, that took thirty years, you know, to buy it [...]. Uh... meanwhile, nature education was, uh, also started in the eighties.'

Up till now, the centre is dependent on the nature reserve in that it still is its reason for existence. The educational staff member also voiced the belief that society as a whole depends on nature and that the centre is actively committed to alert people that 'we really need nature in order to have a good society'. Furthermore, all the staff members we met as well as the voluntary nature guides

we talked with expressed an active commitment to offering people opportunities to experience this valuable natural area. From this perspective, the staff members consider the increased policy attention for education for sustainable development²¹ – at least partly – as a threat: replacing EE by ESD would be at the expense of the ‘valuable knowledge of nature’, they argue.

The centre appeals to voluntary nature guides for its educational activities. Those guides’ strong attachment to nature, their passion and inspiration is underlined as a crucial motive for this.

‘Even today, teachers like to have the guides accompany the groups because we feel, and they as well, that they are... uh, the cherry on the cake, you know. With their approach, you know, with their, their, uh, their passion for nature they, uh, well yes, reach the right audience in the right ma... in the right time.’

Regularly we observed verbal as well as non-verbal expressions of some kind of interest, amazement or emotional commitment related to the direct experience of nature – particularly if there were animals involved. For instance, the primary school pupils jostled one another to watch an owl with binoculars. Another example is that, in a short informal talk with the guide in between two stops during a walk, a boy told about how he and his father saved a bird that had been attacked by a cat. During the water analysis activity, too, the pupils revealed diverse appreciations of the animals they discovered.

‘The girls put the water organisms into magnifying pots.

- *Careful!*
- *Hey!*

²¹ In the context of the UN Decade of Education for Sustainable Development ESD became an important issue within the Flemish EE policy (see for instance Van Poeck et al. submitted). At the moment of our research, the centre was faced with ongoing organisational reforms. An important decision that had to be taken precisely concerned the weight of nature, environmental issues and/or sustainability within the future content of educational programmes.

- *Oh!*
- *Is that alive, Miss?*
- *Boy o boy!*
- *I've caught a little fish.*
- *Yes, me too.*
- *Look, they belong together! Mother and son... [laughter]*

- *'Let's see if we can find anything. Sometimes there are some very interesting organisms to be found, uh, such as a fine, uh, a fine specimen of a leech.*
- *Pardon, a leech? I'll give it a pass.'*

These utterances voice participants' commitments, values, or opinions concerning nature. Yet, diverse attachments that might be incorporated in such expressions remained implicit as the guides never went further into them. On the contrary, during the water analysis the guide regularly made somewhat annoyed comments if the pupils paid too much attention to animals that were not useful so as to determine the quality of the water ('You should not collect the tadpoles. We cannot use them.' Or: 'Yes, but it's not about the fish. It's about the other animals.').

A fact, fairy, or fair position? Similar to our analysis of the first case, this education centre, too, is found to embrace a fact as well as a fairy position towards the issues it addresses. As we will elaborate below, this double position is reflected in the twofold aim of the excursions: transferring knowledge about nature and offering pupils opportunities to experience nature.

With regard to the former, the emphasis is on the transfer of scientific and factual knowledge about nature in general and the local reserve in particular.

- *'You just said that you want to convey knowledge through what you're doing here. Uh... Like what knowledge?*

- *Well, knowledge of natu... of nature, see? To get to know nature as it is and nature's diversity, the flora as well as the fauna, and here [in the reserve] I have found the ideal place to demonstrate that nature is not just roadside grasses and, uh... uh a collection of birds, but that there is an, uh, enormous biodiversity to discover and I do think that it's very important for people to be aware of this, that citizens, from an early age, become aware of this.'*
[emphasis added]

The aim to educate visitors about nature 'as it is' reveals an approach to nature as a matter of fact. It is considered important to provide exact knowledge about the issues that are addressed and, therefore, extensive and correct knowledge about nature and the reserve is an important criterion in the selection and training of the guides. The perspective on nature as a matter of fact is also reflected in – as well as, actually, brought about by – the educational activities, didactic tools, and interactional practices that shape the excursions, particularly those aiming at study of the biotope. For instance, pupils were given the task to find and identify aquatic animals using a dip net, magnifying pots and identification tables in order to determine the quality of the water. Another exercise was to answer questions about the reserve (e.g. 'Which river flows through it?', 'Which kinds of ground cover are there?' and 'How long is the boundary of the reserve?') by using a map with a legend. Other tasks were to dig up animals from the soil and identify them, to determine the water clarity using a Secchi disk, to measure (with the proper instruments) the height of a tree, the temperature of the water, the moistness of the soil, etc. The most frequently recurring interactional practices were teaching, giving detailed instructions, and asking questions to elicit an answer that one has already determined in advance. The guide that coached the water analysis frequently intervened with precise instructions in order to make the pupils select the 'proper' animals (i.e. those needed to conduct a biological water analysis).

'Look carefully, also for the little worms; look, have you got this one yet? Yes, fine, you can lay that one aside too. And this one? No, and look, the little ones, you've got those ones already... You've already got those ones, haven't you, the little ones? Let's see if we can find any snails, or worms. Okay.'

Questions to elicit pre-determined answers were frequently asked during the introductions of an excursion as well as during the walks in the reserve.

- *'Guide: In our area there are numerous so-called "meersen"²². Do you know what a "meers" is? Yes.*
- *Pupil: A bird?*
- *Guide: A "meers" a bird? A "mees" (tit) is a bird. Yes. [...] But what are "meersen"? What is a "meers"? If we had a map I could show you.*
- *Pupil: Channels.*
- *Guide: There are many channels in the "meers". What does it mean, when there are many channels, what... [...] Can you explain the presence of these channels? Yes.*
- *Pupil: Because, uh, there's a river running through.*
- *Guide: Indeed, and what does it do, what would the river do in the past, this natural river in winter, what happens to all its water?*
- *Pupil: It would freeze.*
- *Guide: Yes, fine, when it's cold it still does, doesn't it?*
- *Pupil: That plain there would get flooded.*
- *Guide: That plain there would be flooded, so we're talking about a very low-lying area, yes, which in the past would be naturally submerged. Today we need to help a bit so it's a flood plain in winter.'*

Thus, at particular moments and through the interventions and tools described above nature in general as well as particular issues such as water quality and

²² We preferred to keep the Dutch words "meers" (translatable in English as "marsh") and "mees" (translatable as "tit") in the text to convey the confusion of tongues that takes place.

biodiversity pre-eminently emerge as matters of fact. This, in turn, allowed for only one particular and predefined set of values to be enacted: a fascination for nature that is inspired by an ill-conceived image of the scientific attitude as neutral observation²³. For instance, when the guide meticulously steered the pupils to perceive and analyse the quality of the water 'as it is' according to the procedures for biological water analysis developed by experts, she closed the door for other perspectives. Water quality, here, is not about the pleasure connected to finding attractive little fishes, nor about amazement at the amount of tadpoles that will soon be transformed into frogs. The issue emerges here as the exact and proper measuring of those undisputable indicators that are assumed to 'truly' reveal how the water quality actually is.

The second aim of the excursions is offering opportunities to experience nature. The guides and educational staff members emphasise the importance of arousing pupils' interest in nature and creating openness to value and appreciate it.

'What we're looking for in particular is this good feeling, you know, of this natural environment and uh... Yes, despite bad weather conditions, for instance, or uh... that the time spent here has been valuable and that they have become a bit more aware of... how valuable that environment is. [...] That uh, the children go to, that they experience it, the wow effect. Oh, that's not what I'd expected, yes, oh, I find it really cool here, well, you know, this feeling of comfort and shelter you can get in nature. [...] Gee, I'd like that very much and sometimes it does happen, that pupils come back here later and that it stays with them, what shall I say, as a little beacon in their, uh, school days... and uh... [...] Yes, that they see this house as a different house, that it is something special and that they take along something of

²³ As already touched upon, Latour (2008) argues at length that the image of scientific practice that was passed down through the ages and that consists of a distanced observer depicting reality-as-it-really-is is actually a mythical reconstruction, neglecting the constitutive role of actual scientific practice in all its social and technical complexity. For an extensive discussion of the mythical character of this image of science and how it is still active in current thought, see Goeminne (2011).

its meaning, and also the natural reserve, that they, uh, manage to see it through different eyes, and that when they leave here, that they, yes, that something has opened up, yes...'

This aim is reflected in the role that is attributed to the voluntary guides and, as the excerpt below shows, reveals a quest for an alternative pedagogy than the matters-of-factual approach we described above.

'Uh, that's somebody who's able to convey... especially the knowledge he's got, you know, in a pleasant manner. In such a way that, well, the youngest visitors, the visitors have a good time. So their role is not so much that of a do-gooder or a pedagogue or a finger-pointing moralist, but uh... well, somebody who, uh, informs them and knows how to make this natural environment exciting and opens their eyes a bit... and indeed, who encourages them to do something with it later on... who stimulates...'

This aspiration to offer pupils valuable nature experiences results in a different kind of educational activities, tools and interactional practices that were particularly applied during the guided walks in the reserve. In contrast to the abundance of tools and instruments used during the study of the biotope, the only tool that was used during the walks we observed, are binoculars through which pupils could watch birds. The interactional practices between guides and pupils were less structured beforehand as the guides frequently went along with the (sometimes coincidental and unexpected) observations and encounters in the reserve. They taught about the plants, landscapes, and animals they came across, thereby paying attention to the (e.g. medicinal) usefulness of nature for people, the history of the reserve, the conduct of animals, etc. The guides also regularly told stories and legends about plants and animals.

The EE centre's aim to offer opportunities for experiencing nature is pursued by appealing to participants' personal interests and preferences and could thus be situated at the fairy position in contrast to the factual approach to nature that we

found to be connected to the way in which the centre tried to achieve its objective of transferring knowledge. Similar to the case of Ecolife, we find here an educational practice in search for a position that acknowledges facts as well as values, opinions, and preferences. Yet, both at the fact and the fairy position, this centre takes a less extreme stand than Ecolife does. As we argued, Ecolife connects the knowledge claims in the workshops to far-reaching (social, economic and ecological) implications leaving little room for other considerations while simultaneously emphasising the participants' freedom of choice/opinion. During the excursions in the centre, nature sometimes emerges as a matter of fact that is known (and, thus, manageable) by experts who are willing to share this knowledge with the pupils without further obligations. The guides and staff members just hope to foster a shared passion for nature. As such, the pupils here are not confronted with the profound ambiguity inherent in the contradictory message of Ecolife. During the excursions, the main purpose seems to be to direct attention to nature as a shared interest. This can be regarded as a first step towards a fair position. Nevertheless, nature (and particular issues such as biodiversity and water quality) cannot emerge here as a common matter of concern in which the pupils and educators are jointly and antagonistically implicated since the excursions do not address the multiplicity of attachments that are at stake. Pupils are not encouraged to express and explain their own interests, opinions, and preferences so that the diverse and perhaps mutually exclusive attachments remain unexplored. The only possibility remaining is a one-sided choice between a fact or a fairy position, torn apart and disconnected. The excerpt below illustrates how a guide addresses the issue of exotic species, taking the underlying knowledge claims and normative assumptions for granted. At the point when a pupil voices diverging attachments, albeit implicitly, these remain unexplored. In our view, however, this very moment could have been seized upon as a point of departure in the elaboration of a fair position. In exploring a

multiplicity of attachments and concerns or a diversity of images of 'nature', a space for enacting the interconnectedness between facts and values might have opened up.

- *'Guide: What you can see there, for instance, [...] is a number of Canadian geese. They are very aggressive breeding birds over here. And they chase away the native breeding birds. Canadian geese are an exotic species, chasing off the pairs of black-tailed godwits that come here from Africa to breed, for instance. I said they are an exotic species and in this natural reserve, where all flora and fauna are protected, it has been decided to cull them, to control their number, at the moment there are several out there in those meadows. But since shooting is not allowed in natural reserves [...] they have opted to destroy the nests to reduce their population a bit. [...] They addle the eggs and put them back in the nest or they puncture them and put them back in the nest. And mother goose simply continues brooding but those eggs won't hatch.*
- *Pupil: Oh.*
- *Guide: And after a while, after quite a number of days following her usual breeding period, the goose realises that, oh dear, something's wrong here, but by then the breeding season no longer allows her to nest again.*
- *Student: Oh.*
- *Guide: So those are destroyed.*
- *Student: That's how you control, they put the egg there, but what about that Canadian goose...*
- *Guide: Well, we're not killing the Canadian geese, those that are there, can stay, but we're controlling their numbers. And even so, in winter we've got concentrations of up to hundreds of Canadian geese that elsewhere in Flanders [...] there they are shot, sometimes by the hundreds.*
- *Student: Oh.*
- *Guide: Not that I'm against that, and I can even accept their being shot in a particular way. But what I do object to is that, once those at times hundreds of animals have been shot, they bring in a crane and a bulldozer, dig a hole*

and shove them into it. That's something I do... that's unacceptable from an ethical point of view. If you kill animals, you should show them some respect, for instance by using them for food. [...] That's a personal thing. Please come along.'

Documentary films

The third case is 't Uilekot, an organisation in a rural area of Flanders that describes itself as a 'regional centre for action, culture, and youth'. The centre consistently addresses environmental issues in the context of international solidarity and social justice. It runs a café and develops activities in four domains: ecology, international solidarity, culture and youth work. For this analysis, we focus on the making of films about sustainability issues. The centre made three documentaries: 'Climaxi' (about climate change), 'Sustainable on Paper' (about sustainable forestry) and 'Fish and Run' (about sustainable fishery). We interviewed the coordinator of the centre and observed four educational activities related to the films: a film performance annex debate about 'Sustainable on Paper', a film performance and subsequent discussion about 'Fish and Run', a political action related to 'Sustainable on Paper' and a day at the set of 'Fish and Run'. The scripts of the three documentaries were analysed as documents.

A multiplicity of attachments? In line with its focus on environmental issues in the context of international solidarity and social justice, the main attachment of this centre can be described as 'people and their environment'. More particularly, during interviews as well as observations, the coordinator and volunteers of the centre regularly expressed concern for, commitment to, and emotional involvement with the people/groups that are affected by (or 'victims of') sustainability problems.

'Such things will always be rather, not rather but very emotional. That's the audience you'd like to be involved with. Those are the people you love in your life.'

[...] Those are the people you like and all, uh, so... yeah... After shooting those scenes... every time we needed quite a while ... an hour or two ... to chill out before we could go on. That's heavy stuff, you know, even today. Also when you see that. Even when I see that film for the twentieth time, when it's been a while, it'll still fill me with emotions and indignation. And it makes me think, hey man, it's such an indifferent system, there's so much injustice in this shit society, I don't want to have anything to do with that...'

Therefore, throughout all its activities, the centre is actively committed to realising social change in order to improve ecological sustainability and social justice.

A multiplicity of attachments of diverse actors involved came to the fore in the films as well as during the performances and actions related to the documentaries. In 'Climaxi', for instance, the issue of climate change is addressed from the perspective of the environmental movement, poor people unable to pay their energy bills or to take energy saving measures, businessmen planning energy-wasting investments, local people hoping for employment opportunities as a result of these investments, people in the south suffering by the consequences of climate change, etc. The makers of 'Sustainable on Paper' discovered that the large scale plantations required to meet the growth of paper and wood consumption worldwide – although they are certified by the Forest Stewardship Council (FSC) – destructively affect the life and environment of local people in Brazil. In the film, diverse actors express their (often antagonistic) attachments: e.g. local people (attached to the conservation of the jungle, access to potable water, landownership), representatives of FSC (attached to criteria and procedures to foster sustainable forestry), consumers in affluent countries (attached to an abundance of wooden/paper products), and representatives of a multinational paper corporation (attached to making profit and its ambition to 'be a benchmark in sustainability'). In 'Fish and Run' the environmental movement

and scientists expressed their attachment to maritime biodiversity; fishermen using common as well as sustainable (passive) techniques were concerned about a sustainable (i.e. durable) future for fishery and attached to the sea; consumers to tasty fish; policymakers to European and national legislation such as the distribution of quota; sellers at the fish market to their economic activity; etc. As we will further elaborate below, exploring and presenting this multiplicity of attachments is precisely what the centre considers to be an important purpose of its educational activities. Also during the film performances with subsequent discussion or debate and in the political action concerning the FSC label, these diverse and antagonistic attachments are extensively explored and discussed. We observed here a sustained effort of the coordinator and volunteers of the centre to invite others to present their concerns, perspectives and opinions on the one hand and to advocate their own attachment to the people that are affected by the issue at stake on the other.

A fact, fairy, or fair position? The centres deep concern about the people affected by sustainability issues and its consequent commitment to realising social change on the one hand and the aspiration to present and explore a multiplicity of attachments on the other are another manifestation of how practices in the field of EE and ESD are faced with the democratic paradox and the tension this brings about. The interview as well as the activities we observed reveals that the centre neither takes a clear fact position, nor an obvious fairy position towards the issues it addresses. Yet, as we will show, precisely the tension described above is at the basis of the difficulties and risks involved in the quest for a fair position.

The approach to sustainability issues as undisputed matters of fact, as it is applied for instance in all kinds of behaviour precepts, was criticised by the coordinator we interviewed.

'Uh, and to try and explain to people that we... that the story as it is told mainstream, that essentially it is not right. The story that we should consume less,

install solar panels and buy green energy, uh... We want to point out the implied contradictions to people, starting from the idea that all this may be fine but that there are many people who simply can't afford it. And those are left out.'

Consequently, the centre is reluctant towards translating sustainability into well-defined claims or standards ('do's and don'ts'). On the contrary, they argue that sustainable development should be approached as a continuous quest for what can be regarded 'sustainable' in very concrete situations. EE and ESD, then, should be aimed at arousing interest in the issue at stake and evoking questions rather than providing answers.

'From the beginning we have deliberately chosen not to offer solutions. Be..., because we... because we've always been sort of a, a, a group of people who say, listen, we'll do the asking and it's for people to reflect and think what they... We're not dishing out any ready-made solutions or ideologies... And these days, if we compare our times to twenty years ago, many people find that hard. And that's what they said... I was expecting to see solutions but I'm left with even more questions than, than in the beginning... But I find that, personally I find that a good thing. So if you can make people think and question themselves, then that's fine.'

Yet, arousing interest and evoking questions, here, cannot be regarded as a manifestation of taking the fairy position of mere opinions and preferences as their 'continuous quest' implies an attempt to critically explore and confront the multiplicity of attachments involved. The centre's thorough attention to the diversity of interests, opinions, and knowledge claims concerning the issues at stake could thus be connected to the question whether these opinions are 'well or badly constructed'. The films and our observations reveal for example how the centre aims at building expertise through action and research in collaboration with the people affected by the issues at stake as well as by interviewing experts and a variety of actors involved in the issue. Their attempt to take into account the multiplicity of opinions, assumptions, preferences, and factual knowledge

emerging from this process indeed reflects an active quest for a fair position, resisting a relapse into a fact or fairy position. At particular moments, the interactions, discourses, and educational tools and instruments that shape their practices indeed seem to contribute to this attempt of approaching sustainability issues as matters of concern.

An important consideration that contributes to the search for a fair position is the deliberate choice to develop educational activities starting from concrete issues instead of general or theoretical subject matters. The concern for real people affected by sustainability problems is always the starting point for making a documentary. For instance, when the centre organised a concert, one of the musicians turned out to be a fisherman who used sustainable techniques. He talked about his experience that it was utmost difficult to stand up to the competition with the fleet using common, intensive fishing methods and that he started a petition striving for an inshore three miles zone for sustainable fishery. This encounter was the trigger for making 'Fish and Run'. The very particular concern of the fisherman and the idea he strived for was acknowledged, examined further, complemented, refuted, and adjusted by other points of view. Thus, making the film became a quest for possible solutions that can ensure a sustainable future for the fish as well as the fishermen. The issue of sustainable fishery, then, was no longer a matter of implementing well known solutions but was presented as a matter of concern in which a multitude of attachments are caught up.

A sustained and common focus on these mutually exclusive attachments concerning the issue at stake is another way in which the centre tries to approach sustainability issues from a fair position. During the activities we observed, plenty of time was taken for in-depth discussions. Divergent points of view were elaborated and clarified, participants frequently objected to each other's opinions and they were given the opportunity to ask questions and / or to answer them

extensively. Not only did those discussions enable a multiplicity of attachments to be expressed, they also served as a forum for criticizing and challenging each other's opinions or knowledge claims. This was made possible by the opportunities for objection, by keeping on asking questions in order to challenge people to clarify, refine, or revise their arguments as well as by calling people to account regarding the consequences of their own opinions or behaviour.

In its focus on the diversity of attachments, the centre consistently attempts to emphasise those of the – often vulnerable – people affected by the issue at stake. 'Giving voice to the voiceless' is a continuous and deliberate endeavour frequently reflected in the films as well as in the arguments used in debates and actions. In the debate and action about 'Sustainable on Paper', for instance, representatives of FSC recognised the problems revealed in the movie but continuously referred to procedures for stakeholder consultation and reaching consensus amongst the members of FSC. In contrast, staff members and volunteers of the centre consistently expressed their concern about the suffering people.

'So when I watch this movie, showing the use of Round-Up and how local communities are being deprived of their income; when I consider the case of Uganda, where 22,000 people were displaced, and when I see that this is taking one or two years... Well, me and you, we've got the time to have a debate on this every other year, you know. But that woman with her jobless son, she's got no time for that, see. She's expecting a solution right now.'

No matter how self-aware the centre is in its quest for a fair position, as illustrated above, it does face a number of challenges and, perhaps, pitfalls. A first one is connected to its commitment to realising concrete social change that is brought about by the strong attachment to people and their environment. This commitment causes tensions with the aspiration to preserve openness to a multiplicity of perspectives. For instance, in contrast to 'Climaxi' and 'Sustainable on Paper', 'Fish and Run' does present possible solutions to ensure a sustainable

future for the fish as well as the fishermen. The challenge, here, is to avoid that these ideas and propositions, that were a result of the research conducted in the making of the film, start to serve as matters of fact that are beyond dispute and, thus, close the door for other attachments. Another challenge is connected to the centre's strong attachment to the actors affected by sustainability issues and the related commitment to 'give voice to the voiceless'. As argued, this is a valuable concern which contributes to the search for a fair position. Nevertheless, there is a difficult balance involved, i.e. the balance between presenting the (often unheard) voice of these vulnerable people and avoiding that this vulnerability – as it touches the audience – becomes an objectified matter of fact that silences other voices or perspectives. For instance, during the shooting of 'Fish and Run', the coordinator of the centre told about his struggle to decide which ones of the filmed scenes should be in the documentary or cut out of it. His doubts particularly concerned the role of the fisherman who originally served as the reason to make the film. The purpose was to focus on his dream of an inshore three-mile zone for sustainable fishery. Yet, in the meantime, the fisherman's project turned out to be loss-making and he quit. The coordinator told us how he was struggling with this, particularly because – although he would rather not admit this for himself – he started to think that the failure could be partly due to a lack of ingenuity and entrepreneurship of the fisherman himself. That day, he interviewed a scientist for the film so as to assess the fisherman's proposal by confronting it with insights based on scientific research. This scientist, too, while being interviewed, acted very reticent with regard to contesting the fisherman's idea.

- *'Interviewer: So what's the point of a fisherman fishing for sole inshore? If we consider that most of the population in the inshore three-mile zone cannot be commercialised because the fish are too small?*
- *Scientist: Well, we should not forget that this is about mixed fisheries where different species are caught... uh... well... what shall I say [laughs].*

- *Interviewer: No, but what I'd like to know is why, why would an inshore fisher go fishing for sole in coastal waters while you as a scientist argue that you need to go offshore for that.*
- *The scientist shrugs his shoulders and shakes his head: Those are commercial... uh... aspects... of fishermen [stretches out his hands high in front of him]. But I'm rather wary uh... to express my opinion on this. [shakes his head] I mean, a fisherman...*
- *Interviewer: You'd rather not because the fisherman might get the impression that you're calling him a fool or what? [laughs]*
- *Scientist: No, no, no... No.*
- *Interviewer: Could we maybe resolve this dilemma by simply saying once again for uh, two main species uh, that while they breed inshore, the adults are to be found, uh, a bit more offshore? That we simply have this in a single scientific discourse?*
- *Scientist: [nods] So in general we can say that, for a population that is structured by age, the location of fish will vary with age. Juvenile fish, small fish will tend to prefer the shallower coastal waters. I'm referring mainly to sole and plaice here, mind you, so the main flat fish uh, from the southern North Sea. And as they grow into adults, they will move further away from the coast into deeper waters.'*

Concluding remarks

The aim of this article is to contribute to the discussion about the democratic paradox in EE and ESD. Drawing on Latour's concepts we showed how educational practices are often oscillating between a fact and a fairy position and that the quest for a fair position turns out to be a challenging endeavour. This oscillation can be explained as a symptom of educational practices being trapped in the Modern Constitution. As Latour explains, the fact and the fairy position are only very partial renderings of issues at stake. However, thinking from within the Modern Constitution and its separated worlds of facts and values, this partial

approach can only be complemented by adding what has been left behind. This is for instance what happens when Ecolife employs factual arguments such as ecological footprints to make people embrace a value-laden position of ‘caring for the planet’. Vice versa, the EE centre can – at particular moments – be seen as actively appealing to a particular set of emotions – admiration, fascination – to lead their audience to adopting a factual position *vis-à-vis* ‘nature as it is’. These examples show, in a very symptomatic way, that neither facts nor values can exist by themselves. This is precisely what Latour intends with his dual mode of using ‘matter of concern’: in the same way as facts can only exist by the values, concerns and attachments that sustain them, values are completely powerless when their factual underpinnings are removed from view turning them in mere opinions. Dwelling on the relation between the ‘scientific’ fact position and the ‘poetic’ fairy position, Latour words it as follows (Latour 2008, 38): ‘I am not saying that we have to ‘reconcile’ the scientific with the poetic worldviews, to ‘bring together’ science and art, because such an enterprise would produce only the most monstrous hybrid: two artifacts brought together just makes for a third artifact, not for a solution.’

A genuinely fair approach should thus not depart from within the Modern Constitution by artificially bringing together what got separated into facts and values but in reality – as a matter of concern – never got broken in the first place. Rather, it tries to create the occasion where facts and values can emerge in their interconnectedness by exploring a multiplicity of attachments in bringing a public issue – that is to say a public and an issue – into existence. In this respect, Marres also argues that a public does not emerge ‘out of the blue’ (Marres 2005). Work has to be done in the sense that a ‘public-in-the-making’ must engage in articulating joint and antagonistic attachments among relative strangers.

What our analysis of the cases has shown is that the ambiguity of oscillating between a fact and a fairy position straitjackets people and places them in what

Quaghebeur et al. (2004) labelled a 'double-bound position': they are incited to 'act by themselves' (that is, in line with their personal values, opinions and preferences) but at the same time restricted by a preconceived model or norm for this acting by oneself (i.e. sustainability standards and precepts that serve as matters of fact). A fair position puts the democratic paradox in another light. Since both private interests (individual actors' attachment to things) and public interests (attachments to matters of collective concern) are caught up in one and the same issue, being attentive to the joint and antagonistic attachments of a set of actors caught up in such a matter of concern prevents falling into one pole of the democratic paradox while neglecting the other. It enables moving beyond the contradistinction between democratic concerns (at risk of ignoring facts concerning far-reaching consequences of sustainability issues and, thus, situated at the fair position) and sustainability concerns (at risk of denying the variety of values and opinions involved and, thus, situated at the fact position) but instead takes a position within this tension. The multiplicity of attachments is acknowledged and, since it cannot be assumed that these can co-exist peacefully, stands in the way of an 'anything goes' relativism. A fair position thus goes to the core of this democratic paradox without the ambition to solve the tension inherent in it.

ESD and EE, then, can no longer be understood in terms of socialisation. Socialisation always involves a 'knowing' position on the part of the educator. Yet, the specific nature of sustainability issues rather challenges the unbridled legitimacy of existing knowledge, expertise, and routines. In this view, such issues can alternatively be understood as a starting point for educational practice as the actors involved do not only share ignorance and uncertainty as to how to handle them but are also caught up in them through joint and antagonistic attachments. By enacting, exploring, and confronting mutually exclusive attachments, ESD and EE can emerge as a space in which things are made public: this 'is not just about

making things known (as 'matters of fact'), but about making them present (as 'matters of concern')' (Masschelein and Simons 2009, 237). Making sustainability issues present through a sustained attentiveness to the multiplicity of attachments which bind actors to it creates a space for subjectivation. Simons and Masschelein (2010a) introduced the concept of 'pedagogic subjectivation', understood as an experience of potentiality, a strong experience that one 'is able' (to do something, to know something, to speak about something...).

'[P]edagogic subjectivation includes engagement with 'school material' (texts, books ...) that one has at one's disposal. Teachers can turn this material into a 'thing-in-common', in the face of which others are perceived as equals and an experience of 'being able to' can emerge. This experience, we suggest, is the experience of students' leaving the family and entering the school: not as a selection or qualification machinery but as a 'public space' because one is equally exposed to a thing-in-common.' (Simons and Masschelein 2010, 601)

This 'thing in common' in the case of EE and ESD is the issue at stake and the joint and antagonistic attachments it brings about.

MANUSCRIPT 5:

Participation in times of urgent transition. Environmental education caught in a paradox.²⁴

Environmental education (EE) and education for sustainable development (ESD) are facing a 'delicate balance (or paradox)' (Östman 2010, 75) between on the one hand concerns about the sense of urgency surrounding current ecological problems and, on the other hand, the acknowledgement that within these issues a variety of commitments, values, interests, and knowledge claims are at stake and that, therefore, a pluralistic and participatory approach is required. Yet, pluralism and participation do not necessarily enhance sustainability. Researchers have addressed this tension in a lively debate in academic literature (e.g. Jickling and Wals 2007; Breiting 2009; Rudsberg and Öhman 2010; Wals 2010; Læssøe 2010; Östman 2010; Lundegård and Wickman 2012; Kopnina 2012; Van Poeck et al. submitted; Van Poeck and Vandenabeele submitted) and practitioners struggle with it in their everyday practices. The latter is the central focus of this article. We analyse an educational practice that is caught up in this paradox as it is characterised by a pursuit of fundamental social change – that is, a transition toward a sustainable society – through a participatory approach. Our aim is to grasp the struggle involved and the conceptions of education that inform it.

Sustainability issues as public issues

In the context of sustainability transparent and undisputed issues are rare. The causes as well as the effects of problems such as climate change, the extinction of species, nuclear risks or oil depletion are complex, uncertain, and contested as they are entangled with diverging and often irreconcilable values, interests and

²⁴ This manuscript – co-authored by Joke Vandenabeele – has been submitted to *Adult Education Quarterly*.

knowledge claims. Neither the available expertise, nor the existing social and political institutions and routines are able to tackle them. At the same time, however, the consequences are utmost far-reaching and often bring about injustices and social controversies. An urgent response is thus indispensable. Latour (2005a) and Marres (2005) characterise such issues as ‘public issues’. A ‘public’, they argue, is required so as to adopt issues which currently existing institutions and experts are failing to address or prove incapable of finding a settlement for. Such a public, Marres emphasises, is *caught up* in the issue at stake. Drawing on Dewey’s (1954) conception of the public she qualifies an issue as a public issue if the spread of the effects of a given action is far enough to substantially affect actors who are not directly involved in the action. Latour (2005a, 27), too, argues that our globalised world is characterised by the intimate entanglement of a variety of human and nonhuman actors that are, willingly or unwillingly, connected by the expansion of all kinds of ‘assemblages’ such as markets, technologies, science, ecological crises, wars and terrorist networks. Those many differing assemblages, he stresses, are already connecting people no matter how much they don’t feel assembled by any common lifestyle, interest, or commitment.

Marres (2005; 2007; 2010) and Latour (2005a) further clarify this notion of entanglement by elaborating that our relation to public issues should be understood in terms of ‘attachment’. The concept of attachment is used by actor network theorists²⁵ to refer to a special relation between human and nonhuman entities. Attachment, in this account, is a mode of ‘being affected by’ whereby

²⁵ Actor Network Theory (ANT) is an approach that evolved out of Science and Technology Studies. Authors such as Bruno Latour, Michel Callon and John Law developed a distinctive approach to social theory and research characterised by a constructivist perspective (avoidance of essentialist explanations), a ‘material-semiotic’ method (mapping relations that are simultaneously material and semiotic) and an extension of the understanding of the social by focussing on networks of human as well as nonhuman actors (thus acknowledging the agency of nonhumans, their power to transform society).

actors are both actively *committed* to an object of passion and *dependent* on it (Marres 2005). They must do a lot of work so as to sustain this object of passion while, at the same time, the object binds them in the sense that their pleasure, fate, way of life and perhaps even the meaningfulness of their world is conditioned by it. This entanglement, this state of affectedness, they argue, can take the form of institutional, physical, monetary, and legal ties as well as of attention, interest, involvement, or of being touched, implicated, and mobilised by an issue.

It is this notion of attachments that allows Marres to complement or, rather, to sharpen Dewey's account of the public. Starting from these attachments, she argues that one cannot adequately define a public by merely referring to actors that are commonly implicated in an issue. The fact that actors are all affected by the issue at stake is not a sufficient characterisation for it since actors are not only jointly but also *antagonistically* implicated in public issues. They have divergent attachments and the sustainability of these attachments is threatened by the attachments that exclude them. Being jointly and antagonistically implicated in an issue, then, means being bound together by mutual exclusivities between various attachments. Acknowledging this antagonism thus implies

'to move beyond the "mere" statements of divergences among attachments that permeate social life — where one says "I am into the environment" and another "I am into the oil-based economy," or something of the sort, after which each goes his or her own way. We enter into a situation where an object of contention [...] provides an opportunity to enact the disagreement between various, entangled, exclusive attachments, over a specific, concrete, accessible question' (Marres 2005, 129)

This notion of antagonistic attachments offers a perspective that acknowledges pluralism without falling into undue relativism. Latour (2005a) elaborates upon it by referring to the etymology of the old word 'Thing' or 'Ding' that originally

designated a certain type of archaic assembly. Early senses of the word included 'meeting' and 'matter', 'concern' as well as 'inanimate object'. Ancient Icelandic deputies, for instance, were called 'thingmen' and gathered in the 'Althing', in an isolate place where disputes were addressed. This old etymology shows, according to Latour, that we 'don't assemble because we agree, look alike, feel good, are socially compatible or wish to fuse together but because we are brought by divisive matters of concern into some neutral, isolated place in order to come to some sort of provisional makeshift (dis)agreement' (Latour 2005a, 13).

'[L]ong before designating an object thrown out of the political sphere and standing there objectively and independently, the Ding or Thing has for many centuries meant the issue that brings people together because it divides them. [...] If the Ding designated both those who assemble because they are concerned as well as what causes their concerns and divisions, it should become the centre of our attention.' (Latour 2005a, 13 - emphasis in original)

Indeed, such a Ding or Thing, that is, an assemblage of actors around an issue that causes their concerns and divisions is our central focus in the remainder of this article. We present an analysis of the case of 'Transition Towns' aiming to reveal the particular 'assemblage' that emerges around sustainability issues within this educational practice. Building on the insights developed by Latour and Marres we studied this case so as to understand how the delicate balance between the sense of urgency brought about by sustainability issues and concerns for pluralism and participation is dealt with.

The Transition Towns movement: Analysing an assemblage around sustainability issues

As indicated, we focus on an educational practice²⁶ that embodies the delicate balance between concerns for sustainability and for pluralism and participation. The Transition Towns movement came into existence as a response to the perceived need for a fundamental ‘transition’ toward a sustainable society and pursues this transition through a participatory approach. So as to grasp the emerging assemblage we investigate the actors involved, the resources that are mobilised, the rules of interaction, and the discourses on sustainable development and EE/ESD²⁷. Analysing the actors involved enables us to find out which actors are drawn into the assemblage. An analysis of the formal and informal rules of interaction allows examining whether, and if so, how actors are encouraged to voice diverging attachments as well as how controversy is dealt with and which opinions, points of view, and arguments are regarded legitimate. We analyse the mobilisation of resources (educational tools, methodologies, and activities) in order to understand how concerns, knowledge claims, values, expertise, etc. are drawn into the assemblage and how these resources are also affecting the space for a multiplicity of attachments. Finally, analysing which particular discourses on sustainable development and EE/ESD are nourished enables a deeper understanding of how educational practices deal with

²⁶ The analysis we present is part of a broader doctoral research project in which 7 cases are studied with a focus on whether and how sustainability issues emerge as ‘public issues’ within educational practices. Besides the case described in this paper, we analysed the project ‘Environmental Performance at School’ (Milieuzorg Op School), an environmental education centre, a Community Supported Agriculture initiative, a regional centre for action, culture, and youth, a transition arena for a climate neutral city, and an organisation that offers workshops to promote ecological behaviour change. Therefore, we gathered data by combining an extensive document analysis with in-depth interviews (19) and direct observations (45) and analysed them using the qualitative analysis software QSR NVivo.

²⁷ This analytical framework – inspired by the Policy Arrangements Approach (Arts et al. 2006) – guided the entire multiple case study.

contestation and controversy as well as which attachments are taken into account.

Transition Towns

The Transition Towns movement arose in Totnes (United Kingdom) where the first Transition Town (TT) has been established in 2006. Since then, the initiative has been copied around the world. The aim is to prepare towns, villages, cities and neighbourhoods for a future affected by climate change and shrinking supplies of cheap energy (peak-oil). In Flanders²⁸, too, a group of volunteers gathered in what they call the 'Transition Network' strives to spread the idea and to facilitate the establishment of local TTs throughout Flanders. Up till now, 23 Flemish TT initiatives started up. For our analysis, we focussed on the Flemish 'Transition Network' – the umbrella organisation so to speak – as well as on initiatives taken by a local TT. We analysed documents, interviewed 2 volunteers of the Transition Network (each of them also engaged in local TT initiatives – a small village and a city) and observed 3 activities: a 'Transition Conference' (organised by the Transition Network), a course on 'visioning' the future and a demonstration of the results of this course annex 'Transition Café' (organised by a local TT initiative).

Actors

Within the TT movement six people are gathered in the coordinating Transition Network but the heart of the movement, the interviewees emphasised, is constituted by the volunteers engaged in local TT initiatives. In the documents as well as during the interviews, the bottom-up approach was elaborately highlighted, particularly reluctance against steering and prescriptions from above (be it from authorities, scientists, or NGOs) and local communities ('the place where people live') as the core locus of action. Thus, the movement locates the 'epicentre' of the assemblage around the issues of climate change and peak-oil

²⁸ The Dutch-speaking part of Belgium.

within these local communities. This goes with a strong appeal to and reliance on the capabilities present in local communities.

‘The greatest responsibility may not rest with the citizens, but it is probably the lever that offers the greatest chance of bringing about change. Because the, um, political lever, um, doesn't really work at the moment. Companies are also too defensive of their profits, aren't they? Um, technology ... yes actually most of the problems still exist or are getting worse. So we can't manage without the citizens, can we? [...] So in fact this means there is a great um, yes a possibility that citizens are going to, um, um, help get things started, right?’

Therefore, the interviewees emphasised, the TT movement is very open towards involvement of miscellaneous actors within these local communities: everyone is invited to take part and to bring in a diversity of capabilities; deliberate efforts are made to make people feel comfortable, show interest in them and take their contributions seriously; (financial) thresholds are minimised and the movement is open to collaborate with all kinds of people and organisations. As argued, at the same time they resolutely take an egalitarian stance and reject top-down steerage from experts and policymakers. Scientists are welcome to engage in initiatives within their community and to bring in their expertise ‘like others contribute with their talents’. Likewise, policymakers are invited to facilitate and support local initiatives while the TT movement emphasises the importance of remaining independent and, hence, is reluctant against substantive interference of politicians and authorities.

The highlighted openness of the movement towards the involvement of ‘everybody’ contrasts with a more or less implicit expectation that participants are willing to submit themselves to a number of taken for granted claims. As we will further elaborate below, the movement assumes for instance that ‘transition’ is not only inevitable (due to ‘physical limits’) but also desirable to protect ‘the common good’ and that individuals within local communities are able to make

this happen. Participants are expected to share this analysis as well as the proposed way out of it.

'There is a, um, you know, a certain openness is important and also a... um, what we actually want to avoid is a... um, what sometimes comes out in these type of discussions is, um, buck passing, isn't it. Pointing the finger: it's their fault, it's their fault. I think it's an attitude of well, OK, they are mainly responsible but let us also see what we can do, yeah? So perhaps this is a kind of expectation for people to be prepared to consider their contribution to events. Yes.'

The movement's aim to 'inspire' and engage a broad range of participants to contribute to the 'inevitable' and 'desirable' changes contrasts with both interviewees' explication that, in practice, the movement mainly reaches a rather homogeneous, congenial audience.

'So what you see is... that it is not so straightforward and that um, people that spontaneously arrive at the first transition... initiatives have a certain profile, don't they? I mean... not predominantly young people per se but a lot of young people who are driven, are very often very concerned by the ecological aspects and not as much with the social, aren't they? Um, I also think they are rather left-leaning, or, yeah, whatever. Um, so the first group of people that turns up has a certain profile. And this sometimes makes it a little more difficult to expand, which is the intention, right?'

These interviewees but also participants we observed mentioned diverse causes for non-participation such as 'not being ready for the change yet', a lack of time, and (too) dissimilar social environments and lifestyles. One interviewee argued that people who don't want to take part might just have a different opinion regarding the proposed changes, thus acknowledging that issues such as peak-oil and climate change are entangled with diverse and often irreconcilable attachments.

Resources

The TT movement is based on a variety of activities that are being organised: courses and trainings about transition and the issues of peak-oil and climate change, film performances, lectures, thematic working groups (on local food supply, gardening, energy, education, etc.), actions (e.g. guerrilla-gardening, carrier cycles-share, introducing alternative local currencies), visioning and back-casting, brainstorming activities (Open Space, World Café, etc.), workshops (about repairing electrical equipment or bikes, making clothes, cooking vegetarian meals, artistic activities, etc.), Transition Cafés, exchange marts, etc. Through these activities, the assemblage is expanded with new – human and nonhuman – actors: gardens, vegetables, speakers, local currencies, shops, participants, bicycles, and a variety of didactic tools that are especially used in order to provide information such as books (e.g. the Transition Handbook), films (documentaries as well as short films on the internet), slide shows, and courses.

The interviewees indicated that it is very important to comprehensibly explain the complex issues of climate change, peak-oil and transition so as to sensitise people and to foster a clear insight into ‘what happens and what they can do about it’. As such, ‘knowledge’ is drawn into the assemblage and the transfer of knowledge about ecological issues is regarded a prerequisite for transition. Although, as argued, the movement is reluctant against steering from experts, it does rely on scientific knowledge to underpin its discourse (see also below). For instance in a brochure on the movement:

‘Scientists announce that the inevitable end of the era of cheap oil (peak oil) is nigh. Because our current lifestyle is so closely linked with cheap oil, this end will also have serious consequences for our way of life. Not only climate change but also the financial crisis, pollution of our environment, the disappearance of many animal and plant species, the large number of refugees, the gap between North and South etc. make it clear that something has to change.’

Besides appealing to scientific expertise (also through books, scientific reports, inviting experts for lectures, etc.), in line with its focus on capabilities within local communities, the movement strives for developing expertise itself thereby, again, expanding the assemblage. Some volunteers make efforts to qualify themselves with regard to particular issues or aspects of transition and to share knowledge. For instance, a course on permaculture has been organised without the involvement of experts. The participants each studied a part of it and subsequently shared the acquired expertise with the others.

The educational resources that are used reveal a tension between, on the one hand, an invitation to imagine and 'dream' of a desirable future (e.g. through activities such as visioning, World Café, Open Space) and, on the other hand, the acknowledgement that dreams and imaginations are inevitably restricted by ecological (physical) and social limits (that are brought into the assemblage through the transfer of knowledge, lectures, films, etc.). This tension – which is a manifestation of the paradox between pluralism and sustainability concerns – appears to be difficult to handle. For instance, during the course on visioning the introductory presentation emphasised the limits implied in sustainability concerns.

'We see a number of things, if we look carefully, that won't be possible any more. And we have to take full account of them. Now, imagining the future without taking account of what won't be possible any more in the future, yes, that's being somewhat too naive.'

The speaker subsequently elaborated on peak-oil, climate change and a money-based economy. Yet, during the 'Transition Café' following on the demonstration of the results of this course we did not observe a sustained and profound attention for physical limits. For instance, during a group discussion the suggestion was raised to produce food locally. One of the participants questioned the feasibility of this idea.

- *'Just now, I was sitting with another group [...] and then the discussion turned to the fact that in and around Ghent there is probably not enough land available to feed the entire city. So I thought if that's the intention... then we must um...*
- *Yeah, yeah, no, someone in the last group thought there would be.*
- *Ah, yes, but that would be a good idea of course if it were possible, then you need less transport for food and ... in a way perhaps you do.*
- *You'll need a lot of agricultural land.*
- *But it would be good in the sense that there would be many more opportunities in Ghent.*
- *I am now at a pick-your-own farm in Ghent and it needs one hectare to provide vegetables for 200 people, not including potatoes, so if you extrapolate that to the 100-160 thousand residents in Ghent that adds up to 1,000 hectares.*
- *And how do you actually realise that? What does 1,000 hectares actually mean?*
- *1,000 hectares is equal to 2,000 football pitches.*
- *[...]*
- *Isn't setting up one of those initiatives unrealistic then?*
- *No, the more there are the more they will uh, endure.*
- *But is it possible in practice?*
- *I don't know.'*

As the questions raised were not further investigated – which is, obviously, not easily done within the format of such an activity – the discussion did not move beyond a noncommittal brainstorm or the mere utterance of ideas, opinions, and preferences. The issue thus was not thoroughly explored and this prevented the assemblage around it from being expanded and the irreconcilability of diverse attachments from being enacted.

Discourses

The baseline of a brochure about the Transition Network runs ‘collaborating to tackle peak-oil and climate change’ and the goal of the movement is described as follows:

‘The Transition network is a new movement whose aim is to inspire, encourage, help, train and work with communities, groups and initiatives in the transition from oil dependence to a more local and social economy.’

The interviewees phrased the movement’s mission as ‘towards a resilient, oil-independent society’ and ‘preparing ourselves together for an era after oil’. Within these descriptions and the respondents’ elaborations on it we found 3 elements that constitute the movement’s discourse on what is at stake: the need for ‘transition’ towards another society, the assumption that this transition involves a quest for alternatives, and the importance of ‘resilience’ within local communities. Transition, it is emphasised, is not about ‘adapting’ the system. So as to be able to deal with the challenges brought about by peak-oil and climate change a fundamental ‘rethinking’ of the system is required. As argued, such a transformation of society is regarded ‘vitally important’ and it is assumed to involve imagining, developing, and experimenting with new solutions for the problems of peak-oil and climate change. The movement emphasises that TTs ‘do not pretend to have all the answers’ but that they want to encourage people to search for answers and alternatives themselves.

‘It’s a response to something, to something that is coming. For some people it’s about peak oil, isn’t it, the fact that we will have far less fossil fuels in the future. For some people it is much more about an ecological approach: all is not well with the planet.’

People are invited to imagine (or to ‘dream’) a different kind of society and to experiment with the ideas they develop. They are thus invited to further expand the assemblage around the issues of climate change and peak-oil. During a

presentation at the Transition Conference we observed, Rob Hopkins, the founder of the movement, argued that every TT is a 'research and development unit'. During the course on visioning the future a local volunteer labelled this endeavour as a form of art.

"Imagineering" is the design or development of shall we say almost new forms of society or of a world in 2040 or 2050 that is climate friendly, at which we will have arrived, let's say. [...] It actually starts with a creative idea, designing something vague and then – if you can conceive it, if you can gradually give shape to it – then giving it a place in the real world. And I think that that is actually a form of creativity but I would also call it art. Art, if we are talking about it, often involves paintings or statues or suchlike but that's just one way of looking at art. Art can also be much more. It can actually involve relationships between people or what people achieve together, that can also be art, in fact. Living together can actually be an art.'

As already indicated, the movement considers transition and the search for alternatives as a bottom-up process thereby strongly appealing to and relying on the 'capabilities', 'creativity', 'talents', and 'firmness' present in local communities. Therefore, the movement strives for (re-)building 'resilience' within these communities – or, to draw an abundance of capabilities and talents into the assemblage – so as to increase their self-sufficiency and their capacity to face problems and find solutions.

From the TT movement's discourses on the sustainability problems at stake and on the solutions for them, two fields of tension emerge. The first one is a tension between pessimism and optimism, or between a sense of urgency concerning the issues of climate change and peak-oil and a view on 'transition' as a positive story.

'So first of all I think that people, that it must get through to people, right, that there is a problem and uh... if we don't react in time then it will really be too late. Without meaning to be doom-mongers, but it is realistic isn't it, this end

scenario. But in the transition the idea will be to try and keep it positive, right? And, and ... yes um, to, to... to, er, sketch a kind of dream image, for people to sketch their own dream image of a different kind of society. Yes.'

On the one hand, the movement emphasises that our current lifestyles and social structures cannot be sustained and that we face a pressing and compelling need for fundamental changes – that is, an inevitable transition. At the same time, this rather pessimistic claim seems to be rendered bearable by highlighting the necessary changes as an opportunity to create a positive alternative. The 'engaged optimism' the movement wants to propagate is prominently expressed in the following quote presented on a slide during the course on visioning the future: 'Everything will be okay in the end. When it's not okay, it's not the end.' During the interviews as well as the observations, volunteers of the TT movement elaborately emphasised transition as a path towards an 'attractive', 'beautiful', 'pleasant', 'social', and 'sustainable' future.

'And we especially hope that you will get started soon and display your first inspiring images of the future. Because that's what we are moving towards, to a great future that is beautiful, where we can do all kinds of things with less but which is far better.'

In the leaflet of the Transition Network, too, the sense of urgency is easily reconciled with a positive view on the future.

'The changes we need, to avoid a total collapse are exactly those things that we must undertake to create the world we dream of.'

This reconciliation brings about a second tension: one between emphasising collaboration within local communities and acknowledging that transition also involves a social and political struggle. The idea of 'creating the future we dream of' plainly ignores the existence of divergent attachments and points toward what is needed to preserve the taken for granted reconciliation of an inevitable transition and a positive future, that is, a consensus, a willingness to share the

movement's view on such a positive future and its proposition to realise this by individually contributing to 'small, positive changes' within local communities. Other perspectives thus need to be kept out of the assemblage. This goes with a focus on inclusion. The movement aims to 'take along everybody' in the transition toward a positive future and rejects the idea of 'leaving people behind', of facing the 'difficult times' to come with an 'every man for himself'-attitude. In line with this, the TT movement wants to stimulate connectedness and cohesion within local communities and help people find sympathisers. During the Transition Café, one of the local volunteers phrased her own experience as follows:

'I mean if you receive applause and hugs and are appreciated and belong to a community then that solves a lot of things you would otherwise solve by going shopping. And it works incredibly well. So I am certainly up for it.'

We thus observed that some participants and local volunteers enthusiastically promoted the idea of transition as a positive and harmonious story. Yet, we repeatedly observed others contesting it. For instance, they raised doubts about whether individual and local contributions will suffice to come to grips with peak-oil and climate change and advanced the need for global and structural changes. Furthermore, discussions arose about whether transition is a matter of individuals' free will or of tackling existing power relations. Within the coordinating Transition Network, too, some remonstrate that transition also requires a social and political struggle.

'That's a discussion within transition, uh... In the transition the social struggle that took place at so many levels, is quite deliberately, uh, quite deliberately kept in the background, not to mention excluded. Uh, what uh, yes and there are many discussions about it, aren't there? Which personally I also find a terrible shame. So uh, it's a bit, uh, yes they definitely want to keep that positive story, don't they. Uh, while yes, there are some things you can never achieve without a fight, right? You are not handed them on a plate because you have such a great, positive story

to tell, so... Well, anyway. So, they also try to keep the threshold as low as possible to participate in such a transition group so as not to um, stand on the barricades, right? Or so they don't have to get involved in the real fight. So that discussion is avoided as much as possible, isn't it? And it is more a story about, uh, yes, about building a new kind of uh, society in a very positive manner, right? As if outside there is no one left that disagrees with it, you know, and that must be conquered?'

In reflections of this kind it is acknowledged that 'the future we dream of' might be quite different from the future others have in mind and that transition thus involves diverse and irreconcilable attachments. Yet, the focus on consensus narrows down the assemblage – e.g. by excluding power relations or proposals for structural changes – and prevents mutually exclusive attachments from being enacted.

Rules of interaction

Interviewees told that diverging and conflicting opinions regularly emerge within TT initiatives. The excerpt below (in which an interviewee explains how she reacted to the denial of climate change by a participant) illustrates how such utterances of dissent are approached in a rather ambiguous way. Differences in opinion are regarded legitimate whereas, at the same time, they are regularly addressed from a rationalist perspective, that is, in terms of 'right' or 'wrong'.

'Yes, I have said that the transition movement is very well informed and that uh, and that climate change genuinely exists. And that, of course, he is entitled to his own opinion isn't he? And that there is also an entire... that there are indeed a number of scientists who, who try, um, to undermine that and to reject it, yes, that we unfortunately um, have different viewpoints.'

This ambiguity reflects a tension between, on the one hand, the movement's strong ('well-informed') knowledge claims about peak-oil, climate change, and the transition these issues demand and, on the other, reluctance towards convincing

people (even if their view is considered 'obviously wrong'). In the excerpt below, another interviewee emphasises the importance of 'maintaining dialogue' thus creating a space for argumentation and to move beyond the stance that everyone has the right to have his/her opinion.

'Uh, actually it is, uh, we are quite hesitant when it comes to the idea of having to convince people or something, aren't we? So if someone, uh, is now totally convinced that uh, nuclear fusion is the solution then I think there will definitely be an attempt to present arguments for it... and perhaps say that yes it's true, that is the solution but, hold on, we are not there yet so we will still have to come up with a solution in the meantime or... Well I think it will be further examined but never, um, and different truths can also coexist, I think, don't you agree? Unless it is very extreme, you know, that someone says um, the only solution is for there to be three billion people less, yes, well that's not something which we will support. But still, in this case the question would be yes, but imagine for once how you would do that, who is going to decide or how...Eh? So I think that, the intention remains as always uh, the discussion is more important than having the last word.'

In the end, then, differences are not solved but people have been invited to consider the implications of their proposals and to move beyond uttering 'mere' opinions or preferences.

Yet, the discussions we observed – mainly addressing the inevitable transition and how to achieve it – did not transcend the expression of opinions, preferences, and emotions that remained largely unquestioned. As indicated, this also involved argument about the claim to realise transition through individuals' commitment in local communities. For example:

- *'When you start looking at things it's fun and challenging but as soon as you start to seriously ask the question then... as people we are very much compelled by, uh, by the need to conform, to follow the crowd.*
- *Compelled, yes, in a sense.*

- *By circumstances, right? By society, you could say. The fact that you need to earn a living by going to work but then you also need to get there and then you're off. You could say, I'll go by bicycle, OK, some will...*
- *It's not always possible.*
- *[...]*
- *Yes, that's, yes, everyone will find a reason right? What you are saying, there is certainly something in it, and personally I agree, but then I think... many people don't feel the same, do they?*
- *It's easier for some people than for others, isn't it?*
- *No, no but I mean, we often say that we have no choice and the system wants that and I go along with it, but actually strictly speaking you do have that freedom. It depends whether you are prepared to question it.*
- *Ah, yes.'*

Through such discussions, participants raised other issues and concerns which expanded the assemblage by drawing new actors into it such as the maelstrom of contemporary society, jobs, traffic, 'other people', and freedom. Yet, this expanded assemblage was not elaborately explored and did not bring about the enactment of irreconcilable attachments.

Education as a response to sustainability issues

Our analysis brings forward how the particular assemblage that emerged around the issues at stake within the TT movement rarely opens up the space for contestation and controversy, that is, for the enactment of the irreconcilability of the actors' attachments. Three 'metaphors for learning' are functioning within the analysed interplay between actors, resources, interaction rules and discourses. 'Metaphors for learning' have been defined as images that are used to define education and that bring forward fundamental assumptions behind educational theories and practices (Sfard 1998; Elmholt 2003). We will employ those images

here as conceptual tools that allow us to understand the particular and very diverse practices to which the metaphors refer. First, our analysis showed that the TT movement is obviously functioning in accordance with what Sfard (1998) has called the 'acquisition metaphor' (Sfard 1998) which assumes that education is about the acquisition of knowledge, skills, ideas, meanings, facts, representations, etc. Indeed, the transfer of knowledge on and insight in complex issues like peak oil and climate change is regarded vital in the TT movement. What we observed is that this dynamics of acquisition, although – as our analysis shows – it obviously broadens the assemblage around the issues at stake, it does so in a very particular, preconceived direction. The emphasis is on the transfer of expert knowledge about the state of the planet and about the possible contributions of people within local communities to cope with it (knowledge about 'what happens and what they can do about it'). This particular knowledge is thus used to underpin the movement's discourse on an 'inevitable transition' and all the same serves to lay the foundation of the acquisition of (equally well-defined) attitudes and skills within local communities. Our analysis revealed how this reduced the space for the enactment of a multiplicity of irreconcilable attachments.

Secondly, in the movement we also recognise an appeal to the 'participation metaphor' (Sfard 1998), that is, an image of education as the process of becoming a member of a certain community which entails (achieving) the ability to act according to its particular, negotiated norms. The TT movement's inclusionary focus on community building and its approach to transition as a bottom-up process strongly reflects this image of education. Within this metaphor, Sfard emphasises, participation is understood as 'taking part' and 'being a part' which implies a process of becoming a part of a greater whole. We observed how this process goes with specific expectations towards the participants. They are expected to share the movement's analysis of an 'inevitable and desirable' transition as well as the proposed strategies to realise this endeavour. Yet, our

analysis shows how this consensual understanding of participation and community development restricts the assemblage around the issues at hand. It leads to reaching a rather homogeneous audience because of the non-participation of those people who are unwilling or unable to live up to these expectation and, furthermore, the assemblage is narrowed by keeping other analyses, strategies, and considerations (e.g. power relations, proposals for structural changes) out of it. As such, this particular perspective on participation fails to take into account the fundamentally contested nature of sustainability issues in which a multiplicity of irreconcilable attachments are entangled as it reduces the space for the enactment of this antagonistic entanglement.

Thirdly, the TT movement contains elements of the 'knowledge creation metaphor' that defines education in terms of 'the pursuit of newness' (Paavola et al. 2004, 562). In this image of education the focus is on innovation, on collectively creating new knowledge or transforming and further developing existing ideas and practices. Indeed, every TT is seen as a 'research and development unit' and the movement emphasises that it 'does not have all the answers'. Therefore, the emphasis is on enhancing 'capabilities', 'creativity', 'talents', and the 'firmness' present within local communities so as to encourage and enable participants to search for answers themselves and to experiment with ideas for a better society. Here, too, the very particular, consensual understanding of knowledge creation as a matter of contributing to the realisation of an inevitable and desirable transition ('the future we dream of') is taken for granted too easily. It ignores the existence of divergent attachments and, as such, prevents the enactment of controversy as well as the broadening of the assemblage around the issues at stake.

These three conceptions of education that are functioning within the TT movement showed first and foremost a focus on inclusion and consensus building. This focus contradicts Marres' (2005) claim that it is the *issue* that brings actors together, not the bonds of a shared form of life, commitment, or interest.

In our research on the learning of farmers about environmental issues (Vandenabeele and Wildemeersch 2012), we already observed that education was neither exclusively a process of acquiring a knowledge base to meet externally set standards nor was it solely a process of becoming part of a community of look-alikes. It was, above all, a process in which farmers were prepared to be surprised by the points of view of others (e.g. members of the environmental movement, people living in their neighbourhood, etc.) and to face the ambivalences that result from this. We articulated this alternative educational dynamics by introducing a fourth metaphor for learning: the 'response metaphor'. It is a metaphor in which education is understood as 'a response to the questions of others who are not like us [...] in full recognition of the ambiguities and differences that exist in real life situations' (p. 70). In the light of the present analysis of the TT movement, connecting this metaphor to the insights of Marres and Latour allows for a better understanding of educational practices as an attempt to present sustainability issues as public issues. The notions of assemblages and attachments that are central to our analysis reveal that pluralism and contestation in the context of sustainability issues is not only informed by differences in opinions and worldviews but brought about by a multiplicity of human as well as nonhuman actors that are intimately entangled in an issue. It is a persistent and profound attention to that issue and the exploration of the multiplicity of attachments which bind actors to it that allows to move beyond uttering 'mere' opinions, views, or preferences.

What binds actors who are jointly implicated in a 'community of strangers' (Marres 2005, 58) is that, in order for them to take care of an issue, they must take into account the effect it has on others and give a singular response to issues such as climate change and peak-oil. Education as a response to sustainability issues points then to a fundamentally different educational practice. Education, here, is not about becoming convinced as a result of the acquisition of knowledge,

nor of becoming a member of a particular community through a participatory process or a contributor to a knowledge creation process. Rather, inspired by Latour's elaboration on the old word 'Thing' or 'Ding', education as a response could be understood as creating a space for an assemblage of actors around an issue that causes their concerns and divisions in which they are invited and encouraged to explore – or to study – an issue and to respond to each other's divergent and mutually exclusive attachments. Education as a response requires time and patience so as to explore an issue, expand the assemblage around it and enact the irreconcilability of attachments. Yet, Ashley (2005, 192) argues, education in the light of sustainable development 'often works against the background of a rhetoric of time running out. Alarming though it may be for some, this rhetoric probably needs to be resisted'.

Sustainability issues and the plea for pluralism

Issues of sustainability are complex, uncertain, and contested as they are interwoven with diverging and often irreconcilable values, interests and knowledge claims (Marres 2005; Dijstelbloem 2007). It is often unclear who (or which groups) will suffer from the mainly far-reaching consequences. In a world of risk and uncertainty, Ashley (2005, 195) argues, 'right answers' might turn out to be 'horrendously wrong'. In such a context 'there is no longer something to be taught that is universally agreed upon or that can be universally applied' (Wals 2010, 144). Many authors argue therefore for a 'pluralistic' (some label it 'democratic') approach to environmental education (EE) and education for sustainable development (ESD), one that acknowledges, stimulates, and engages a variety of values, interests, and knowledge claims (e.g. Jickling 1994; Jensen and Schnack 1997; Lijmbach, Margadant-van Arcken, van Koppen, and Wals 2002; Öhman 2006; Jickling and Wals 2007; Breiting 2009; Rudsberg and Wals 2010; Östman 2010; Læssøe and Öhman 2010; Jóhannesson, Norðdahl, Óskarsdóttir, Pálsdóttir, and Pétursdóttir 2011; Lundegård and Wickman 2012). Their plea can be regarded a critique against approaches to EE and ESD that aim to serve a particular end, i.e. behavioural modification in the pursuit of sustainability. Repeatedly, researchers point at the risk of EE and ESD becoming an instrument for manipulation and indoctrination (Jickling and Spork 1998; Bonnett 1999; 2000; Wals and Jickling 2000; Jickling 2001; 2003; Ashley 2005; Jickling and Wals 2007) which positions 'learners as marionettes for the good intentions of environmentalists or environmental educators' (Breiting 2009, 200). Pluralistic EE

²⁹ This manuscript – co-authored by Joke Vandenabeele – has been submitted to *The European Journal for Research on the Education and Learning of Adults*.

and ESD, by contrast, is characterised by indeterminism, open-endedness, free opinion-making, critical thought/dialogue, and enhancing students' competence to act (Gough and Scott 2007; Wals 2007; Rudsberg and Öhman 2010). The idea is that EE and ESD should foster independent and critical thinking, stimulating learners to become active citizens (Jensen and Schnack 1997; Breiting 2009; Jóhannesson et al. 2011) who are able 'to debate, evaluate, and judge for themselves the relative merits of contesting positions' (Jickling 2004, 137). Pluralistic EE and ESD, Rudsberg and Öhman (2010) argue, strive to acknowledge and engage different perspectives, views and values when dealing with sustainability issues. Students are made aware of the fact that there is more than one possibility, and encouraged to examine and evaluate different alternatives and to be critical of their own statements. Deliberative, open-ended conversations whereby 'different arguments are encouraged and considered and no particular standpoint is privileged' (Rudsberg and Öhman 2010, 106) are seen as a key aspect of education.

This open-endedness in EE and ESD, however, is the target of criticism too. While 'indoctrination' toward predetermined goals has been rejected on the basis of pluralistic / democratic concerns, indeterminism is challenged on the basis of sustainability concerns. Are all outcomes of an educational process equally desirable, Wals (2010) wonders, on condition that they emerged from carefully considering different points of view and engaging in (joint) meaning making? He draws attention to the risk of falling into 'anything goes relativism':

'The plea for pluralism might lead to this kind of relativism when in the end it is accepted that any perspective or position on sustainability or sustainable development is as good as any other one, that your view on sustainability is as true as mine and that I would be wrong to critique yours, and while it might be wrong from my perspective, it might be right from yours.' (Wals 2010, 145)

Dobson (2003, 26), too, emphasises that ‘if harm is being done, then more justice rather than more talking is the first requirement’. Justice, for him, is about an equal distribution of ‘ecological footprints’, that is, of environmental harms and benefits. Kopnina (2012, 710) connects the danger of ‘lapsing into indecisive relativism’ with a plea for an ecocentric perspective in EE and ESD. These authors put forward normative criteria based on sustainability concerns since, as Kopnina (2012, 700) emphasises, there is no guarantee that a pluralistic approach to education will address ecocentric perspectives while the dominant anthropocentric corporatist perspectives are counter-productive to the effort of preventing urgent environmental problems.

In analysing this debate, what comes to the fore, is a search for a ‘delicate balance’ between sustainability concerns and the acknowledgement of a variety of commitments and values (Östman 2010, 75). But, as some authors argue (Östman 2010; Rudsberg and Öhman 2010; Lundegård and Wickman 2012), it is still far from clear what ‘pluralistic’ (or ‘democratic’) EE and ESD actually mean. Furthermore, empirical research (e.g. as to whether and how it appears in educational practices) remains rare. With this article, we aim at nurturing this debate theoretically as well as empirically. We draw on the insights of Bruno Latour and Noortje Marres as these authors allow us to put the delicate balance between acknowledging pluralism and taking into account sustainability concerns in another light.

Making sustainability issues public

We opened this article with elaborating on the complexity, uncertainty, and contestation that characterise sustainability issues. What these issues bring to the fore, Latour argues, is that transparent and uncontested facts are rare while the consequences are far-reaching and cause social controversies. Such issues, he argues, should be approached as ‘matters of concern’ instead of ‘matters of fact’

(Latour; 2004; 2005a; 2010a). Latour uses the term 'matters of fact' referring to approaches to reality in terms of facts that are assumed to 'speak by themselves' and are, thus, beyond dispute. Such facts serve as a standard then to distinguish between some enlightened people who have unmediated access to the truth, captured in undisputable facts, and the others who articulate disputable assertions, opinions and values. Yet, he argues, within a context of the proliferation of scientific controversies transparent, unmediated, undisputable facts have become rarer and rarer and we increasingly face 'highly complex, historically situated, richly diverse matters of concern' (Latour 2004, 237). Latour introduces this concept of 'matters of concern' as an attempt to overcome the dichotomous thinking between on the one hand unmediated and undisputable 'facts', 'the truth', 'nature' (commonly referred to as 'objective') and on the other hand disputable 'values', 'opinions', 'preferences', 'interpretations', 'choices', 'struggles' (what we commonly label 'social' and 'subjective') (see also Decuyper et al. 2011; Goeminne and François 2010; Van Poeck et al. submitted). What he points at is that for many issues this 'clear and widely accepted boundary between what is considered to be unquestionably technical and what is recognized as unquestionably social' (Callon et al. 2009, 25) is blurred. We face instead a proliferation of states of affairs that neither fit in the list of 'mere' values, opinions, preferences, etc. nor in the list of undisputable facts.

Latour (2005a) and Marres (2005) argue that, because of this lack of transparent and uncontested facts, a lot of sustainability issues cannot be dealt with within existing institutions, nor by the available expertise. They characterise such issues as 'public issues'. The spread of its effects substantially affects actors who are not necessarily directly involved in it. If these actors are to address the issue at stake, they must organise into a 'public'. Such a public is, thus, caught up in the affair. Marres (2010) emphasises that actors are not only affected by these issues in factual terms. This 'state of affectedness' also refers to the affective states of

being touched, implicated, and being moved in the sense of being mobilised by the necessity to have these issues systematically cared for (Marres 2010, 201-202). Latour (2005a, 27) specifies this affectedness as an intimate entanglement of a variety of actors. In our globalised world, he argues, human as well as nonhuman actors are connected, willingly or unwillingly, by the expansion of all kinds of 'makeshift assemblies' such as markets, technologies, science, ecological crises, wars and terrorist networks. This attention for networks of human as well as nonhuman actors is a crucial feature of Actor Network Theory, an approach that evolved out of Science and Technology Studies. Authors such as Bruno Latour, Michel Callon and John Law developed a distinctive approach to social theory and research characterised by a constructivist perspective (avoidance of essentialist explanations), a 'material-semiotic' method (mapping relations that are simultaneously material and semiotic) and an extension of the understanding of the social by focussing on networks of humans and nonhumans (thus acknowledging the agency of nonhumans, i.e. their power to transform society). In line with this Latour argues that actors' relation to matters of concern – whether it takes the form of attention, interest, or involvement – should be understood then in terms of 'attachment'. This notion of attachment is used by actor network theorists to refer to a special relation between human and nonhuman entities. Attachment, in this account, is a mode of 'being affected by' whereby actors are both actively *committed* to an object of passion and *dependent* on it (Marres 2005). The object binds them in the sense that their pleasure, fate, way of life and perhaps even the meaningfulness of their world is conditioned by it and they must do a lot of work so as to sustain this object of passion. Drawing on this notion of attachments Marres argues that actors are not only jointly but also *antagonistically* implicated in public issues. They have divergent attachments and the sustainability of these attachments is threatened by the attachments that exclude them. Being jointly and antagonistically

implicated in an issue, then, means being bound together by mutual exclusivities between various attachments.

Precisely what qualifies sustainability issues as public issues, that is, the joint and antagonistic attachments through which a variety of actors is caught up in it, is at the basis of the 'delicate balance' between sustainability concerns and the acknowledgement of a variety of commitments and values. Therefore, the enactment, exploration, and confrontation of mutually exclusive attachments in the mobilisation of a public also pose a major challenge for educational practices in the light of sustainability issues. In the remainder of this article, we will inquire into such a practice: a guided tour of a CSA farm (Community Supported Agriculture³⁰). With Latour and Marres we can now reframe the tension between a pluralistic and normative approach of EE and ESD to a question of what it means to organise a public around sustainability issues, i.e. Community Supported Agriculture. Latour's characterisation of a public in terms of entanglement stimulates us to focus on the specific 'assemblages' that emerge where contestation and controversy – that is, the enactment of the irreconcilability of the participants' attachments – becomes possible. Making sustainability issues public within educational practices implies the broadening instead of limiting of

³⁰ CSA grew up in the early 1960s in Germany, Switzerland and Japan as a response to concerns about food safety and the urbanisation of agricultural land. The aim was to develop an alternative, locally-based socio-economic model of agriculture and food distribution. Groups of consumers and farmers formed cooperative partnerships to fund farming and pay the full costs of what they consider ecologically sound and socially equitable agriculture. In particular, members or shareholders of the farm pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. Once harvesting begins, they receive weekly shares of vegetables and fruit (and also sometimes herbs, cut flowers, honey, eggs, dairy products and meat). Thus, growers and consumers share the risks and benefits of food production and the farmland becomes, either legally or spiritually, the community's farm. As community members directly provide the farmer with working capital in advance, growers receive better prices for their crops and gain some financial security. In Europe, many of the CSA style farms were inspired by the economic ideas of Rudolf Steiner and experiments with community agriculture took place on farms using biodynamic agriculture.

the involvement of actors as well as creating a space to enact mutually exclusive attachments. We draw on an empirical analysis focusing on how an assemblage around a sustainability issue emerges within a conversation. So as to grasp the assemblage, we analyse which actors (human as well as nonhuman) are drawn into it and how this affects the space for the enactment of antagonistic attachments. The analysis we present is part of a broader doctoral research project in which 7 cases are studied with a focus on whether and how the 'publicisation' (Marres 2005) of sustainability issues takes shape within educational practices. In this article we highlight the analysis of one particular activity that pre-eminently allowed us to grasp the educational dynamic brought about by an attempt to make an issue public.

Assembling the issue of sustainable agriculture

The activity we analyse here is a guided tour for a group of master students in bioscience engineering, accompanied by their professor, who visit a CSA farm in the context of the course 'sustainable agricultural techniques'. It is the farmer who guides the tour. He welcomes the students and starts his talk, in line with the group's subject, with referring to an omnipresent concept in sustainability discourse: the 'Triple P' (People – Planet – Profit):

'And I don't know if anyone here knows what the three Ps are? ... Never heard of them? [...] - OK, the first P, for us, is 'planet'. This means that we generally assume that without nature and without the planet and without the, how everything works in nature, that we wouldn't have any farms in fact. So I think it's essential in all the decisions we make, that we propose that you first have nature and that you need to examine how it all fits together. So perhaps there is already a major difference with how you view nature... because most people start with the second P, that stands for people, um, indeed that's also important for us that's also why we do it or why we are involved in nature.'

In doing so, he expresses and clarifies his own attachment, that is, 'the planet'. All the choices he makes, he argues, are affected by his concern for this planet. The language he uses emphasises that what he says is his personal point of view: e.g. 'I think', 'our choices', 'for us'. Immediately he also points out the possibility that the students might have other attachments – 'people', for instance –, yet, without leaving room for them to respond as he promptly continues his talk about how he understands the 'people' and 'profit' dimension of the Triple P. After his explanation, he does ask for a response:

'Now I don't know if this ties in somehow with your vision of agriculture?'

One of the students expresses how he sees it, which obviously deviates from the farmer's point of view:

- *'Student 1: Agriculture must be productive. As much... not as much as possible, it's still the intention, yes to produce food and to make sure there's enough.'*
- *Farmer: Yes, so for you the P for profit takes precedence?*
- *Student 1: Yes [nodding]'*

These interactions reveal how actors can be implicated in the issue of sustainable agriculture by different attachments: 'the planet' or 'profit' (or, more precisely, a sufficient production of food). The farmer continues the discussion by denouncing the student's attachment to 'profit' thus highlighting the controversy implied in the divergent views:

'Therefore producing food, or allowing people to invest money in banks or trade it on the stock markets, that's the same, that's profit. [...] If you look at the bottom-line of agriculture, it's about profit, and I say it's wrong. Start with speculating on the stock markets. It will yield much more than agriculture [...] I just want to ask you the question to be somewhat confrontational. Because it is not straightforward in this society, farming... But tell me if I am being too

confrontational or if I also say something that doesn't make sense OK? Because it, this is just my subjective story.'

Here, too, he specifies his attachment as a personal point of view and he invites the students to contest it. They do not, and he continues his talk with an extensive elaboration on how the historical development of European agriculture after the Second World War is characterised by a tendency towards more technological interventions, increase in scale, and a growing dependence on subsidies. Again, he encourages the students to bring in their own point of view:

- *'Farmer: So it's the third P that now has the upper hand in agriculture. All the farmers are tearing their hair out and actually their closest relationship is with their bank manager. Well, you can say if it's true or not OK?*
- *Student 2: No, it's true, but as a farmer it's your choice whether to start a business or not isn't it?*
- *Farmer: Yes, that's true.*
- *Student 2: So yes, you choose whether you want to get involved with the banks.'*

As a response, one of the students thus added a new consideration to the discussion: the farmers' own choice whether or not to go along with this tendency. The farmer agrees with this argument, yet, subsequently he told about a consequence of the choice he actually made, that is, the fact that his small-scaled farm cannot benefit from subsidies. He concludes his explanation as follows:

'If you choose, very consciously, for the P, that we are going to start with nature, and we start as a farmer but we are not going to get involved in the business of building a new hangar or buying new tractors and starting a completely new business, then you get left by the wayside. So we are the turnaround in fact, we are causing the changeover with our business. I am not the only one in Europe, and certainly not in Flanders, that views agriculture like that. Now, it is hard work.

[...] That means that we are really managing our crops, land and nature and people in a different way. And the last P, profit, this will indeed be a difficult issue for us. That's why we need to work hard and get started.'

In doing so, he repeats his attachment to the planet and further clarifies it by focussing on its implications. As such, he moves the discussion beyond the mere expression of opinions by relating the student's opinion to his own, profound experience. The way in which the farmer talks about this experience seems to have caught the students' attention and interest. Student 1 asks:

'Who are you actually? Or, yeah, how did you end up in this business?'

His question reveals that he experienced the farmer's story as somewhat odd or, at least, unfamiliar. The second student is curious to know his opinion about conventional agriculture:

'But, what is your opinion then, of conventional agriculture?'

Conventional agriculture can be considered as her own attachment. She told that she is the daughter of a pig farmer using conventional techniques and, thus, her family's livelihood depends on it. The farmer explains why he thinks that conventional agriculture will come to a dead end and, as such, the irreconcilability of attachments (i.e. to the planet versus to profit/conventional agriculture) is again enacted. The farmer points out the policy on agricultural subsidies as a major obstacle for sustainable agriculture and the discussion expands as more students now get involved in the conversation. Some students contradict the farmer's arguments.

- *'Farmer: I don't receive any subsidies. And I also think that it would be very good to say that we are putting an end to them.*
- *Student 2: But you also don't live from it.*
- *Farmer: I do live from it.*
- *Student 2: Oh, you said yourself that you don't pay yourself a wage.*

- *Farmer: Yes but that's different. You don't need a wage to be able to live from it. I eat from it. That's a big difference. If you think I've got EUR 2,000 on my account at the end of the month. I think I've got EUR 900 or something like that on my account.*
- *Student 2: Yes but food alone doesn't get you far.*
- *Farmer: No, but yes, that's what we have to do. That's the transition we have to make. That's the change we have to bring about. I think some major steps are going to be necessary to consciously address or handle it.*
- *Student 1: Not everyone can do it though. It is nevertheless...*
- *Farmer: Why not?*
- *Student 1: What would we eat? If everyone... There's more, I mean yes...'*

Thus, the antagonism between both attachments is further emphasised. As the discussion continues, new concerns are brought into it. Famine, for instance:

- *'Farmer: Then I'd say yes, ninety percent of farming throughout the world is managed like this.*
- *Student 2: Yes, there are also I don't know how many going hungry.*
- *Farmer: Yes, of course but that's because our onions and the chickens that are subsidised are exported to Benin, and to Toga and to the Gambia and wherever it is. They are put on the market at dumping prices and the people there can't sell their own produce because it is more expensive. So an African produced chicken or cow, or milk, or egg or onion is more expensive than those produced in Europe with subsidies for the farmer and the producer and the distributor here, which is sold there and transported - large footprints and so on - so they don't produce onions there any more for the moment'*

Or agricultural policy in Africa:

- *'Student 4: But isn't that the fault of Africa's agricultural policy, that they have taken the wrong approach?*

- *Farmer: The African countries [...] are lobbying intensely because Europe and the United States should stop subsidising their agriculture to such an extent. And as long as that doesn't happen, well, that's why I think that it must happen urgently, right? Then you still have a world in disarray.'*

In both cases the farmer relates the student's concern, again, to the issue of subsidies. Next, he for his part brings the issue of speculation into the discussion. Both topics enable him to highlight, once more, the mutually exclusive attachments to 'planet' or 'profit'.

'Because our sector is one that people speculate on, right. Banks speculate on the price of sugar or flour, and it's not even about the speculation itself, it's just about whether the price will fall or rise, which means that for once they will make a profit from it. So just from the differences in exchange rates. It goes too far. I think that goes too far... [...] [student 2 agrees with the farmer's point of view] So I think we are just shifting towards economics, that we must really think of something completely different. I think that agriculture has a very important role to play. We are the primary sector. That's why I also chose the farming business. Well, like, how can you change the world, eh? When you're 45, you think, right, what else is there for me to do in life and then I thought, OK, that's what I'm going to do. That's something I am really going to go for. I am really going to do it well, you know? And whatever the cost I will shoot myself in the foot and earn less. I used to work in TV where I earned about eight times as much. And now I don't, but OK, I am happier and I really feel like I am doing something useful.'

Emphasising this contrast allows the farmer to reconfirm and further clarify his own attachment. Here, he explicitly indicates that his happiness, way of life and even the meaningfulness of his world depends on it. As a response, some students ask more questions so as to grasp what this attachment actually implies. For instance:

- *'Student 4: So you think that a farmer in Europe should have twenty cows, twenty pigs, and as many crops he or she needs for the local...*
- *[...]*
- *Student 6: So you are actually more fair trade focused then?'*

Others contradict what the farmer puts forward:

Student 1: Imagine if the subsidies were completely removed. Then we would still produce food much more efficiently than Africa. And it would still be cheaper.

Or, again, they bring in new concerns:

- *'Student 3: The shops, they buy as cheaply as possible. And yes it is usually the case that products from Belgium, that are grown here, are more expensive than those that are imported. And they can't be taxed as an import product because Europe doesn't allow that. And if they tax it, yes, that's protectionism. You know, if Europe were to tax something that is imported. And then the others, Europe's trading partners would say yes but you can't do that. You are caught in your structure and you can't just change this structure by saying that you're going to farm in a different way. Well, that's what I think.*
- *[...]*
- *Student 2: But isn't it also the consumer's problem, that the consumer must be willing to pay more?*
- *[...]*
- *Student 6: So actually you are disconnecting part of the chain?*
- *Farmer: We are shortening the chain. Yes.*
- *Student 3: That is actually what we saw in the exhibition too. That's actually ruining everything.*
- *[...]*
- *Student 3: If everyone produces in this way then it will be impossible to produce enough food for the whole of Belgium.*
- *[...]*

- *Student 4: But won't you need more agricultural land as well, if you want to work like that? ... You will need more land.'*

As a result, the assemblage around the issue of sustainable agriculture grows. New actors – human as well as nonhuman – are drawn into it: shops, taxes, consumers, the chain of distribution, food shortage and agricultural land. The issue is further explored as the newly raised concerns are elaborated. For example the question of agricultural land:

- *'Farmer: We are working on around 1.5 hectare. How many people can you feed with that? ... Well, with vegetables and fruit and...*
- *Student 2: Only with vegetables and fruit then?*
- *Farmer: Yes.*
- *Student 2: You could also ask, is there meat?*
- *Student 4: And meat?*
- *Farmer: That is the question. That is a good question isn't it? It depends um, how much does meat cost? Meat is extremely expensive isn't it, compared with...*
- *Student 4: But if you want to organise it like that then for a cattle farm it means there must be less animals or you will need more agricultural land.*
- *Farmer: Yes.*
- *Student 4: If you want to keep it organic and keep your manure in your cycle, you need more agricultural land don't you, and you will ...*
- *Farmer: Or look at it in a different way. [...] Look, if you have one hectare that's enough to feed approximately two hundred people for an entire year. But that is, yes that is a completely different way of thinking to one hectare yields so many tonnes of carrots or so many tonnes...*
- *Student 2: And how much agricultural land is there in Flanders? [The farmer shakes his head to indicate that he is not sure]*
- *Student 4: 600,000. 600,000 hectares.*
- *[...]*

- *Student 2: And that's just vegetables.*
- *Student 4: And that's just vegetables, yes.*
- *[...]*
- *Student 2: But do you think that everyone must become a vegetarian or something like that then or do you think meat production will still be possible?*
- *Farmer: I think that meat production is still possible, I like eating meat. But I think that less meat is necessary. [Many students nod in agreement]'*

Again, the assemblage expands as the issue is related to new concerns (e.g. land use for the production of meat) which bring new attachments into the discussion (e.g. an attachment to eating meat).

The guided tour of the farm continues analogously. The issue of sustainable agriculture is further explored by raising additional concerns such as the expansion of nature reserves, pesticides, biodynamic agricultural techniques, GMOs, potato disease (phytophthora) and fox-hunt. In doing so, the irreconcilability of the attachments to 'the planet' and to 'conventional agriculture' is further enacted. For example:

- *'Student 1: What's so wrong about spraying with Roundup so they are gone? [laughter]*
- *[...]*
- *Farmer: But other things are also destroyed, aren't they? And we want to make the soil more dynamic don't we? If you continue to use your product...*
- *Student 1: With Roundup?*
- *Farmer: Yes, with Roundup, yes.*
- *Student 1: What will be ...destroyed?*
- *Farmer: All the weeds, the soil life that it also supports. There is a lot... a lot of fungi that are all gone. It's all gone.*
- *Student 1: Because of Roundup, really?*

- *Farmer: It is a fairly, well a fairly ruthless product, Roundup.*
- *Student 1: Is it? [...]*
- *Another student: You should find out about Roundup, what percentage targets the plant, how much gets into drinking water and everything. It's huge.*
- *Student 1: Into the drinking water, come on... [laughter]'*

By further exploring the issue, new actors are drawn into the assemblage: land owners, fungi, brass and bronze tools, plant louses, ladybirds, agro-forestry, Rudolf Steiner, breeders' rights, multinational chemical corporations such as Bayer and Monsanto, industrial chips and croquettes, freezers, foxes, chicken farmers, etc. Throughout the conversation, the farmer repeatedly emphasises that he voices a personal point of view.

Well that's my point of view. You don't have to agree with it, do you? But that's all I can tell you.

All the same, by indicating that he 'cannot tell another story', he underlines that his striving for agriculture that puts the planet first is not a mere opinion. It is an attachment.

Education as a response

Our analysis of this conversation reveals a sustained and profound attention – on the part of both the farmer and the students – for the issue of sustainable agriculture. Throughout the activity, this issue is further explored, studied, and discussed, not in an abstract sense but starting from the farmer's narrative. The way in which he speaks about his attachment to the planet and about how this affects both his view on sustainable agriculture and his efforts to apply this in practice offers the students an appeal to respond to it. In doing so, they raised other concerns and knowledge claims and sometimes voiced their personal,

divergent attachments. As such, the conversation created a space for the expansion of the assemblage around the issue at stake and for the articulation of diverse attachments and the enactment of their mutual exclusivity.

Latour as well as Marres argue that in making issues public both controversy and 'closure' / 'settlement' play an essential part. As Latour puts it: 'Nothing is beyond dispute. And yet, closure has to be achieved' (Latour 2010a, 478). Marres (2005) defines public-isation as an attempt to articulate issues, draw actors into it and formulate a possible settlement for it. In the case we analysed, this settlement or closure finds shape in two (closely related) ways. First, the farmer's effort to apply his idea of agriculture that puts the planet first in practice is an attempt to transform society by finding a settlement for the issue of sustainable agriculture. As such, it is embodied in the farm, the crops, the shareholders, (volunteer) work at the farm, regulation about harvesting, parties and picnics, tools, etc. As a result, the appeal made to the students to respond to the farmer's attachment moves beyond an 'anything goes' relativism. At the same time, however, it can neither be regarded as indoctrination considering the efforts made to explore the issue, expand the assemblage around it and enact the mutually exclusive attachments entangled in it. What we observed is an educator speaking about his very singular attachment, thereby appealing to an equally singular response on the part of the students. This appeal to a response is the second way in which closure takes shape within this practice and that we want to call this an 'educational closure'. The students are invited to respond to the questions, points of view, and experiences of the farmer in full recognition of the antagonism, ambiguities, and differences that exist between them (Vandenabeele and Wildemeersch 2012).

This educational closure is then neither the result of indoctrination, nor of the cultivation of a sheer plurality of opinions. Rather, it can be understood as a derivative of what Simons and Masschelein (2011a) have labelled 'mastery'. They introduce the idea of the teacher-as-master as opposed to the currently dominant

image of the teacher-as-expert and elaborate how the latter's relation to the world, to others as well as to him-/herself is based on knowledge and competence (expert knowledge in a discipline or subject, didactic knowledge, and self-knowledge respectively). Mastery, on the other hand, is characterised by relations of *care*. The teacher-as-master perceives the world, or something in the world, as demanding care. The master is, thus, someone who takes up responsibility for the world. This is, indeed, what our analysis of the conversation or, more precisely, of the farmer's attachment to the planet and to a form of agriculture that puts this planet first, reveals. The planet, for him, does not primarily emerge as something that has to be known so that this knowledge can be transmitted to the students. Rather, he explicitly emphasises, his attachments involves toil and moil. It is about taking care for the crops, the soil, nature, and people. Or, as Simons and Masschelein (2011a, 25) phrase it, 'it is a question of searching, of being engaged, of caring – that is, of not being indifferent'. Likewise, the master does not understand his/her relation to him-/herself in terms of knowledge but as something that requires constant care. Mastery shows itself, Simons and Masschelein argue, in a constant and attentive search for accordance between what one thinks and what one does. The farmer voiced how he engaged in such a search and decided to set up the CSA farm as this was what he really wanted to go for, whatever the cost, so as to do something that makes sense for him. Our analysis also shows that this search is never final. While taking care for his farm, his crops, and the shareholders and through the decisions he has to make time and again (e.g. as to the use of pesticides) the farmer is challenged to ascertain whether what he thinks and does are in accordance and to try to transform himself so that this accordance is achieved. In what the farmer says and does, he thus also shows who he is or what he stands for. He presents himself and his attachment thereby rendering himself vulnerable to the diversity of attachments brought in by the students. For the master, Simons and Masschelein (2011a)

stress, there is always something at stake as (s)he has no indifferent relation to what (s)he is dealing with. The care for his farm can be considered the farmer's very singular response to the issue at stake. While presenting himself and what he stands for, all the same, the farmer exposes the students to something in the world: his attachment to the planet and his experiences of taking care for a farm in a way that puts this planet first. We observed how this showing who one is and what one stands for occurred very explicitly here as one of the students actually asked the farmer 'who he is'. His narrative about an attachment to the planet and his embodied experiences caught the students' interest and attention. It is thus his attachment to the world that is central in his relation towards the other, i.e. the students. This relation between the master (as a teacher) and the other (the pupils), Simons and Masschelein argue, is in a certain respect secondary. It is the responsibility for the world and the care for oneself that precede the care for the other. To describe this understanding of the relation towards the pupil or student as a derivative of care and love of the subject and the care for oneself, they also use the notions 'invitation' and 'touchstone'. Our analysis indeed revealed how two things converged: on the one hand, an invitation to become involved with the subject (i.e. the issue of sustainable agriculture) and thus to take care for oneself and the world (to explore the issue, expand the assemblage around it, clarify one's attachments, etc.) and, on the other hand, offering a kind of touchstone. By showing his mastery, by showing who he is and what he stands for, the farmer encourages the students to take up the opportunity to verify whether their own thinking and doing are in accordance.

Concluding remarks

The theoretical contribution of Bruno Latour and Noortje Marres allowed us to put the above mentioned delicate balance between acknowledging pluralism and taking into account sustainability concerns in another light. The concept of

mutually exclusive attachments enables moving beyond the contradistinction between pluralism (and the allied risk of undue relativism) and indoctrination (and the associated threat to democratic values) but instead takes a position *within* this tension. The divergence of attachments is acknowledged and, since it cannot be assumed that these can co-exist peacefully, stands in the way of an ‘anything goes’ relativism. Marres (2005) further elaborates this idea of the irreconcilability of attachments by referring to Annemarie Mol’s notion of ‘multiplicity’. Both the terms ‘plurality’ and ‘multiplicity’ refer to some kind of variety. Yet, whereas plurality in Mol’s account implies different entities that exist side by side, in parallel, multiplicity refers to varying entities that are enmeshed in one another, but at the same time, cannot be reconciled. It implies both mutual entanglement and difference. Thus, public issues entail a multiplicity rather than a plurality of attachments. Taking these mutually exclusive attachments seriously within an educational process – that is, enacting their irreconcilability, making manifest the point at which attachments prove mutually exclusive – is in this sense very different from taking into account a ‘plurality’ of views, opinions, values and knowledge claims as it is often proposed in pluralistic approaches to EE and ESD. As Marres (2005) puts it: issues cannot be reduced to aspects of (political) discourse; an environment ‘out there’ and the attachments it brings about is precisely what is at stake. This is indeed what our case study has shown. The farmer’s efforts to take care of his attachment to the planet by establishing a farm (‘out there’) – that is, the way in which he strives for a closure in his own way of farming – enables the enactment, exploration, and confrontation of mutually exclusive attachments. As such, it serves as an invitation for a response, an educational closure, encouraging both the farmer and the students to take into account the multiplicity of views, values, interests and knowledge claims without resorting to an ‘anything goes’ relativism and neglect of the far-reaching implications and injustices brought about by many sustainability issues.

Ecological modernisation and the containment of controversy
about sustainability issues³¹

Ecological modernisation

In the Western world a new way of conceptualising environmental problems has emerged since the late 1970s as a result of a particular argumentative interplay between governments, environmental movements, and key expert organisations: the discourse of ‘ecological modernisation’ (Hajer 1995). Although this discourse acknowledges that ‘structural design faults’ in the core institutions of modern society – i.e. the industrialised production system, the capitalist organisation of the economy and the centralised state – cause severe environmental destruction (Mol and Spaargaren 2000) it is all the same assumed that the existing political, economic, and social institutions can *internalise* the care for the environment (Hajer 1995). Hence, a fundamental transformation of these societal structures does not appear here as a prerequisite for addressing ecological problems. As such, ecological modernisation challenges the radical environmentalist critique of the 1970s that argued for a fundamental reorganisation of those institutions that are involved in the modern organisation of production and consumption (e.g. Meadows et al. 1972). A key assumption is, thus, the possibility of reconciling economic growth, technological development and environmental impact reduction. Within this discourse, the environmental challenge is regarded a management problem as well as a ‘positive-sum-game’: ‘there would be no fundamental obstructions to an environmentally sound organisation of society, if only every individual, firm, or country, would participate’ (Hajer 1995, 26).

³¹ This manuscript – co-authored by Joke Vandenabeele and Gert Goeminne – has been submitted to *Environmental Politics*.

Hajer (1995) emphasises that although the political scientists who introduced the concept of ecological modernisation (e.g. Joseph Huber and Martin Jänicke) allocated a central role for technological innovation and economic development, the conceptual change actually stretches to many other domains such as the techniques of environmental policymaking, micro- and macro-economic strategies, the role of science in the process of policymaking, and legislative discourse (see also Mol and Spaargaren 2000). Furthermore, he argues, ecological modernisation brought about a reconsideration of participation seeking to bring to an end the former sharp antagonistic debates between the state and the environmental movement by acknowledging new actors and creating new practices (e.g. active funding of NGOs, round table discussions). Læssøe (2007; 2010) too highlights that 'participation' became a new buzzword under the discursive paradigm of ecological modernisation, yet, at the same time he criticizes the latter for bringing about a narrowing of participatory practices. His analysis of citizen participation in environmental issues in Denmark reveals an orientation towards consensus and the marginalisation of conflicts or contestation concerning values, political ideology, and the ever-present tension between private and collective interests. The increasingly expertocratic approach, he argues, reduces citizen involvement to top-down information and behavioural adjustment. Further articulating this transformation, he identifies the following four evolutions: (1) from exposing and attacking the socio-cultural dynamics of sustainability issues to a technical-functionalistic approach denying social and cultural dimensions; (2) from social mobilisation in the context of value-based and structural conflicts regarding sustainability issues to a consensus orientation that narrows the scope to those solutions that all parties involved can easily accept; (3) from actions that imply political engagement and collective empowerment to the promotion of small technical fixes that avoid politicisation; and (4) from issue-based learning about society at large to a limited, local perspective (Læssøe 2007).

In this article, we analyse how this discourse of ecological modernisation affects a concrete practice in the field. That is, we examine a ‘transition arena’ that has been established by an urban government and aims at realising climate neutrality in a participatory way by means of ‘transition management’. Inspired by ‘dramaturgical’ analytical frameworks we scrutinise the case focusing on the particular design of the setting in which participation takes place.

A focus on the performativity of participatory settings

Hajer (2005) argues that the analysis of participatory practices should not merely focus on the types of arguments that are raised but also include the conditions for dealing with issues by focusing on the *setting* in which public participation takes place. It is through these settings – which are never neutral – that ‘the public’ is constructed and transformed (Gomart and Hajer 2003) in particular non-neutral ways. A setting’s characteristics not only define who has access to the public but also what counts as relevant information, reasonable arguments, and legitimate decisions (Nahuis 2008). In other words, it is the particular design of the setting in which utterances are made that affects ‘what is said, what can be said, and what can be said with influence’ (Hajer 2005, 626). ‘The public becomes what the setting makes it’ (Hajer 2005, 642).

Starting from these considerations, several authors (e.g. Gomart and Hajer 2003; Hajer 2005; Nahuis 2009) developed analytical frameworks for the study of public participation drawing on metaphors borrowed from theatre and drama: actors, script, setting, attributes, staging, performance, acts, and scenes. Dramaturgical analysis, Hajer clarifies, shows how scenes are scripted and staged as well as how the variety of players subsequently act within and upon those scripts and stagings. Combining elements of the frameworks elaborated by Hajer and Nahuis, we analyse the setting of the transition arena by employing the following concepts. First, ‘scripting’ (Hajer 2005) refers to the efforts made to create a setting by

determining the characters in the play as well as the cues for appropriate behaviour. Our analysis of the transition arena's script also entails the setting's 'access conditions' (Nahuis 2008), that is the way settings give access to some actors while others are part of the audience (i.e. those who are able to observe the performance and are indirectly involved) or excluded altogether. Second, we focus on the 'staging' (Hajer 2005) of the setting which refers to the deliberate organisation of an interaction through tools, methodologies, activities, formal and informal rules of the game, etc. Here, we also include the artefacts that are used and that co-determine the physical situation in which the interaction takes place. Third, we analyse the 'performance', i.e. the way in which the contextualised interaction itself produces social realities such as understandings of the issue at stake, knowledge, and new power relations (Hajer 2005).

In line with recent developments in the field of Science and Technology Studies, such a 'performative' perspective on participatory settings thus draws attention to the co-production of public and issues, that is to say to the very concrete ways in which the scripting, staging and performance of a particular setting creates a very particular public around a very particularly framed issue (Marres 2005). Following Jasanoff's account of social and natural order as standing in a relation of co-production, we thus conceive of the issue-public duality as an emergent result, rather than a starting-point of a particular participatory dynamic (Jasanoff 2004).

With our dramaturgical analysis of the transition arena we will thus not only investigate the actors involved (or excluded) but also examine how the particular design of the setting affects which concerns, knowledge claims, values, expertise, opinions, discourses, and arguments are regarded legitimate and which are not. The latter allows us to understand whether and how this particular practice aligns with the discourse of ecological modernisation.

A 'transition arena' for a climate neutral city

The case we analyse is a 'transition arena' that has been established in order to transform Ghent (Belgium) into a climate neutral city by 2050. The initiative was taken by the urban government and the aim is to realise climate neutrality by means of 'transition management'. In the policy document 'Towards a sustainable city: more than a city trip! On transitions and transition management.' the urban government describes transition as 'a process of far-reaching, structural changes in the social as well as technical systems of our society that is explicitly connected to a preconceived goal: sustainable development'. The management of transitions is conceived as 'leading', 'steering', and 'facilitating' potential processes of change toward a desired future, grounded in an in-depth understanding of the current situation (rather than as a matter of 'control'). Thereby, the urban government draws on a theoretical understanding of transitions (developed by DRIFT³² – see below) as an ideal succession of 6 crucial steps: analysing systems, developing vision ('leitmotifs'), outlining 'transition paths', experimenting, follow-up, and embedding. The arena is part of this policy process and has been set up so as to promote the participation of a variety of 'stakeholders'. For our analysis, we studied documents, we interviewed 2 civil servants (the coordinator and one of the engineers of the 'climate team') and we observed 4 activities (3 meetings of the arena and 1 'Climate Forum' with a broader audience).

Scripting

The driving force behind the arena is the environmental department of the urban government in Ghent, more specifically the engineers belonging to the department's climate team as well as the coordinator of this unit and the director of the department. As a kind of producer of the setting, this team's role is to facilitate and support the arena administratively, logistically, and strategically by

³² Dutch Research Institute For Transitions.

preparing meetings, helping to find financial resources, developing step-by-step plans, etc. The team itself is supported and advised by three organisations that were brought in to guide the transition management process: the Dutch Research Institute for Transitions (DRIFT), the Flemish Institute for Technological Research (VITO) and tri.zone, a consulting agency focusing on sustainable development. Our analysis shows how the climate team, assisted by these organisations, largely determines the characters in the play, the access conditions, and the cues for appropriate behaviour. A key role is attributed to the 17 members of the transition arena who are called ‘fresh-thinkers’, ‘trendsetters’, and ‘freethinkers’. Among those actors are the alderman for environment, businesspersons and representatives of youth work, the arts sector, the environmental movement, and the university (e.g. experts in mobility and wastewater). These varied characters are expected to ‘co-create and co-implement’ the urban government’s ambition of a climate neutral city.

‘Everyone must support the objective but must also be able to help create the objective, so actually it’s a sort of co-creation and, if you allow co-creation and if it becomes everyone’s baby it is easier to take the step towards co-implementation and meet the shortages of your own leverage.’

Therefore, it is regarded crucial to engage ‘people with a network’ – that is, who can reach an audience – who also have the time, the gusto, the knowledge, the creativity and the will and power to ‘make a difference’ within these networks. As one of the interviewees explained, participants have to be ‘interested’ and ‘convinced’ and able to think ‘positively and constructively’. Sometimes, people with very particular skills are sought (e.g. ICT skills or expertise concerning mobility). Another consideration of the climate team is to avoid engaging too many ‘dominant’ people. This concern is particularly expressed with regard to the participation of ‘bosses’, politicians, and academics. As to the last, the climate team also wants to avoid scientists who live in an ivory tower.

'We have also tried to involve a number of professors, or yes, people from Uni, not many, 'cause they do love to talk, don't they? (she laughs) and love to explain everything. Uh, they shouldn't be too dominant because ultimately however you look at it, a lot of these researchers are very theoretical and um, it is just that, most professors who actually have spin-offs in practice, who have actually rolled their sleeves up and got their hands dirty are actually the people who are most useful.'

Thus, specific expectations toward participants serve as a standard to distinguish between those actors who are (to be) given a key role, those who are indirectly involved as part of the audience and those who are ignored altogether. These expectations explicitly guided the selection of participants and, throughout the whole process, the climate team deliberately searched for the 'proper' actors and, when regarded necessary, made the effort to organise a sort of audition.

'That's why we organised the climate forum. We thought, we're going to have to move to climate working groups, we need more people than there are sitting in the arena. They are a bit reluctant to appeal to their network, or we find that their network does not include the right people so we go headhunting and uh, the climate forum was organised specifically for headhunting purposes.'

Furthermore, the aforementioned cues for appropriate behaviour provided the basis on which the arena members' actual engagement is judged. For instance, one of the interviewees explained why a particular participant's contribution was regarded disappointing:

'We need people who think positively and constructively in a group, who look for solutions and do not just focus on the obstacles, and I am afraid that X rather likes to focus on the obstacles. He is fairly negative when he encounters a hurdle while starting to look for a solution should almost be second nature. And you see he stumbles at the hurdle so that's why it was a bit disappointing.'

In general, some actors are considered more 'valuable' than others, depending on their willingness and ability to contribute to the urban government's ambition of climate neutrality in accordance with the methods and strategies developed by the climate team and transition arena. After all, the *raison d'être* of the arena is this very particular policy goal: realising a climate neutral city by 2050. This objective is considered a 'story' that has to be 'sold'. The principal aim of the arena is then to realise a 'transition in the minds'. This perspective brings about a particular view on the division of roles between key actors (i.c. the engineers of the climate team and the 'valuable' fresh-thinkers within the arena) and the audience to which the story of a climate neutral Ghent has to be sold.

'And one of the things, yes, one of the reasons why they, they created my job is also to perform some streamlining and, and to implement an effective policy to supplement that of the engineers [...] In such a way that we must actually just work out the transition in the minds. Well, that's what it involves in fact... In my, in my view that's what it comes down to, the engineers come up with measures that can be implemented. They tell us what is feasible. They perform studies on renewable energy, energy maps. Yeah, they are also developing all kinds of new, interesting tools, often with European subsidies. But... of course in this way it will not be sold yet, will it?'

The judgement on arena members' 'usefulness' also reflects the way in which participants are approached from an instrumental and economic perspective. Not only does the environmental department make an effort to 'headhunt' 'valuable' partners (and to provide extra support for those that are considered more useful than others); potential participants, too, are assumed to consider their commitment on the basis of a cost/benefit analysis. For instance, one of the interviewees expressed understanding as to the lack of involvement of important industrial actors in the arena referring to the fact that an urban government does not have sufficient 'benefits' to offer.

'But actually in that respect we have little to offer. The local authorities do not always have the leverage. And you also see that man has quit. But on the other hand if you look at the climate working group [...] on the valorisation of sewage, there for example, there is an um, [an industrial actor] effectively sent someone to be present and that is a major industrial partner, involved in innovation, in everything to do with renewable energy. So then it's, good, but then they make a cost-benefit analysis again, which works in the climate working groups but not in the arena. So somehow it must move towards a business case and then you will attract those people. If it does not involve a business case, if it concerns purely social objectives... [then you won't].'

Staging

In line with the transition arena's aim to 'co-create and co-implement' a climate neutral city by 2050 the arena members are invited to define the vision, to formulate targets, and to develop innovative solutions. The organised activities are meetings during which plenary discussions usually alternate with further elaborations in subgroups. During these meetings, slides are shown, brochures are distributed, and notes are discussed. This goes with the intention of the climate team to 'put something on the table' at the start of each meeting: e.g. a systems analysis, results of CO₂ monitoring, suggested transition paths, survey results, etc.

'Mobilising people is not always, um, not always straightforward and sometimes by putting something on the table you get a reaction, like, we once collected all the transition paths and actions that we had captured in all manner of ways all at the same time and then you also get the reaction: did we say that? And so on, so, um, but they just found it difficult to put everything on paper and there are times when you need something that provides structure or something that unlocks that response.'

For instance, we observed a meeting where participants were asked to provide feedback on the systems analysis that had been prepared by the climate team.

This approach, the interviewed engineer explained, does not entirely fit in with transition management theory. First, less time was taken for it than prescribed.

'In principle you can easily take a year. So if you really want to do it properly, really thoroughly, then it can easily take you a year. We sorted that out, I think in a few weeks, with a whole load of reports that already existed and in fact the most important items uh, or conclusions or eye-catchers... [...] Um, and we also said that from the beginning that it wasn't the intention to make a fully-fledged, entire system analysis.'

Furthermore, instead of doing the systems analysis within the arena, in collaboration with the participants, it has been carried out by the engineers of the climate team and, subsequently, presented to the arena for feedback. Key topics of that analysis were presented on 15 slides and the arena members were invited to formulate comments on the text as well as to suggest matching images so as to visualise these topics. The participants were given 2.5 minutes to discuss each of the 15 topics of the systems analysis and one of the coaches kept a close watch on the timing. Subsequently, they were divided in 4 subgroups and invited to formulate 'basic principles' (centred around 'people', 'planet', 'profit' and 'participation') so as to develop a vision concerning the goal to transform Ghent into a climate neutral city. The engineer emphasised that the participants were unwilling to spend more time on it.

'DRIFT's step-by-step plan requires that you refine the system analysis with the whole group, in such a way that it really gets through to them [...] but people thought it was good that it was presented once, but the second time was too much. So the second time it was like, OK we have to move forward, we have to build on this. However the first time we did not get far enough but people thought refining the system analysis was a waste of time.'

Thus, as a next step, the arena members formulated ideas and suggestions as to how to realise a transition towards climate neutrality and their input was

gathered by the climate team into 4 'leitmotifs' and 20 'transition paths'. We observed a meeting where these were presented and participants had to indicate (by means of stickers) which paths they considered the most important. Afterwards, in subgroups, the participants were asked to complete 2 posters. The first one aimed at further defining the paths. Participants were invited to provide feedback on the description and the targets (for 2018, 2030 and 2050) the climate team had prepared as well as to list preconditions that have to be taken into account. They were given 20 minutes to do so. The second poster focused on actions in order to realise the targets. The arena members had to list good practices, possible actions as well as people and organisations they considered to be crucial partners and they had to finish this in 40 minutes.

Transition management in general and this arena in particular, the interviewees argued, follows a two-tiered path of 'studying' and 'doing' so as to create new practices, routines and a new system. Transferring and sharing knowledge is considered to be crucial in order to 'learn from each other', to 'grasp the complexity' of the climate-issue and to 'achieve a more or less commensurable level of knowledge' among the actors involved. Therefore, experts were invited to give presentations, participants were encouraged to bring in and share their knowledge and expertise, the climate team brought in the results of (mainly technical) analyses, and the results of working groups or subgroup discussions were elaborately considered. These efforts are assumed to lay the foundations for an in-depth study of the issue at stake and, thus, to develop new knowledge and insights. Yet, the way in which the activities were organised – particularly the rapidity – seems to challenge the aims of studying and co-creating. As the following excerpt also illustrates, the emphasis is on doing rather than on studying.

'We chose a path involving study and action. If you want to achieve climate neutrality in the city or make it totally independent of fossil fuels then um, you can

study the concept for years, you can easily spend years on it but in fact not just society but also politics demands that action is taken quickly and so we are following a parallel path, implementing it at the same time and that's actually the transition, the transition arena.'

As such, the particular staging of the transition arena's setting inhibits a thorough, in-depth exploration of what is 'put on the table' and, thus, of the issue at stake.

Performance

In line with this, we regularly observed manifestations of disagreement among the arena members but these, too, were addressed only superficially. For example, diverging opinions were voiced concerning the balance between social and economic interests.

- *'By "profit" I was thinking about something completely different to focussing on companies. If the city must be transformed into something very different there must be a social dimension, something must change in the power relationships. That runs through everything. That social element must be included.*
- *Increasing the value of existing property is the best social measure you can have: the autumn of the homeowners' years.*
- *[...]*
- *I advocate paying enough attention to the economy in the sustainability discourse because it is often lacking.*
- *Yes but profit is also social profit.*
- *I do follow. I have a problem with idealists. At the end of the journey you have to weigh up the cost of your car.*
- *I do not agree with that at all.*
- *Neither do I.*
- *[...]*
- *Yes, but entrepreneurship creates cash flows that make these things affordable.*

- *That doesn't make sense. This is a certain economic discourse. You can also look at economics in a different way. Companies do not create added value, people do. You can also view the economy as a cooperative system.*
- *They tried that with communism. It failed. You cannot mainstream that.'*

Other subjects of discussion concerned the relation between structural, systemic changes versus small, feasible steps forward and the choice for a narrow focus on 'climate neutrality' (the reduction of greenhouse gas emissions) or a broad one on a 'sustainable city' including other considerations such as poverty, affordable housing, etc. During these discussions, we observed diverging opinions being voiced, yet, within a perspective of a plurality of views that are assumed to be able to co-exist peacefully. The diverse concerns, values, knowledge claims, etc. that lie behind them are not made explicit and their possible irreconcilability – that is, the way in which they exclude one another – is not enacted.

Despite these divergent views the outcome of the transition management process, that is, the leitmotifs and transition paths, reflect a very particular understanding of the transition towards a climate neutral city emphasising the positive side effects of climate neutrality, technological solutions, and the possibility of win-win situations. The positive side effects are highlighted in the leitmotif 'Ghent, a good city to live in' with transition paths highlighting topics such as 'quality' and 'well-being'. Participants in the arena regularly voiced the concern to avoid defeatism and to focus on the benefits of a climate neutral city. The leitmotif 'Intelligent cycles' consists of transition paths that aim to realise the reduction of greenhouse gasses through technological measures and innovations. The emphasis put on win-win situations comes to the fore in the leitmotif 'Creating surplus value together, locally and within a global perspective'. One of the transition paths, for instance, highlights synergy between companies and community:

'Transition path 5: companies and community as good neighbours. Companies embrace corporate social responsibility, balancing people, planet and profit/prosperity, with better results for business and society'

A key concept underpinning this leitmotif is the 'blue economy', the merits of which were phrased as follows during a film that was shown:

'If we can make the cake bigger, it is easier to share with everyone. However many people have good ideas, what we need are people who make it happen, we need these entrepreneurs, actually we need a whole generation of entrepreneurs. [...] They change the rules of the game and generate more money for themselves and their community. That makes everybody happy.'

A closer look at a concrete interaction during an arena meeting might help to grasp how divergent points of view were translated into a consensual understanding of climate neutrality as a technical issue that brings about positive side effects and win-win situations. During the meeting where the leitmotifs and transition paths were discussed, we observed a subgroup discussion consisting of 4 participants: an engineer working for the 'climate team' (C), a former university professor with expertise in wastewater management (W), an entrepreneur owning an energy consultancy company (E), and an employee of the building department of the university (B). They discussed posters about the transition path 'waste is history' and had to provide feedback on the description and targets prepared by the urban government and list good practices, possible actions and crucial partners.

The professor chairs the discussion and starts with a 'confession':

W: Well I should start by confessing that [C] and I have already been thinking about this a bit. But, um, let's maybe go over it a bit, and that doesn't mean that we've got something already, so [C] and I have already been thinking about that story, right, we can say that, because it's absolutely not... it could go any which way, you know.

Indeed, the engineer told us about the intention to submit a European research proposal on the recycling of wastewater for which the university will cooperate with the urban government. Wastewater recycling has been the main research interest of this professor for a long time. In his introductory talk about what preceded this discussion, however, he remains vague and does not mention the topic of wastewater nor the intention to submit a research proposal on it.

The engineer of the climate team urges the others to start with completing the posters. The professor opens the discussion addressing the first target: recording all the waste flows.

'I don't think it's that inviting. But I'm not going to argue about it, certainly not about sewers, we know even less about sewers, but solid waste on the other hand: organic waste, green waste, and I mean, um, plastics, metals and drinking cartons, that kind of stuff, that's already pretty decent, but everything that disappears into the sewer, that's it mostly, I think, what we should be talking about now...'

With this intervention, he implicitly connects the broadly defined target to his personal (research) interest in wastewater management by reducing waste flows to sewage flows. What follows, is a very technical discussion between the professor and the engineer about the fermentation of waste. An excerpt:

- *'W: I have to... Yeah, it is, and I'm looking at you all a little, but maybe I'm... I'm thinking that fermenting, then we're talking about what's digestible, easily digestible, that becomes gas, and that gas is good energy recovery, but if you don't do it right, things that are already dry in and of themselves and that don't digest well, then I don't feel that the fermenting is quite the right choice. So I'm a moderate in that regard, although it's my job and because I... because in a manner of speaking I invented it, you could say that installation is good for things that are wet, in other words things that don't burn well... I like to see them ferment, but...*

- *C: Yes, but then the question is also... but they're starting to package all sorts of things, for instance, both in plastic and in cardboard that's compostable, so something that's dry, but is still compostable material. And fermentable, too.*
- *W: But if it's dry, if it's really dry, and I'm not trying to be contrary here, but then I think that other, physical processes are just as good of an option, and can be very justifiably be highlighted. I mean, you must... you must above all apply the biological processes of fermentation to what is an incredibly unfortunate situation: you have to burn something that's completely waterlogged, and then you really don't get any energy from it; in fact, you have to put energy into it. So, I'm all for one point: all organic waste goes through biogas first, before becoming compostable. You're all agreeing and disagreeing, aren't you.'*

The other participants do not intervene in this technical discussion. The university employee, however, does bring in a new consideration:

- *'B: Well, I think that, if, uh, if something's, you know, missing. It's actually because there is so much throwaway material that there is so much more waste. I see us having to chuck out loads of things because replacing a part in a device is more expensive than just buying a new device. And so we generate an unbelievable amount of waste this way, and while you can say that it's energy friendly, it still needs processing. And why is it cheaper to buy a new device? Because they are made using cheap labour somewhere and in order to fix it here, you have to pay an expensive technician. This ends up generating loads of waste, you know, because you can't actually repair anything, that you can't, um, that they say a fair amount of appliances can't be repaired any more. [...]*
- *E: But then you need a completely different market, don't you, a completely different way of designing devices.'*

In doing so, she broadens the discussion. Where waste previously emerged as an utmost technical matter, here she emphasises the connection with the economic organisation of our society, thereby putting forward new considerations: besides organic waste, sewage, fermentation installations, biogas, incineration, and compost she implicitly indicates that the issue of waste also involves consumables, labour costs, technicians, the market, and product design. As the discussion continues, however, the issue reappears as a technical matter:

- *W: I agree, but, um, how can I put it... repair work is, is... [...] We almost have to use the words repair parts... because more and more modulation is happening, trying to install repair parts a little bit, to do it economically. These don't become waste, they're reused: repair parts, we really should say then: repair parts cannot, in fact repair parts may not be waste.*
- *C: Yes.*
- *W: Something like that. [...] That's what you mean, but how do you say that? Repair, the word repair, um [laughs]*
- *L: Yes, actually, you have to design things so that they can be repaired.*
- *W: Yeah, but repair parts, let's put it this way: repair parts are and can be, are and can be repaired, can and are, yes it is in some way...*
- *[...]*
- *W: Can and are, yes.*
- *E: Excellent!*
- *C: Yes, that's just what I was saying: we can actually repair it, but we don't because it costs more to get it repaired than to just replace it.*
- *W: Can and are repaired. Very good, we've got there. [...]*
- *B: Yes, but repair parts is an odd concept, what do you actually mean by it?*
- *C: That they're modular parts that you can replace, you actually replace a part, to repair it.*
- *B: Oh, OK, I get it...*
- *C: It's actually a modular unit. [...] There is a single part that can be taken out to repair it.'*

As such, some of the considerations that had just been taken into account, vanish. Labour costs, technicians, and the market give way to 'repair parts'. The professor pursues the conversation by suggesting a change in the text:

- *'W: I interpreted the following point as "water is completely reused (energy, nutrients, and water)".*
- *C: By 2018 already?*
- *B: That's kind of short term, you know. Isn't that kind of ambitious?*
- *W: In 2018: it should be possible. There are pilots, we're getting there. We have to be ambitious, otherwise... That's the point I want to make.'*

He thus emphasises, again, his interest in wastewater recycling. Once again, the university employee brings in a new consideration:

- *'B: You want to reduce the amount of waste taken to the recycling centre and winding up in the sewers by 80%. I think that's a really good goal to have, but to do it, we're going to need a lot more than...*
- *W: 80% is already being given a new lease on life right now.*
- *B: Yes, yes, but that means that if you put 100 kg of glass out, you're actually only putting out 20 kg.*
- *W: No, if it's been put out, then it's not waste anymore [because it will be recycled].*
- *B: Oh, I don't agree with that.*
- *E (to B): You're trying to reduce waste, right?'*

Again, her concern for waste reduction – that was already implicated in the concern she raised about throw-away articles – is narrowed to a technological problem that is in need of an appropriate technological fix, that is, recycling. This time she opposes this move. All the participants get involved in the discussion during which the contrast between both points of view is further expressed.

- *'C: You're always going to have waste, you know. [...]*

- *B: What do you all actually mean because I think I see it differently.*
- *W: The separated types are not thought of as waste [by the Flemish waste administration] any more.*
- *E: So I actually think it's a pretty weak target. But there's still a second target, you know.*
- *B: Yes.*
- *E: You could even go back to the days of taking your refillable bottle to the dairy farmer.*
- *W: But that's not really feasible any more, you know.*
- *C: No.*
- *B: Yeah, but then will we ever be carbon neutral? [...]*
- *W: I'll just fill in [the poster] with what I know [about the Flemish waste administration]...*
- *B: But maybe [the Flemish waste administration] is wrong?*
- *E: The [Flemish waste administration] are not saints, you know.'*

The arguments of the employee and the energy consultant are disposed of as being 'unfeasible' and the Flemish waste administration is drawn into the discussion as an arbitrator. Yet, its legitimacy is immediately contested. Subsequently, the professor asks to delete a target about completely eliminating incineration since, he argues, that would render the transition arena 'unreliable'.

The coach that guides this meeting of the transition arena urges the group to start listing good practices, possible actions, and crucial partners. The 4 participants list people and organisations: the local and Flemish water and waste administrations, the chemistry sector, European legislation (REACH), the urban government, the Province, a particular alderman, a representative of a power company, the university, the dock industry, private corporations, consumers organisations, primary and secondary schools, ICT companies, and product design schools.

During this listing exercise the university employer again emphasises the connection of the issue of waste to the economic organisation of our society:

- *E: It's about creating a context in which companies can do their own thing. [...] Kind of like they've done with solar panels.*
- *B: Yes, but that context increased consumption. A focus on repairs can create jobs.*
- *C: You're going to create other types of consumption. You're talking about consuming less, but this is about consuming differently.'*

The engineer's response highlights the contrast between a technical approach to the issue of waste and a perspective that emphasises the need for economic transformation. All the same, with her intervention she delimits the issue – once again – as a technical matter.

Discussion and conclusion

Our analysis of this transition arena endorses Hajer's and Nahuis' claim that the design of a setting strongly affects the involvement of a public in the issue at stake. More particularly, our focus on the performative dimension of participatory practices gives way to a dynamic, co-productionist understanding of the mutual relation between the *issue* and the *public* in the sense that the scripting, staging, and performance of the studied transition arena created a very particular public around a very particularly framed issue of climate neutrality. Our entry point for this investigation was the design of the setting and our case study focussed on what happened in this particular setting. Particularly, we were interested in examining what the setting does in constructing and transforming both those who are engaged in it – the public – as well as in constructing and transforming that what is considered to be at stake in it – the issue (Gomart and Hajer 2003).

The analysis of the setting allowed us to grasp which actors, opinions, points of view, arguments, concerns, knowledge claims, values, expertise, etc. are drawn into this participatory process and which are ignored or excluded. What we found, is that ‘what is said, what can be said, and what can be said with influence’ (Hajer 2005) within this arena aligns well with the boundaries of an ecological modernisation perspective. As to the scripting, the way arena members have been selected and assessed according to specific expectations (i.e. the willingness and ability to contribute to the urban government’s ambition of climate neutrality in accordance with the proposed methods and strategies) as well as the role attributed to the engineers of the climate team gave shape to a sharp division between, on the one hand, key actors who co-create an image of a climate neutral city and, on the other hand, an audience to which this story has to be ‘sold’ through a ‘transition in the minds’. This division of roles and the cues for appropriate behaviour that go with it strongly reflect an ecological modernisation perspective whereby everybody is expected to do their bit, that is, to contribute to the realisation of a consensual account of climate neutrality that tends to reduce public involvement to a top-down, expertocratic transfer of information in the pursuit of behavioural adjustment. Our analysis of the staging of the transition arena shows how the particular organisation of interactions applied the idea of transition management as a ‘two-tiered path of studying and doing’ in practice with an emphasis on doing rather than on studying. The employed activities, methodologies, artefacts, etc. did not foster time and patience for an in-depth exploration of the issue of climate neutrality through the enactment of controversy around it. With regard to the performance, the case study shows how the contextualised interactions translated a variety of (irreconcilable) points of view, values, concerns, knowledge claims, arguments, etc. into a consensual understanding of climate neutrality as a technical issue that brings about positive side effects and win-win situations. From the diversity of concerns, arguments,

forms of expertise, opinions, etc. that were voiced, it appeared to be mainly those corresponding with an ecological modernisation perspective that influenced the created leitmotifs and transition paths. The so produced social reality thus reveals a technical-functionalistic, depoliticised view which reflects the basic idea of ecological modernisation: the feasibility of reconciling economic growth, technological development, and the care for the environment without a fundamental transformation of societal structures.

In summary, our case study not only reveals how the setting of the transition arena, affected as it is by a consensus-oriented ecological modernisation perspective, serves as a limitation for the involvement of actors (cf. the expectations guiding the selection and assessment of arena members) and constrains their capacity to enact controversy. It also shows how, inextricably intertwined with such a depoliticised public, the issue of climate neutrality emerges as – or is transformed into – a consensual, managerial matter that disregards the complexity, uncertainty, and contestation typically characterising sustainability issues.

Arrived at this point, it might be tempting to conclude that the problem lies in the transition arena's biased setting, determined as it is by the boundaries of ecological modernisation and that the solution is to be found in the search for an unbiased setting where alternative views on 'climate neutrality' can be voiced from an equal footing. This would however be at odds with the performative perspective on participatory settings we put forward here. Indeed, based on Science and Technology Studies insights in the performative character of experimental science, Gomart and Hajer (2004) argue that an unbiased setting is a mere impossibility. Just as a scientific experiment does not act to neutrally represent a reality out there but rather co-constructs this reality in a particular way, giving way to more or less 'interesting' knowledge claims, a participatory setting acts in particular ways to co-construct the issue at stake, giving way to

more or less 'interesting' representations of what is considered to be at stake. Hereby, 'interesting' should be understood in terms of the possibilities a particular representation enables and constrains. In other words, a setting's bias is a condition of possibility to represent an issue, the quality of the representation being dependent upon the very performative character of the setting. As Gomart and Hajer (2003, 39) argue, a 'good' setting is 'not one which is neutral, but one which deforms, constrains and enables in interesting ways'. The design of a setting never neutrally represents the public and the issue. It always constructs and transforms them and, thus, inevitably implies inclusion and exclusion.

Therefore, rather than criticising the ecological modernisation bias of the studied transition arena, we tend to conclude that the problem with this particular setting lies in the lack of reflexivity towards its own bias. That is to say, within this de-politicised, consensus oriented setting dissenting views (e.g. pleas for reducing consumption or for fundamental changes in social and political institutions) are disposed of as being 'unfeasible', 'irrational', or 'negative' (i.e. 'not constructive') and are thus assumed to render the arena 'unreliable'. While such utterances suggest a belief in the unbiasedness of a setting that is defined by 'rationality' and 'constructive spirit' on the side of the convenors, they symptomatically reveal – through their dismissive character – the way in which the seemingly neutral perspective of ecological modernisation is in itself also a very particular, that is, a very partial rendering of the issue at stake and the public around it.

Interestingly, STS-scholars Latour (2005a) and Marres (2005) invoke the term 'public issues' for issues such as climate neutrality that are characterised by complexity, uncertainty, and contestation as they are entangled with diverging and often irreconcilable values, interests, and knowledge claims. In this respect, it is important to see that a public issue is not sufficiently characterised by all the actors that are affected by the issue at stake – the so-called stakeholders in ecological modernisation jargon. Actors, Marres (2005) stresses, are not only

jointly but also *antagonistically* implicated in public issues: they are bound together by mutual exclusivities between various ‘attachments’. Attachment, in this account, is a mode of ‘being affected by’ whereby actors are both actively committed to an object of passion and dependent on it. They must do a lot of work so as to sustain this object of passion (e.g. the economic interests of industrial sectors, the policy objective to realise a climate neutral city, Western consumers’ association of materialism with the idea of the good life, efforts to monitor greenhouse gas emissions, technological innovations, concerns about poverty and social justice, etc.) while, at the same time, the object binds them in the sense that their pleasure, fate, way of life, and perhaps even the meaningfulness of their world is conditioned by it. This notion of attachments clarifies how actors are at the same time jointly and antagonistically implicated in an issue: they have divergent attachments and the sustainability of these attachments is threatened by the attachments that exclude them.

By way of conclusion, we therefore want to argue that research on public involvement in (sustainability) issues within participatory settings should shift its focus away from the representational ideal whereby issue and public correspond to pre-existing realities of a problem-out-there on the one hand and public interest on the other (Brown, 2009). In relying on the same correspondence view of representation as the expertocratic politics they aim to replace, such participatory approaches refuse to see the performative dimension of both scientific and political representation. Following Gomart and Hajer, we rather suggest that the focus should be on the question how settings ‘might construct the possibility of certain forms of political action’ (Gomart and Hajer 2003, 37), e.g. making room for contestation and controversy as an occasion to enact the irreconcilability of the actors’ attachments. Considering that public involvement in issues implies constant experimentation on a range of practices – and thus disables the formulation of a priori criteria of ‘good’ settings – (Gomart and Hajer

2003) our case study thus aims to present and assess what happened in one such experiment. By doing so, we hope to inform and inspire further experimentation with other settings in which a public gets involved in issues such as climate neutrality.

Conclusion

The starting point of this doctoral research project was the establishment of the UN Decade of Education for Sustainable Development that challenges practices of EE to find new ways to relate to this changing policy discourse and practice. In the introduction of this dissertation, we briefly sketched the historical evolution of this educational field developing from nature education over conservation education and environmental education towards education for sustainable development. Although this evolution could easily be interpreted as a succession of 'new' perspectives and paradigms breaking out of preceding conceptions of education, our analysis first and foremost revealed what remained unaltered, that is, the way in which education is framed as an instrument to tackle social and political challenges (urban children's increased alienation of nature, problems of nature conservation, the environmental crisis, and issues of (under)development respectively) through a narrowly conceived process of socialisation. EE and ESD are assumed then to foster the values and principles of sustainable development, to promote corresponding behavioural changes, and to qualify people for the role of active participants that contribute to the democratic realisation of a sustainable society. Individual learners should therefore acquire the 'proper' knowledge, insights, skills, and attitudes. They have to 'learn' to adapt their behaviour to what is considered desirable and make themselves competent to deal with the given challenges.

Our analysis of the scholarly discussion shows how a narrow focus on 'learning' is inadequate (i.e. too reductionist) so as to grasp what is at stake in educational practices addressing sustainability issues. Researchers on EE and ESD – working against the backdrop of the far-reaching implications of sustainability issues – point at the importance of educational practices that, in one way or another, take into account these challenges. Yet, all the same criticism is raised about the expectation that these educational practices can solve social and political problems. We brought to the fore how in the debate concerning EE and ESD a

variety of different opinions exists simultaneously centred around the paradox between acknowledging pluralism and taking into account sustainability concerns. The long-lasting discussion in the field of EE and ESD about this ambiguous relation between pluralistic and sustainability concerns, although it is fostered by a variety of nuanced positions, is characterised by a sharp opposition between two extremes. On the one hand, a plea for an instrumental approach to EE and ESD that sees the factual account of the state of the planet as a non-negotiable basis for normative guidelines on how to think and act (which, thus, have to be taught and learned). On the other hand, arguments for a pluralistic approach that understands pluralism as a sheer fact of plurality, resulting in a relativistic tolerance that grants every opinion equal value. As argued, our aim was to further develop an understanding of EE and ESD that moves both beyond a narrow, instrumental focus on learning and socialisation and beyond the contradistinction between pluralistic concerns (at risk of ignoring facts concerning the far-reaching consequences and urgency of sustainability issues) and sustainability concerns (at risk of denying the variety of values and opinions involved) but instead takes a position *within* this tension.

In the remainder of this thesis, we return to our research objectives (that is, grasping the educational dynamics within a diversity of EE practices and revealing the interaction between policy practices and educational practices) by elaborating how the policy analysis and case study we conducted allowed us to address the questions we raised. Outlining the insights emerging from our research also implies acknowledging what remained unaddressed. Therefore, we end this dissertation by putting forward some prospects for a future research agenda.

The interplay of policy practices and educational practices

In this section, we elaborate how the policy arrangement with regard to ESD contributed to the rise of a specific regime that fosters the privatisation rather than public-isation of sustainability issues within EE practices. As we argued in manuscript 1 ESD policymaking contributes to the establishment of a particular *regime* which defines the contours of what is ‘sayable’, ‘seeable’, ‘thinkable’, and ‘possible’ (Masschelein and Simons, 2003; Simons and Masschelein, 2010b, 512). As such, this regime not only affects what becomes (im)possible in EE practices but also how we can (or should) think and speak about these practices. That is, policymakers as well as practitioners and participants are somehow expected to be willing and able to see these practices, think and speak about them and act in/toward them in a very particular way. As we further elaborate below, within this regime EE practices tend to contain (instead of proliferate) contestation and controversy and to limit (rather than broaden) the range of actors assembled around sustainability issues.

In manuscript 1 we showed how concrete policy practices in Flanders are inextricably intertwined with three broader social and political developments that have been extensively described in literature: the growing influence of ESD policy and discourse on EE, the tendency to frame social and political problems as learning problems, and ecological modernisation. Drawing on the analysis of the diverse educational practices through our case study we addressed the interaction between ESD policymaking and EE practices in the field. Thereby, the literature on the aforementioned developments inspired us – as researchers – to see the cases we studied and to think and write about them in a particular way (i.e. attentive for the implications of the social and political developments that have been described by several authors).

As to the increasing impact of ESD, our analysis revealed that this international, policy-driven tendency also strongly affects EE policy and practice in Flanders. As a result, the consensual notion of ‘sustainable development’ reduces the space for contestation and controversy. For instance, we repeatedly observed (in several cases) how sustainable development – often understood as a ‘balance’ between People, Planet, and Profit – served as a buzz word to nip discussions and controversy in the bud. Furthermore, in our analysis of the EE centre we observed how the focus on ESD encouraged practitioners to change their practices. Particularly, the educational staff members and voluntary guides are demanded to shift the focus from what they called ‘valuable knowledge of nature’ to the all-embracing concept of sustainable development. Instead of the traditional, rather informal guided walks in the reserve, guides are now trained to coach carefully programmed activities that aim to address an abundance of issues related to sustainability. Such formats serve as an obstacle for the guides to present themselves and their strong attachment to nature (their ‘passion’) to the pupils. As argued, however, precisely such occasions in which an educator (as a master) shows who (s)he is and what (s)he stands for can expose pupils to the world (i.e. an attachment to nature) and appeal to them for a singular response, thus creating a space for the enactment of mutually exclusive attachments.

The consensual orientation of sustainable development is strongly related to the prevailing discourse of ecological modernisation and its emphasis on ‘collaboration’ so as to ‘manage’ ecological problems. This perspective and the way it affects Flemish ESD policymaking, again, encourages EE practitioners to see the issues at stake and to think and speak about them in a very particular way and to act accordingly. For example, we went into this elaborately in our analysis of the transition arena (see manuscript 7) and showed how a consensus-oriented ecological modernisation perspective functions as a barrier for the enactment of controversy within the arena as well as for broadening the assemblage around the

issue of climate neutrality. This case study allowed us to understand how the way in which some actors, opinions, points of view, arguments, concerns, knowledge claims, values, expertise, etc. are included while others are ignored or excluded aligns with the boundaries of ecological modernisation. We argued how the particular setting of the arena lacked time and patience for an in-depth exploration of the issue of climate neutrality and the enactment of antagonistic attachments entangled in it. Yet, as we elaborated e.g. in manuscripts 4 and 6, during the guided tour on the CSA farm as well as in the making of the films about sustainability issues by 't Uilekot, it was precisely a sustained attention – which requires time and patience – to thoroughly explore the issues at stake and to broaden the assemblage around it (beyond the contours of ecological modernisation) that brought about an educational dynamics which creates a space for the public-isation of sustainability issues.

Finally, we also showed how sustainable development is predominantly framed as a learning problem within Flemish ESD policy. A discourse of learning and qualification (highlighting e.g. the transfer of knowledge and values, green skills, and competences such as systems thinking) prevails in the policy documents and is translated into corresponding policy measures emphasising for example 'final objectives' that translate sustainability in a set of 'key competences'. In our case study we frequently observed how this affects EE practices. We saw for instance how in Ecolife's workshops the emphasis is on the transfer of very particular knowledge (e.g. behaviour precepts implied in clearly defined 'do's and don'ts') and skills (e.g. ecodriving) aimed at rendering the participants more competent to live sustainably (see manuscript 4). Another example is the MOS project's conception of participation and the task-oriented practices that go with it (see manuscript 3). Here, too, the focus is on making pupils competent to contribute – as an active citizen – to the realisation of a sustainable society by learning to become a member of a particular social community that shares a commitment to

environmental performance at school. This way of reducing education to an instrument for problem solving, again, reduces the space to enact mutually exclusive attachments and delimits the public around sustainability issues according to pre- and expert-determined distinctions between who/what is taken into account and who/what is not.

Masschelein and Simons (2003) emphasise that – although it might be tempting – a regime such as the one we described cannot be interpreted as a ‘system’ that can be changed (or, at least, that we can try to change) according to plan. Rather, it generates effects by appealing to people (i.c. ESD and EE policymakers and practitioners but also participants) for a particular way of seeing, speaking, thinking, and acting (i.c. in relation to sustainability issues and educational practices). As such, the regime to which ESD policymaking contributes does not *force* EE practices to contribute to the privatisation of sustainability issues. It is ‘merely’ *appealing* for such practices. In this dissertation, we described and, thus, showed educational practices in their struggle with the issues at stake and the tensions these bring about. As our case study revealed, at particular moments EE practices *do* create a space for public-isation and, thus, resist the appeal for privatisation. By bringing this forward in our descriptions we want to invite and inspire the reader to be attentive to different ways of seeing, speaking, thinking, and acting. After all, Masschelein and Simons (2003, 87 – our translation) argue, ‘resistance can take the form of simply doing different things’.

Considering our research focus, one might have expected that the concluding section of this thesis would contain a number of recommendations so as to propose an alternative ESD policy that fosters the public-isation instead of privatisation of sustainability issues in EE practices. For several reasons, we will not formulate such recommendations here. First, we deliberately want to avoid a position where we – as experts – could easily, that is, matter-of-factly, derive from our analysis guidelines for a ‘better’ ESD policy. As Latour (2010c, 166)

argues, taking the position of an expert reinforces the problematic demarcation between science and politics:

‘Au fond, l’ expert (aussi sympathique et modeste qu’il soit) ne fait que renforcer l’impossible Démarcation en prétendant dissimuler au public la cuisine des sciences en train de se faire et en feignant de protéger les savants de l’intérêt et des passions de la foule. Et le pire, c’est que le paravent des experts est juste assez épais pour permettre aux politiques de s’ abriter derrière leurs avis pour ne pas décider par eux-mêmes en pour eux-mêmes.’

Therefore, we did not approach the policymaking process and the cases we studied from an evaluative perspective and subsequently put forward instructions for policymakers and practitioners based on valid knowledge and expertise about public-ising practices and policymaking. Rather, as indicated above, we aimed to describe policymaking and educational practices – and, in doing so, provided as much information as possible about ‘the making of’ these analyses, the ‘kitchen’ in which they were created – as an invitation to see, think, and speak about it in such a way that, we hope, might inspire policymakers and practitioners to experiment with different practices and to think for (and among) themselves about whether and how they could contribute to the public-isation of sustainability issues. Of course, we as researchers can also contribute to this endeavour and incite reflection and dialogue among practitioners, policymakers, and scientists. Yet, it requires time and effort to engage in such a common search and experimentation. A second, more pragmatic, reason for not suggesting more practical recommendations – or better: considerations – for policymaking is precisely the lack of time and space for dialogue, reflection, and experimentation with professionals within the scope of the present doctoral project. However, we do aim to take up this challenge in the future. In January 2013, I returned to my job as a policy advisor within the EE Unit of the Flemish government. There, I have had the opportunity to give presentations about my research for other civil

servants but also for a variety of practitioners (nature guides, adult educators, staff members of EE centres, teachers, etc.). They told me that the problem setting that gave rise to our research objectives is familiar to them: for example, they recognise the struggle to cope with the democratic paradox and with one's own position as an educator being confronted with such 'difficult' (public) issues. Someone explained how the concepts we elaborated above can inspire policymakers and practitioners and stimulate reflection among them as they 'provide words' to think and speak about their experiences with EE and ESD. Such encounters are encouraging as to the – perhaps optimistic – aspirations of this dissertation. It indicates how presenting our research can incite a dialogue about and search for how educational practices can be understood and given shape in the light of public issues such as sustainability and how, indeed, 'something else' might become possible. We are also preparing a proposal for a 'Strategic Basic Research project' which we will submit to the Flemish government's agency for Innovation by Science and Technology. The characteristics of these projects enable to go beyond an expert perspective. They allow for further theoretical and empirical research and, all the same, create a space for close and intensive collaboration with (organisations of) practitioners and policymakers so as to deliver practical potential for guiding future ESD experiments.

Understanding education in the light of public issues

The challenge we took on in this doctoral research is to articulate the *educational* dynamics within practices of EE and ESD. So as to engage in this endeavour, we aimed at exploring and describing day-to-day educational practices by paying attention to the actors involved in it, the way in which they played their role, the use of educational instruments, the activities that were organised, the interactions that took place, the discourses that informed this, etc. By going into the field, we deliberately took the time to observe and examine a variety of educational practices as an attempt to create opportunities to witness those particular moments in which EE practices create a space for the public-isation of sustainability issues and, thus, perform a different way of seeing, speaking, thinking, and acting in the light of these issues than the privatising approach that prevails in the regime we described above. Witnessing such moments encouraged us to return to theory, that is, to search for insights and concepts that allowed us to further articulate the educational dynamics we observed. In the remainder of this section, we go into this by addressing the key concepts that inspired us to deepen our understanding of education in the light of public issues. Doing so, our aim is not to generate knowledge and theory that truthfully *represent* what the privatisation and public-isation of sustainability issues in educational processes is (or should be) about. Rather, we want to *present* the practices, that is, the events, people, issues, attitudes, instruments, narratives, dialogues, etc. that we observed as well as the rich diversity within and between the cases. The result, we hope, serves as an invitation to be attentive to different ways of seeing, speaking, thinking, and acting within these practices.

Assemblage

We argued how, especially in the context of sustainability issues, education is predominantly framed as an instrument to solve social and political problems. Our aim with this doctoral project was to move beyond a narrow focus on socialisation in terms of qualification for dealing with societal challenges and to conceive of educational processes as a distinct domain, separated from the pursuit of problem-solving inherent in political processes. Simons and Masschelein (2011b, 156-157) in this respect pertinently refer to the etymology of the ancient Greek word 'scholè', which meant school *and* 'free time'. Drawing on insights of Rancière, they argue that the school³³ is not a place of preparation but, rather, a place of 'separation'. It is a very particular practice which consists of offering 'free time'. This separates two modes of the use of time: on the one hand the use of time of those that are subjugated to the necessities of life, and therefore have to do labour and work and, on the other hand, the use of time of those freed from the constraints that accompany labour and work. This school form, as separation, is thus a space/time that is outside the necessities of labour or work. It places labour at a distance. And even where she takes up something of this labour or work – which, as our case study revealed, can be the case in the context of educational practices that address (and take care of) sustainability issues – she transforms it. What happens at school is then different from socialisation or initiation. 'The school is about knowledge and capability for the sake of knowledge and capability itself, which means that it is the place of study and exercise' (Simons and Masschelein 2011b, 157).

So as to deepen our understanding of such 'places of study and exercise' we searched for theoretical and analytical frameworks that incite a consistent

³³ Simons and Masschelein use the word 'school' referring to this ancient etymology. Yet, they emphasise that their considerations apply to the entire field of education and even other domains of society such as social services (see also Masschelein and Simons 2003).

analysis of these places *as practices* and expressly not in terms of, for instance, (individuals') learning process and outcome, competences, didactics, etc. which would, again, have reinforced a narrow socialisation perspective. Marres' and Latour's elaboration of 'public issues' enabled us to examine how educational practices – through their particular (and diverse) 'arrangements' or 'settings' as well as through the interaction with the broader social and political developments we described above – give rise to a variety of 'assemblages' around sustainability issues. In our analysis of the cases, we showed how (human and non-human) actors are drawn into these assemblages or barred out of them as well as how the specificity of each assemblage affects the space for the enactment of contestation and controversy. Thus, it allowed us to understand how the specificity of the arrangement of educational practices can either contribute to the privatisation of sustainability issues (in line with the aforementioned regime), or instead create a space for public-isation.

Whereas the notions of public issues and assemblages served as a theoretical steppingstone, the analytical framework of the PAA provided us with a lens to look at the cases in such a way that they appeared as practices, as particular educational arrangements within which something becomes (im)possible. As our case study shows, through the focus on four comprehensive dimensions (see e.g. sensitising concepts and tree nodes) the PAA encouraged us to examine a wide range of empirical data and, as such, served as a kind of 'wide-angle lens' that enabled us to present the rich diversity of educational settings. Yet, at particular points in our research, we felt the need to add something to this picture by switching lenses, so to speak, in order to further our understanding of the emerging educational dynamics. In our analysis of the CSA farm (see manuscript 6) we decided to focus on one particular activity and conducted an in-depth inquiry – with a 'telephoto lens' – of this very particular moment since the students' visit to the farm drew our attention as it seemed to create a space for

‘something different’ to occur. As to the analysis of the transition arena (see manuscript 7) we initially analysed the collected data in NVivo using the PAA. While writing the article, however, we experienced how the highly detailed and somewhat fragmented analytical perspective offered by the PAA restrained us from bringing how precisely the *connection* between actors, discourses, resources, and (rules of) interaction affected the way in which a public emerged around the issue of a climate neutral city. Hajer’s and Nahuís’ frameworks for dramaturgical analysis inspired us to focus on the design of the transition arena’s setting and on what happened in this specific setting. This kind of analysis allowed us to show how the scripting, staging, and performance of the studied transition arena created a very particular public around a very particularly framed issue of climate neutrality. We brought to the fore what the setting does in constructing and transforming both those who are engaged in it – the public – as well as in constructing and transforming that what is considered to be at stake in it – the issue. Our focus on the performative dimension of participatory practices implied in such dramaturgical analyses thus gave way to a dynamic, co-productionist understanding of the mutual relation between the issue and the public.

Matter of concern

As indicated, we studied educational practices aiming at better understanding how they cope with the paradox between recognising pluralism and concerns about the far-reaching implications of sustainability issues. Latour’s concept of ‘matter of concern’ (and the related notions of ‘matter of fact’ and ‘matter of value’) allowed us to articulate how we observed EE practices struggling with the tension between democratic concerns (at risk of ignoring facts concerning far-reaching consequences of sustainability issues and, thus, situated at what Latour labels a ‘fairy position’) and sustainability concerns (at risk of denying the variety of values and opinions involved and, thus, situated at a ‘fact position’). Our case

study shows how educational practices are often oscillating between a fact and a fair position, thus straitjacketing people within a 'double-bound position': they are incited to 'act by themselves' (that is, in line with their personal values, opinions and preferences) but at the same time restricted by a preconceived model or norm for this acting by oneself (i.e. sustainability standards and precepts that serve as matters of fact). We understood this oscillation – that we addressed explicitly in manuscript 4 but that also came to the fore implicitly in manuscripts 3, 5 and 7 – as a symptom of educational practices being trapped in the Modern Constitution and its separated worlds of facts and values which are both only very partial renderings of issues at stake. Latour's concept of 'matter of concern' enabled us to understand how, also in educational practices dealing with sustainability issues, neither facts nor values can exist by themselves. In the same way as facts can only exist by the values, concerns and attachments that sustain them, values are completely powerless when their factual underpinnings are removed from view turning them in mere opinions. We observed particular moments in which educational practices created the occasion where facts and values can emerge in their interconnectedness and made a fair position of matters of concern possible. As such, the notion of matter of concern draws attention to the educational dynamic where exploring a multiplicity of attachments brings a public issue – that is to say a public and an issue – into existence. Being attentive to the joint and antagonistic attachments of a set of actors caught up in such a matter of concern prevents falling into one pole of the democratic paradox while neglecting the other but instead takes a position within this tension. The multiplicity of attachments is acknowledged and, since it cannot be assumed that these can co-exist peacefully, stands in the way of an 'anything goes' relativism. A fair position thus goes to the core of this democratic paradox without the ambition to solve the tension inherent in it.

Simons' and Masschelein's notion of 'mastery' furthered our understanding of the interrelatedness of the subject of education (as a matter-of-concern) and the people involved in the practice (i.e. on the one hand, the teacher/educator and, on the other hand, the pupils/students/participants). By distinguishing the teacher-as-master from the teacher-as-expert they define this interrelatedness in terms of care. The teacher-as-master (that appeared for instance in our analysis of the CSA farm, in the narratives about the EE centre's voluntary guides' passion for nature, etc.) perceives the world, or an issue in the world, as demanding care. The master is, thus, someone who takes up responsibility for this issue and in doing so, (s)he shows who (s)he is and what (s)he stands for and invites the students to respond (see also below). This understanding of the relation between teacher, student, and subject in terms of care stimulated us, again, to focus on the sustainability issues at stake and to see them as mediators between teachers/educators and pupils/students/participants. That is, it is through the issue – or, more precisely, through his/her care for (something in) the world and for him-/herself – that the master 'opens up' a world for the students, offers them the opportunity to get interested and invites them to take care for the world and for themselves (Simons and Masschelein 2011a). The teacher-as-master genuinely address his/her concern about the issue at stake and its far-reaching implications without reducing EE and ESD to an instrument for manipulation and indoctrination. For the master, Simons and Masschelein argue, there is always something at stake as (s)he has no indifferent relation to what (s)he is dealing with. Mastery, on the contrary, is precisely a matter of being engaged, of caring. It implies a constant and attentive search for accordance between what one thinks and what one does. While presenting him-/herself and what (s)he cares for, the master exposes the students to something in the world: e.g. an attachment to the planet, passion for nature, taking care for a farm in a way that puts this planet first. It is thus his/her attachment to the world that is central in the master's

relation towards the other, i.c. the students. This relation between the master and the students/pupils is, thus, in a certain respect secondary. By showing his/her mastery, by showing who (s)he is and what (s)he stands for, the master invites students to become involved with the sustainability issue at stake and to explore it, expand the assemblage around it, clarify one's attachments, etc. All the same, (s)he offers them a kind of touchstone, encouraging them to take up the opportunity to verify whether their own thinking and doing are in accordance.

Response

Latour and Marres argue that in making issues public both controversy and 'closure' / 'settlement' play an essential part. As such, although we highlighted educational processes as a distinct domain, separated from the pursuit of problem-solving inherent in political processes, our analysis of especially the CSA farm and 't Uilekot shows how the efforts made to find a settlement for an issue (e.g. to apply sustainable agriculture in practice, to examine the issue of fishery and formulate suggestions for policymaking in a documentary, etc.) can incite an interesting educational process. In both cases educators enacted their care for an issue, thereby appealing to students for a singular response. Education as a response (see also manuscripts 5 and 6) emerges then as a derivative of mastery, i.c. of the care for a sustainability issue that serves as an invitation to become involved, to study the issue, expand the assemblage around it, clarify one's attachments, etc. This understanding of education as a response – that has already been observed and described in research on the learning of farmers about environmental issues (Vandenabeele and Wildemeersch 2012) – allowed us to articulate a particular educational dynamic that moves beyond a narrow focus on learning and socialisation in terms of the qualification of individuals (through the acquisition of particular competences) so that they are well equipped to contribute to the solution of the problems at stake. Furthermore, the focus on the

care for an issue (and the invitation to become involved and to study the issue and the multiplicity of attachments entangled in it) creates a space for an understanding of EE and ESD beyond the dichotomised contradistinction between pluralistic and sustainability concerns.

We brought to the fore how ‘closure’/‘settlement’ can find shape in educational practices in two different ways: the care for an issue and the invitation for a response. The way in which these two kinds of closure are also connected (or assembled) draws attention to another perspective on the relation between educational practices and the political process of problem solving than the linear, instrumental one implied in the focus on learning and qualification. We realise that, at this point, further clarification is required. Yet, this moves beyond the scope and design of the present doctoral research. A starting point for further research on this can also be found in Simons and Masschelein’s (2010) concept of ‘pedagogic subjectivation’: the experience of potentiality, a strong experience that one ‘is able’ (to do something, to know something, to speak about something...). In manuscript 3 and 4 we argued how, in the context of EE and ESD, this involves a shared attention for and engagement with an issue and the joint and antagonistic attachments it brings about as a ‘thing-in-common’, in the face of which others are perceived as equals and an experience of ‘being able to’ can emerge. More research is required so as to enable a deeper understanding of pedagogic subjectivation in relation to EE and ESD. This requires a double empirical focus on both the setting of educational practices and experiences of the participants. The double focus on both educational settings and experiences of the actors involved is part of a much broader and on-going scientific search for robust ways to integrate the individual and the society within educational research (see e.g. Hodkinson et al. 2007). In line with this, future research can also further develop the sociobiographical approach (Vandenabeele and Wildemeersch 2012) that has already been used to study education in the context

of sustainability issues drawing on extensive interviews questioning the biographical dynamic of people and their engagement in diverse educational settings.

The following questions can guide future research:

- How can we understand the preconditions, experiences and processes of pedagogic subjectivation in actual practices of EE/ESD?
- How can we conceptualise the relation between pedagogic subjectivation and political subjectivation in the light of public issues such as sustainability?
- How can we further articulate the distinction (or relation) between political and educational ways in which sustainability issues can find a settlement?

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Appendices

Appendix 1: Semi-structured interview questions for the policy advisor

Kan je toelichten hoe het EDO-beleid in Vlaanderen ontstaan is?

Hoe heeft dit beleid zich in de loop der tijd verder ontwikkeld?

Welke actoren zijn betrokken bij het EDO-beleid in Vlaanderen?

Welke rol vervullen ze?

Zijn er in de loop der tijd actoren bijgekomen?

Waarom?

Zijn er actoren weggefallen?

Waarom?

Zijn er groepjes actoren te onderscheiden die een bepaalde visie op het beleid delen?

Zijn er daarbij groepjes met verschillende, tegenstrijdige visies?

Hoe gaan die groepjes actoren om met hun verschillende visies?

Zijn de betrokken actoren op de één of andere manier van elkaar afhankelijk?

Hoe hebben de relaties tussen de betrokkenen zich in de loop der tijd ontwikkeld?

Zijn er daarin belangrijke verschuivingen geweest?

Wie heeft volgens jou zoal invloed op het EDO-beleid in Vlaanderen?

Hoe uit zich dat?

Waarop is die invloed gebaseerd?

Is dit in de loop der tijd geëvolueerd?

Beschikt het EDO-beleid in Vlaanderen over financiële middelen?

Welke?

Van waar komen die?

Is dit in de loop der tijd geëvolueerd?

Hoeveel personen werken aan het Vlaamse EDO-beleid?

Waar werken die?

Is dit in de loop der tijd geëvolueerd?

Waar situeer je de aanwezig kennis en expertise m.b.t. EDO?

Wie heeft die kennis?

Op welke manier werd die kennis verworven?

Hoe wordt ermee omgegaan?

Is dit in de loop der tijd geëvolueerd?

Vind je dat de macht i.v.m. het EDO-beleid eerder hiërarchisch of eerder horizontaal verdeeld is?

Is er bepaalde regelgeving die invloed heeft op hoe het EDO-beleid in Vlaanderen vorm krijgt?

Welke?

Hoe uit zich dat?

Hoe wordt ermee omgegaan?

Zijn die regels strikt?

Zijn ze dwingend of kan je er (soms) onderuit?

Is dit in de loop der tijd geëvolueerd?

Zijn er 'ongeschreven regels' die een invloed hebben?

Welke?

Hoe uit zich dat?

Hoe wordt ermee omgegaan?

Zijn die regels strikt?

Zijn ze dwingend of kan je er (soms) onderuit?

Is dit in de loop der tijd geëvolueerd?

Heeft het EDO-beleid zelf bepaalde regelgeving voortgebracht of beïnvloed?

Welke?

Hoe uit zich dat?

Hoe wordt ermee omgegaan?

Zijn die regels strikt?

Zijn ze dwingend of kan je er (soms) onderuit?

Is dit in de loop der tijd geëvolueerd?

Wat versta jij zelf, persoonlijk onder 'duurzame ontwikkeling'?

Denk je dat anderen dat ook zo zien?

Wie wel/niet?

Waarom?

Wat versta jij zelf, persoonlijk onder 'educatie'?

Denk je dat anderen dat ook zo zien?

Wie wel/niet?

Waarom?

De publicatie "EDO: de vlag en de lading" wil een aantal principes van EDO verduidelijken.

Hoe kwam die brochure tot stand?

Wie heeft daarop invloed gehad?

Wat gebeurt ermee?

Heeft dit volgens jou invloed op (EDO)-praktijken?

Heeft het EDO-beleid in Vlaanderen de kijk op EDO bij de betrokkenen veranderd, denk je?

In welke zin?

Hoe komt dit?

Heeft het EDO-beleid in Vlaanderen de kijk op NME veranderd, denk je?

In welke zin?

Hoe komt dit?

Wat zijn je verwachtingen m.b.t. de toekomst van het EDO-beleid in Vlaanderen?

Hoe denk je dat dit zich verder zal ontwikkelen?

Wat zijn volgens jou wenselijke/noodzakelijke evoluties?

Appendix 2: Survey questionnaire

Wat versta je onder 'duurzame ontwikkeling'?

Wat versta je onder 'educatie voor duurzame ontwikkeling'?

Ben jij betrokken bij het EDO-beleid in Vlaanderen?

Op welke manier?

Hoe zie je jouw rol?

Wat vind je van het EDO-beleid in Vlaanderen?

Heeft het EDO-beleid in Vlaanderen je kijk op EDO veranderd?

In welke zin?

Hoe komt dit?

Heeft het EDO-beleid in Vlaanderen je kijk op NME veranderd?

In welke zin?

Hoe komt dit?

Wat zijn je verwachtingen m.b.t. de toekomst van het EDO-beleid in Vlaanderen?

Hoe denk je dat dit zich verder zal ontwikkelen?

Wat zijn volgens jou wenselijke/noodzakelijke evoluties?

Appendix 3: Overview of the analysed policy documents

International policy documents

1. Council of the European Union, 3046th Education, Youth, Culture and Sport Council meeting, *Council conclusions on education for sustainable development*, Brussels, 18-19 November 2010
2. Commission of the European Communities, *A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development*, Brussels, 15 May 2001
3. Council of the European Union, *Review of the EU Sustainable Development Strategy*, Brussels, 26 June 2006
4. United Nations, *Rio Declaration on Environment and Development*, Rio de Janeiro, 3-14 June 1992
5. United Nations, *Agenda 21, Chapter 36: Promoting Education, Public Awareness & Training*, 1992
6. United Nations, *Plan of Implementation of the World Summit on Sustainable Development*, Johannesburg, 2002
7. United Nations General Assembly, *resolution 57/254*, 20 December 2002
8. United Nations General Assembly, *resolution 58/219*, 9 February 2004
9. United Nations General Assembly, *resolution 59/237*, 24 February 2005
10. United Nations General Assembly, Mid-Decade review of the United Nations Decade of Education for Sustainable Development, 2005-2014, 11 August 2010
11. UNECE, High-level meeting of Environment and Education Ministries, *UNECE Strategy for Education for Sustainable Development*, Vilnius, 17-18 March 2005
12. UNECE, High-level meeting of Environment and Education Ministries, *Vilnius framework for the implementation of the UNECE Strategy for Education for Sustainable Development*, Vilnius, 17-18 March 2005
13. UNECE, Second regional meeting on education for sustainable development, *Draft UNECE Strategy for education for sustainable development, Addendum: Background*, Rome, 15-16 July 2004
14. UNECE, Second regional meeting on education for sustainable development, *Draft UNECE Strategy for education for sustainable development, Addendum: Explanatory notes*, Rome, 15-16 July 2004

15. UNECE Steering Committee on Education for Sustainable Development, *Report of the UNECE Steering Committee on Education for Sustainable Development on its third meeting, Addendum: Reporting format*, 31 March – 1 April 2008
16. UNECE Steering Committee on Education for Sustainable Development, *Learning for the future: Competences in Education for Sustainable Development*, Geneva, 7-8 April 2011
17. UNECE Steering Committee on Education for Sustainable Development, *Discussion paper on the role of education for sustainable development in shifting to a green economy*, Geneva, 7-8 April 2011
18. UNECE, 5th Ministerial Conference Environment for Europe, *Statement on education for sustainable development by the UNECE Ministers of the environment*, Kiev, 21-23 May 2003
19. UNECE, 6th Ministerial Conference Environment for Europe, *Declaration "Building Bridges to the Future"*, 10-12 October 2007
20. UNESCO, *United Nations Decade of Education for Sustainable Development (2005-2014) International Implementation Scheme*, October 2005
21. UNESCO World Conference on Education for Sustainable Development, *Bonn Declaration*, 31 March – 2 April 2009
22. UNESCO, *Report by the director-general on the UNESCO World Conference on Education for Sustainable Development and the Bonn Declaration*, 17 April 2009
23. UNESCO, *Review of Contexts and Structures for Education for Sustainable Development*, 2009

Flemish policy documents

1. EDO-overlegplatform, *verslag 15 juni 2006*
2. EDO-overlegplatform, *verslag 26 oktober 2006*
3. EDO-overlegplatform, *verslag 26 april 2007*
4. EDO-overlegplatform, *verslag 2 oktober 2007*
5. EDO-overlegplatform, *verslag 12 december 2007*
6. EDO-overlegplatform, *verslag 17 april 2008*
7. EDO-overlegplatform, *verslag 9 oktober 2008*
8. EDO-overlegplatform, *verslag 20 april 2009*
9. EDO-overlegplatform, *Educatie als motor voor duurzame ontwikkeling in Vlaanderen. Memorandum van het EDO-overlegplatform naar aanleiding van de Vlaamse verkiezingen 2009.*

10. EDO-overlegplatform, *verslag 5 oktober 2009*
11. EDO-overlegplatform, *verslag 22 april 2010*
12. EDO-overlegplatform, *nota "Selectie van fragmenten over EDO uit de beleidsnota's 2009-2014", 22 april 2010*
13. EDO-overlegplatform, *verslag 9 december 2010*
14. EDO-overlegplatform, *verslag 22 juni 2011*
15. EDO-overlegplatform, *verslag 16 april 2012*
16. EDO-overlegplatform, *verslag 2 oktober 2012*
17. Besluit van de Vlaamse regering houdende de goedkeuring van het Programma Natuur- en Milieueducatie vanaf 1 september 2003
18. Vlaamse overheid, *Visie- en beleidsnota Natuur- en Milieueducatie (2009-2014)*
19. Vlaamse overheid, *Leren voor een leefbare toekomst. Vlaams Implementatieplan voor Educatie voor Duurzame Ontwikkeling*
20. Vlaamse overheid, *Indicatorenrapport: stand van zaken EDO in Vlaanderen, 16 oktober 2007*
21. Vlaamse overheid, *Educatie voor duurzame ontwikkeling: de vlag en de lading, 2011*
22. Vlaamse overheid, *Milieubeleidsplan 2011-2015*
23. Vlaamse overheid, *Verslag werkgroep EDO-projectfiche: overleg tussen beleidsdomeinen, 5 mei 2008*
24. Vlaamse overheid, *Verslag werkgroep EDO-projectfiche: overleg budget, 8 mei 2008*
25. Vlaamse overheid, *Verslag werkgroep EDO-projectfiche: vorming en nascholing en educatief materiaal, 14 mei 2008*
26. Vlaamse overheid, *Samen grenzen ver-leggen. Vlaamse strategie duurzame ontwikkeling fase 1, 2006*
27. Vlaamse overheid, *Vlaamse strategie duurzame ontwikkeling, project nr. 3: Educatie voor duurzame ontwikkeling*
28. Vlaamse overheid, *Samen grenzen ver-leggen. Vlaamse strategie duurzame ontwikkeling, 2011*
29. Minaraad, *advies van 3 juni 2004 over het Vlaamse beleid inzake natuur- en milieueducatie*
30. Minaraad, *Studiedocument over de beleidsontwikkelingen inzake educatie voor duurzame ontwikkeling, maart 2007*

31. Minaraad, *advies op hoofdlijnen van 22 maart 2007 over de organisatorische en beleidsmatige inschakeling en afstemming van NME in de beleidsontwikkelingen rond EDO*
32. VLOR en Minaraad, *advies van 22 maart 2007 over educatie voor duurzame ontwikkeling in leerplichtonderwijs*
33. Minaraad, *advies van 7 april 2008 over het Vlaams implementatieplan voor educatie voor duurzame ontwikkeling*
34. Minaraad, *advies van 10 september 2009 over de Vlaamse Strategienota Duurzame Ontwikkeling: invulling van de operationele projecten*
35. Strategische Adviesraad Internationaal Vlaanderen, *advies van 8 juli 2009 over de Vlaamse Strategienota Duurzame Ontwikkeling: invulling van de operationele projecten*
36. SERV, *advies van 8 juli 2009 over de Projecten Vlaamse strategie Duurzame Ontwikkeling*

Appendix 4: NVivo tree nodes and free nodes for policy analysis

Tree nodes

- Actoren
 - Betrokken actoren
 - Beleidsdomein CJSN
 - Benelux
 - Dept. DAR
 - Dept. EWI
 - Dept. iV
 - Dept. Onderwijs
 - Dienst NME
 - Ecocampus
 - EDO-platform
 - Erfgoededucatie
 - Evolutie
 - Actoren bijgekomen
 - Actoren weggevallen
 - Banden versterkt
 - Formele pad verlaten
 - Vraaggestuurde aanpak
 - Hoger Onderwijs
 - Ik ben niet echt betrokken
 - Leerkrachten – educatoren
 - Lerende netwerken
 - Minaraad
 - Nieuw opgedoken actoren
 - NME-platform
 - Onderwijskoepels
 - Ouders
 - Provincies
 - UNECE
 - Vlaamse regering
 - WGDO

- Coalities
 - Echt voor EDO willen gaan
 - Evolutie
 - Participatieambities
 - Pleiten voor meer middelen
 - Provincies
- Interdependentie
 - Afspraken
 - Beleidsdomeinoverschrijdend samenwerken
 - Financiële afhankelijkheid
 - Intermenselijke afhankelijkheid
- Invloed structurele ontwikkelingen
 - DO als leerprobleem
 - Ecologische modernisering
 - EDO-beleid
 - Politieke modernisering
- Niet-bereikte actoren
 - Alle beleidsdomeinen
 - Bedrijfsleven
 - Te weinig niet-formeel leren
 - Te weinig niet-NME actoren
 - Te weinig praktijkwerkers
- Rol betrokken actoren
 - Beleid beïnvloeden
 - Beleid opvolgen
 - Beleidsuitvoering
 - Beleidsvoorbereiding
 - EDO concreet maken
 - Professionalisering
 - Vertegenwoordiging
- Discoursen
 - Concurrerende discoursen
 - Eenvoud – complexiteit
 - Instrumenteel – pedagogisch
 - Komen boven in praktijken

- Wel – niet bedrijfsleven
- Wel – niet verbreden
- Discoursen over DO
 - Anderen – iedereen
 - Behoeften
 - Betrokkenheid
 - Brundtlanddefinitie
 - C2C
 - De vlag en de lading
 - Ecologische pijler
 - Economische pijler
 - Einddoel
 - Evenwicht
 - Grondstoffen
 - Leefbaarheid
 - Maatschappelijke structuren
 - Oneindig proces
 - Participatie
 - Rechtvaardigheid
 - Ruimtelijke dimensie
 - Sociale pijler
 - Solidariteit
 - Systemen
 - Tijdsdimensie
 - Transitie
 - Triple P
 - Waarden
 - Zoektocht
 - Zorg
- Discoursen over EDO
 - Attitudeverandering
 - Begeleiden
 - Bewustmaken
 - Bijdrage aan DO
 - Capaciteiten – competenties

- Collectief – politiek – maatschappelijk
- De vlag en de lading
- Didactiek
- Draagvlak creëren
- EDO is moeilijk
- Engagement stimuleren
- Formeel, niet-formeel, informeel
- Gedragsverandering
- Individueel
- Informeren
- Inhoud en proces
- Interactie met de samenleving
- Interdisciplinair
- Keuzes maken
- Leerlijnen
- Mentaliteitsverandering
- Nood aan duidelijkheid
- Opvoeden
- Participeren
- Richtinggevend concept
- Sensibiliseren
- Systeemdenken
- Toekomstdenken
- Transitie
- Veerkracht
- Verbondenheid
- Voorbeeldfunctie
- Voorbereiden
- Waarden
- Wetenschap
- Zoektocht
- Discoursen over educatie
 - Actie
 - Ander perspectief
 - Levenslang

- Nieuwe ervaringen
 - Reflectie
- Evolutie
- Invloed structurele ontwikkelingen
 - DO als leerprobleem
 - Ecologische modernisering
 - EDO-beleid
 - Politieke modernisering
- NME-EDO
- Hulpbronnen
 - Evolutie hulpbronnen
 - Evolutie macht
 - Formele macht
 - Hiërarchisch
 - Horizontaal
 - Hulpbronnen
 - Educatief materiaal
 - Engagement
 - Expertise
 - Financiële middelen
 - Monitoring
 - Officieel – in praktijk
 - Onvoldoende hulpbronnen
 - Overleg – netwerking – coördinatie
 - Personeel
 - Procesbegeleiding
 - Visie
 - Vorming
- Invloed
 - Bottom-up
 - De vlag en de lading
 - Dienst NME
 - EDO-platform
 - Logge structuur
 - Politici

- Invloed structurele ontwikkelingen
 - DO als leerprobleem
 - Ecologische modernisering
 - EDO-beleid
 - Politieke modernisering
- Spelregels
 - Aard spelregels
 - Dwingend
 - Formeel
 - Informeel
 - Niet dwingend
 - Niet strikt
 - Strikt
 - Evolutie
 - Geldende spelregels
 - Accreditatie
 - Beleidsplannen
 - Decreet DO
 - EDO-implementatieplan
 - Eindtermen – competentieprofielen
 - VOET
 - Engagement Vilnius
 - Europese raadsconclusies
 - Prioritair nascholings thema
 - Samenwerkingsovereenkomst
 - Schoolpact
 - Subsidiereglementen
 - UNECE Strategy
 - Verdrag van Aarhus
 - VSDO
 - Invloed structurele ontwikkelingen
 - DO als leerprobleem
 - Ecologische modernisering
 - EDO-beleid
 - Politieke modernisering

Free nodes

- Doorstroming onvoldoende
- Gewenste evoluties
- Verwachte evoluties

Appendix 5: Overview data-collection case study

Documents

Environmental Performance at School

Overall project

1. Website
2. MOS guidelines primary education
3. MOS guidelines secondary education
4. Thematic manual 'Water' secondary education
5. Guidelines judging committee 2011
6. Note 'What does MOS expect of a candidate for Logo 3 or the Green Flag?'
7. Report communication study
8. Note 'Draft mission and vision'
9. Report MOS-forum 29 April 2008
10. Note 'MOS after 2013: vision & ideas of the MOS coaches primary education'
11. Programme feedback group for teachers
12. Note 'Preparation task force continuation MOS-project 24 March 2011'
13. Report feedback group for teachers 30 May 2011
14. Report meeting task force continuation MOS-project 2 December 2011
15. Advice of the Financial Inspection about the continuation of the MOS-project
16. MOS' response on the advice of the Financial Inspection
17. Call letter-writing action climate change
18. Press release 'Letters for the climate'
19. Press release 'Walk for water'

School 1

20. Response to the questionnaire

School 2

21. Response to the questionnaire
22. Evaluation form poverty project
23. Presentation poverty project made by pupils

School 3

24. Response to the questionnaire
25. Presentation citizenship project

School 4

- 26. Response to the questionnaire
- 27. Dossier for the application for a Green Flag
- 28. Flyer demonstration sustainable transport
- 29. Booklet ecological footprint made by pupils

School 5

- 30. Response to the questionnaire
- 31. Dossier for the application for Logo 3
- 32. Letter for parents about World Water Day
- 33. Note 'Workshops World Water Day'
- 34. Note 'Water Project'
- 35. Forms for completion on the Water Project
- 36. 'Waterpaper' made by pupils

School 6

- 37. Response to the questionnaire
- 38. Action plan

Environmental education centre

- 39. Website
- 40. Index card with keywords on EE and ESD

Transition Towns Network

- 41. Website
- 42. Flyer Transition Network Flanders

Transition arena

- 43. Website
- 44. Flyer 'Climate coalition'
- 45. Flyer MUSIC-project
- 46. Note 'Towards a sustainable city: more than a city trip! On transitions and transition management.'
- 47. Note 'Members of the transition arena'
- 48. Note 'Summary start measurement transition arena'
- 49. Presentation transition arena 1
- 50. Presentation transition arena 4
- 51. Report transition arena 1
- 52. Report transition arena 2
- 53. Report transition arena 3
- 54. Report transition arena 3bis
- 55. Report transition arena 4

56. Note 'Preparation of transition arena 5 – transition paths'
57. Report working group 'Blue Economy'
58. Report working group 'Consumer steers the market'
59. Report working group 'Sustainable transport'
60. Report working group 'Energy-efficient businesses'
61. Report working group 'Sewage water'
62. Report working group 'Urban agriculture'

Community Supported Agriculture

63. Website
64. Flyer 'Natural learning'
65. Agreement with harvest shareholders
66. Business plan
67. Flyer 'We feed the world' distributed during the information session
68. Flyer information session
69. Text 'Philosophy of life at de Meester-Wroeterij'
70. Project application 'Why a nature = culture project at de Meester-Wroeterij?'

't Uilekot

71. Website
72. Brochure 'The label business'
73. Script 'Climaxi'
74. Script 'Sustainable on Paper'
75. Script 'Fish and Run'

Ecolife

76. Website
77. Flyer Ecodriving
78. Parking disk with hints for Ecodriving

Interviews

Environmental Performance at School

Overall project

- Provincial MOS-coach secondary education (12/09/2011)
- Provincial MOS-coach primary education (14/09/2011)
- Project coordinator (29/11/2011)

School 1

- MOS focal point (18/11/2011)

School 2

- MOS focal point + colleague (13/10/2011)

School 3

- MOS focal point (26/04/2011)

School 4

- MOS focal point (part 1) (06/05/2011)
- MOS focal point (part 2) (06/06/2011)

School 5

- School director (28/09/2011)

School 6

- School director (16/02/2012)

Environmental education centre

- Director of the centre* (28/03/2011)
- Educational staff member (part 1) (28/03/2011)
- Educational staff member (part 2) (12/05/2011)

Transition Towns Network

- Volunteer coordinating network (09/03/2011)
- Volunteer coordinating network (15/03/2011)

Transition arena

- Director 'Climate team'* (28/03/2011)
- Engineer 'Climate team' (27/02/2012)

Community Supported Agriculture

- Farmer (12/09/2011)

't Uilekot

- Coordinator (23/03/2011)

Ecolife

- Director (29/04/2011)
- Educational staff member (17/10/2011)

** The director of the EE centre is the same person as the director of the 'Climate team' that organises the transition arena. We conducted one interview, going into the two cases.*

Observations

Environmental Performance at School

Overall project

1. Meeting task force continuation MOS-project (24/03/2011)
2. Meeting task force continuation MOS-project (13/05/2011)

3. Feedback group teachers (30/05/2011)
4. Judging committee MOS-logo's (20-21/06/2011)

School 1

5. Action lunch boxes + sustainable school shop (17/05/2011)
6. Cleaning street litter + tasting (tap) water (20/05/2011)
7. MOS council (18/11/2011)

School 2

8. Project poverty (31/05/2011)

School 3

9. Announcement project citizenship (26/04/2011)
10. Project citizenship (10/05/2011)

School 4

11. MOS council (02/05/2011)
12. Manifestation sustainable transport (06/05/2011)

School 5

13. World Water Day: 'Walk for water' (22/03/2011)
14. Workshops water project (25/03/2011)
15. Performance workshops water project for parents (08/04/2011)
16. Evaluation meeting teachers (02/05/2011)

School 6

17. MOS council (19/01/2012)
18. Manifestation climate change 'Warm Jersey Day' (16/02/2012)

Environmental education centre

19. Study of the biotope secondary school (12/05/2011)
20. Study of the biotope secondary school (21/10/2011)
21. Springtime walk primary school (cancelled: observation of the staff member and guides) (01/06/2011)
22. Autumn walk primary school (09/11/2011)

Transition Towns Network

23. Course on 'Visioning the future' (17/09/2011)
24. Conference Transition Towns (29/09/2011)
25. Performance of the results of the course on 'Visioning the future' (09/12/2011)

Transition arena

26. Transition arena (06/06/2011)
27. Transition arena (10/10/2011)
28. Climate forum (22/11/2011)

29. Transition arena (30/01/2012)

Community Supported Agriculture

30. Information session (21/03/2011)

31. Working day for volunteers (29/10/2011)

32. Excursion for engineering students (05/12/2011)

33. Voluntary work at the farm for primary school pupils (28/03/2012)

't Uilekot

34. Holiday camp 'City of dreams' (18/04/2011)

35. Pupils' Parliament (29/04/2011)

36. A day at the set of 'Fish and Run' (02/09/2011)

37. Film performance 'Sustainable on Paper' (09/11/2011)

38. Film performance 'Fish and Run' (18/11/2011)

39. Action about the FSC-label (15/12/2011)

40. Meeting working group (07/02/2012)

Ecolife

41. Event Ecodriving (29/09/2011)

42. Workshop Ecodriving (21/11/2011)

43. Workshop Energy saving for poor people (11/01/2012)

44. Workshop Ecoteam@work (26/01/2012)

45. Workshop Ecological Footprint (01/03/2012)

Appendix 6: General list of semi-structured interview questions for the case study

Kan je om te beginnen even toelichten wat [case] precies is?

Hoe is [case] ontstaan?

Hoe zou je jullie 'boodschap' kunnen omschrijven?

Wat willen jullie bereiken?

Willen jullie kennis overbrengen?

Welke?

Op welke manier?

Hebben jullie aandacht voor ethische kwesties?

Op welke manier?

Mijn onderzoek focust op Educatie voor Duurzame Ontwikkeling. Besteden jullie aandacht aan het concept 'duurzame ontwikkeling'?

Wat versta je onder duurzame ontwikkeling?

Hoe stel je dit voor aan de deelnemers?

Wie is er, in brede zin, betrokken bij jullie educatieve activiteit(en)?

Wie speelt een actieve rol?

Wie komt op een andere manier in beeld?

Welke rollen spelen die verschillende actoren?

Waarom zijn net zij betrokken?

Zijn er andere mogelijke actoren die betrokken zouden kunnen worden?

Werd dit overwogen?

Waarom zijn zij niet betrokken?

Zijn er in de loop der tijd nieuwe actoren betrokken?

Welke?

Waarom?

Zijn er actoren weggevallen?

Welke?

Waarom?

Is er (rechtstreeks of onrechtstreeks) een plaats weggelegd voor wetenschappers en experts?

Op welke manier spelen zij een rol?

Wat wordt van hen verwacht?

Wat willen ze met deze activiteit zelf bereiken, denk je?

Welke invloed hebben ze volgens jou?

Is er (rechtstreeks of onrechtstreeks) een plaats weggelegd voor politici en beleidsmakers?

Op welke manier spelen zij een rol?

Wat wordt van hen verwacht?

Wat willen ze met deze activiteit zelf bereiken, denk je?

Welke invloed hebben ze volgens jou?

Is er (rechtstreeks of onrechtstreeks) een plaats weggelegd voor bedrijven of andere marktactoren?

Op welke manier spelen zij een rol?

Wat wordt van hen verwacht?

Wat willen ze met deze activiteit zelf bereiken, denk je?

Welke invloed hebben ze volgens jou?

Welke rol zien jullie weggelegd voor burgers?

Wat wordt van hen verwacht?

Wat willen ze met deze activiteit zelf bereiken, denk je?

Welke invloed hebben ze volgens jou?

Hebben jullie aandacht voor burgerschap?

Op welke manier?

Zijn er mensen die fungeren als vormingswerker, begeleider, lesgever,...?

Hoe noem je die persoon?

Wat wordt van hem/haar verwacht?

Wat wil hij/zij zelf bereiken?

Welke invloed heeft hij/zij volgens jou?

Hoe uit zich dat?

Wat is de rol van de deelnemers in dit leerproces?

Hoe noem je hen?

Wat wordt van hen verwacht?

Wat willen ze zelf bereiken, denk je?

Welke invloed hebben ze volgens jou?

Hoe uit zich dat?

Zijn (sommige) betrokken actoren van elkaar afhankelijk?

Waarom?

(Hoe) beïnvloedt dit het leerproces?

Moeten jullie rekening houden met bepaalde regels bij het organiseren van jullie werking?

Welke?

Zijn deze regels strikt?

Zijn ze dwingend of kunnen jullie er op de één of andere manier (soms) ook onderuit?

Zijn de regels formeel vastgelegd in wetgeving of reglementering of is er (ook) sprake van eerder 'ongeschreven wetten', van informele spelregels of gewoontes?

Zijn de spelregels in de loop der tijd veranderd?

Hoe?

Waarom?

Ervaren jullie soms/vaak tegengestelde of afwijkende meningen?

Hoe gaan jullie daarmee om?

Zijn er regels (zowel formele als informele) over hoe moet worden omgegaan met conflicten en onenigheid? Welke? Hoe wordt dit geregeld?

Wordt het leerproces zelf strikt geregeld?

Is de activiteit gestandaardiseerd of is er (veel) ruimte voor flexibiliteit?

Kunnen de deelnemers zelf het leerproces/de activiteit ter discussie stellen? Kunnen ze ervoor zorgen dat het wordt aangepast?

Besteden jullie aandacht aan het creëren van een geschikte (fysieke, materiële) leeromgeving?

Welke keuzes werden hierin gemaakt?

Wat wil je daarmee bereiken?

Op welke manier beïnvloedt de leeromgeving het leerproces, denk je?

Zijn er doorheen de tijd veranderingen geweest in de leeromgeving?

Welke?

Waarom?

Gebruiken jullie bepaalde leermiddelen?

Welke?

Waarom kozen jullie voor die leermiddelen?

Wat wil je ermee bereiken?

Wie nam die beslissing?

Zijn de leermiddelen gestandaardiseerd of bieden ze (veel) ruimte voor flexibiliteit?

Kunnen de leerkrachten/vormingswerkers/educatoren/... de leermiddelen ter discussie stellen?

Kunnen ze kiezen uit/voor alternatieven?

Kunnen de deelnemers zelf de leermiddelen ter discussie stellen?

Kunnen ze kiezen uit/voor alternatieven?

Zijn er doorheen de tijd nieuwe leermiddelen bijgekomen?

Zijn er leermiddelen weggevallen?

Waarom?

Gebruiken jullie (duurzaamheids)indicatoren/
meetinstrumenten/rekenmodellen/... (bv. ecologische voetafdruk,
koolstofvoetafdruk, enz.)?

Op welke manier worden die in het leerproces gehanteerd?

Wat wil je ermee bereiken?

Kunnen de deelnemers een eigen inbreng doen in de educatieve activiteit?

Hoe?

Wat verwacht je van de inbreng van de deelnemers?

Welke actoren worden volgens jou allemaal getroffen door de
duurzaamheidskwesties die in de educatieve activiteit centraal staan?

Wie heeft hier op de een of andere manier iets mee te maken?

Op welke manier zijn deze actoren betrokken bij de
duurzaamheidskwestie?

Krijgen al deze actoren (rechtstreeks of onrechtstreeks) een plaats in het
leerproces?

Wie wel en wie niet?

Waarom?

Zijn er actoren die voor zichzelf en/of anderen een plaats trachten te
verwerven?

Welke?

Waarom?

Hoe wordt daarmee omgegaan?

Heeft de educatieve activiteit aandacht voor machtsverhoudingen?

Op welke manier komt dit aan bod?

Wat wil je hiermee bereiken?

Appendix 7: NVivo tree nodes and free nodes for case study.

Tree nodes

- Actoren
 - Betrokken actoren
 - Rol betrokken actoren
 - Selectie betrokken actoren
 - Coalities
 - Coalitie met getroffen actoren
 - Epistemisch activisme
 - Getroffen actoren
 - Interdependentie
 - Niet-betrokken actoren
 - Rol
 - Rol van burgers
 - Rol van experts
 - Adviseren
 - Legitimering
 - Zekere kennis aanbrengen
 - Rol van marktactoren
 - Rol van politici
- Discoursen
 - Discoursen over case
 - Boodschap
 - Boodschap aanpassen aan doelgroep
 - Maar één verhaal
 - Missie
 - Omschrijving case
 - Ontstaan case
 - Vertrekken van concern
 - Vertrekken van concrete kwestie
 - Vertrekken van een beleidsdoel
 - Vertrekken van een praktijk
 - Vertrekken van een thema

- Discoursen over DO
 - Aandacht voor machtsrelaties
 - Alles hangt samen
 - Alternatieven en oplossingen voor duurzaamheidskwesties
 - Alternatief, oplossing als voorbeeld stellen
 - Individueel bijdragen aan oplossingen
 - Nieuwe oplossingen zoeken
 - Oplossingen aanreiken
 - Oplossingen uitproberen
 - Oplossingen van bovenaf
 - Oplossingen van onderuit
 - Oplossingen verbeelden
 - Oplossingen zijn moeilijk
 - DO als containerbegrip
 - DO als continue zoektocht
 - DO als duurzaam materiaalgebruik
 - DO als geheel van puzzelstukjes
 - DO als kleine positieve dingen doen
 - DO als leerproces
 - DO als legitimering
 - DO als onbruikbaar concept
 - DO als politieke strijd
 - DO als positief verhaal
 - DO als samenwerking
 - DO als technofix
 - DO als transitie
 - DO als vaststaand streefdoel
 - DO als vraagteken
 - DO als win-win
 - DO concreet maken
 - DO geen politieke strijd
 - DO is moeilijk
 - DO is waardegeladen
 - Duurzaamheidsclaims
 - Duurzaamheidsclaims zijn contextgebonden
 - Duurzaamheidsclaims zijn universeel

- Duurzaamheidskwesties
- Economische benadering
- Expertise
 - Expertise aanhalen
 - Expertise ter discussie stellen
- Geen duurzaamheidskwesties
- Hier en elders
- Kleine veranderingen onvoldoende
- Meer dan economische ontwikkeling
- Natuur
- Nu en later
- Oorzaken van duurzaamheidskwesties
 - Individuele verantwoordelijkheid
 - Structurele oorzaken
- Rechtvaardigheid
- Soorten kennis over duurzaamheidskwesties
 - Kennis over alternatieven
 - Kennis over gevolgen
 - Kennis over oorzaken
 - Kennis over veranderingsstrategieën
- Triple P
- Veerkracht
- Verbreden NME naar EDO
- Zorg
- Discoursen over educatie
 - Doelen van educatie
 - Actie
 - Actief, duurzaam burgerschap
 - Antwoorden bieden
 - Attitudes overbrengen
 - Beleid implementeren
 - Blik verruimen
 - Draagvlak creëren
 - Empowerment
 - Gedragsverandering
 - Gemeenschapsvorming

- Inspireren
 - Interesse wekken
 - Kennisoverdracht
 - Keuzes leren maken
 - Kritisch nadenken
 - Maatschappelijke verandering
 - Mensen helpen
 - Milieuwinst
 - Onderzoeken
 - Sensibiliseren, bewustmaken
 - Stilstaan
 - Vaardigheden aanleren
 - Voorbeeld geven
 - Vragen oproepen
 - Waardenontwikkeling
 - Waardenoverdracht
 - Zelfbewustzijn
- Eindtermen
- Moet leuk zijn
- Participatie
- Relatie educatie – ethiek
 - Educatie als ethische praktijk
 - Educatie als instrument voor ethische principes
 - Expliciete aandacht voor waarden
 - Impliciete aandacht voor waarden
- Relatie educatie – maatschappelijke verandering
 - Gedragsvoorschriften
 - Publieke betrokkenheid creëren
- Relatie educatie – burgerschap
 - Instrumentele relatie leren – burgerschap
 - Niet-instrumentele relatie leren – burgerschap
- Manier van praten
 - Beleidstaal
 - Markttaal
- Hulpbronnen
 - Activiteiten

- Begeleiding
 - Advies
 - Coachen
 - Ervaringen delen, netwerken
 - Filteren
 - Hulp bij administratie
 - Ideeën
 - Informatie
 - Steun en motivatie
 - Structuur
 - Vorming
- Beloning, straf
- Duurzaamheidsindicatoren
 - Ecologische voetafdruk
 - Eigen indicatoren
 - Gebruik van duurzaamheidsindicatoren
 - Kritiek duurzaamheidsindicatoren
 - Motivering duurzaamheidsindicatoren
- Financiële middelen
- Kennis
 - Feitenkennis
 - Kennis als bezit
 - Kennis creëren
 - Kennis delen
 - Kennis doorgeven
 - Kennis is complex
 - Kennis is gecontesteerd
 - Kennis is onzeker
 - Kennis is plaatsgebonden
 - Kennis is zeker
 - Kennis opzoeken
 - Methodologische kennis
 - Onvolledige of foute kennis
 - Wetenschappelijke kennis
- Label
 - Administratief werk

- Bekroning
 - Criteria schrikken af
 - Motivatie
- Leermiddelen
 - Criteria voor beslissing over leermiddelen
 - Gebruikte leermiddelen
 - Motivering leermiddelen
 - Ontwikkeling leermiddelen
 - Wie beslist over leermiddelen
- Leeromgeving
 - Aandacht voor leeromgeving
 - Geen aandacht voor leeromgeving
- Methodieken
 - Methodiek aanpassen aan de doelgroep
- Symbolen, rituelen
- Talenten
- Invloed structurele ontwikkelingen
 - DO als leerprobleem
 - Bevestigen DO als leerprobleem
 - Ingaan tegen DO als leerprobleem
 - Ecologische modernisering
 - Bevestigen ecologische modernisering
 - Ingaan tegen ecologische modernisering
 - EDO-beleid
 - Politieke modernisering
- Spelregels
 - Afwijkende meningen komen niet voor
 - Afwijkende meningen komen voor
 - Compromis
 - Conflictbenadering
 - Morele conflictbenadering
 - Politieke conflictbenadering
 - Rationele conflictbenadering
 - Diversiteit
 - Geen spelregels
 - Geen vijanden

- Gelijkgestemden
- Harmonie en consensus
- Houding tegenover afwijkende meningen
 - Afwijkende meningen zijn belemmerend
 - Afwijkende meningen zijn immoreel
 - Afwijkende meningen zijn irrationeel
 - Afwijkende meningen zijn legitiem
 - Afwijkende meningen zijn nodig
 - Omgaan met dissensus is moeilijk
- Openheid voor het nieuwe, andere
 - Openheid voor het nieuwe bij de leraar
 - Openheid voor het nieuwe bij de lerende
- Pluralisme
- Regulering leerproces
 - Flexibel leerproces
 - Gestandaardiseerd leerproces
- Relatie leraar – lerende
 - Egalitaire verhouding
 - Hiërarchische verhouding
- Sociale cohesie
- Sociale integratie
- Soorten interactie
 - (Ongevraagd) eigen mening geven
 - Leerling geeft eigen mening
 - Leraar geeft eigen mening
 - Afspraken maken
 - Belonen
 - Beschuldigen
 - Compliment geven
 - Controleren
 - Discussie over kwesties
 - Doceren, uitleg geven
 - Doorvragen
 - Emoties uiten
 - Feedback geven
 - Helpen

- Inbreng vragen
- Informatieve vraag
- Informeel gesprek
 - Gesprek naast de kwestie
 - Gesprek over de kwestie
- Inspelen op onverwachte gebeurtenis
- Instructies geven
 - Leerling geeft instructies
- Instructies vragen
- Interviewen
- Kennis inbrengen
 - Leraar brengt kennis in
 - Leerling brengt kennis in
- Naast de vraag antwoorden
- Niet willen praten
- Opdracht uitleggen
- Open vragen
- Problemen signaleren
- Procedures in vraag stellen
- Reflectie over ervaring
- Spelregels in vraag stellen
- Straffen
- Suggestie doen
- Tegenspraak geven
- Tegenspraak vragen
- Verhalen
 - Verhalen van de leraar
 - Verhalen van de lerende
- Verwijzen naar ethische aspecten
- Verwijzen naar procedures
- Vragen naar eigen mening
 - Vragen naar mening van de leraar
 - Vragen naar mening van de lerende
- Vragen naar emoties
- Vragen naar gewenst antwoord
- Spelregels van toepassing

- Afspraken
- Dwingende spelregels
- Evolutie van regels doorheen de tijd
- Formele spelregels
- Informele spelregels
- Niet-dwingende spelregels
- Niet-strikte spelregels
- Regels over betrokken actoren
- Regels over conflict
- Regels over dissensus
- Regels over rolverdeling
- Regels over subsidiëring
- Spelregels overtreden
- Spelregels zijn hinderlijk
- Strikte spelregels

Free nodes

- (Geen) tijd
- Aanspreken op competentie
- Angst
- Bedreiging private sfeer
- Capaciteiten
- Concern
- Deficiëntiebenadering
- Emotionele betrokkenheid
- Engagement
- Erkennen van competentie
- Geen engagement
- Geen kerntaak
- Geen keuze
- Geen volgehouden aandacht
- Het goede leven
- Iets op tafel leggen
- Ik kan dat
- Individuele keuze
- Innerlijke

- Inspelen op actualiteit
- Is dit voldoende
- Kracht, energie
- Kritische bedenkingen negeren
- Lage drempel
- Leerkrachten stellen vragen
- Leerlingen negeren
- Link met maatschappelijke context
- Logical truth
- Macht als consument
- Meesurfen op hype
- Niet beschuldigen
- Niet vrijblijvend
- Niet wereld veranderen
- Objectief – subjectief
- Onderbreking
- Op hun gemak voelen
- Overtuiging
- Passie
- Projectlogica volgen
- Quote
- Topical truth
- Verbondenheid, samenwerking
- Vraag, opmerking over mijn onderzoek
- Vrijblijvend
- Waarden zijn moeilijk
- Wie ben jij