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### **Lock-ins and Opportunities. A Multi-Level Analysis of the Transition towards Sustainable Higher Education in Flanders**

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We live in an age of great socio-ecological challenges: climate change, loss of biodiversity, soil pollution, water pollution, deforestation etc. (e.g. Rockström et al., 2009; Jones & Jacobs, 2006). As the drastic impact of these challenges can hardly be ignored, also higher education (HE) institutions are to a growing extent called upon to contribute to tackling them. The Copernicus University Charter for Sustainable Development, UNESCO's Global Action Programme, the UN Decade of ESD and more recently the Sustainable Development Goals are some examples showing that HE institutions are increasingly expected to 'become more sustainable'.

This 'becoming more sustainable', however, is not a linear process: The directions this process can take are debatable and it can entail many different aspects of HE. It can for example merely involve practical programmes and initiatives to 'green the campus' (Berlinger & Adomßent, 2008), it may be focused on employing education as an instrument to make the students 'act green' or become more ecologically aware (Ideland & Malmberg, 2014), or on the further implementation of research for sustainability (Hugé et al., 2016), or on any combination of these elements. Adding to this complexity is the fact that HE institutions and systems are in themselves very complex: they have a multitude of functions, many stakeholders, and often a very complex structure. This implies that this transition towards sustainable HE is both a difficult thing to accomplish in practice and a difficult topic to study.

This study aims to shed a new light on these intricate transition processes by drawing on an analytical framework developed in the academic field of transition studies: The 'multi-level perspective' (MLP) on transitions (Geels, 2005; Geels & Schot, 2007). This middle-range theory has widely been used in social-historical studies of transitions of complex socio-technical systems such as the transport, energy and agro-food systems (Geels, 2011). This framework is designed to take into account the complexities of such systems and of change processes. It views transitions as non-linear processes which are the result of an interplay between three analytical levels: the landscape (macro level), the regime (meso level) and the niches (micro level) (Geels, 2011). A transition is hence to be seen as a shift from one regime configuration to another, profoundly different one. This paper reports on a system analysis of the current HE system in Flanders which to some extent already has incorporated some sustainability concerns. However, attention to sustainability at the regime level consists of incremental changes which remains 'faithful' to the currently dominant structures, cultures and practices. At the niche level, we investigate small-scale radical novelties carried by dedicated actors and driven by experimentation in the margins of the dominant HE regime. Both niches and the regime are affected by the socio-technical landscape: A series of large overarching societal trends and developments such as globalisation, the ecological crisis and growing inequality.

The main objective of this exploratory study is to get a better view on the complexities of the HE system in Flanders (Belgium), on the way sustainability is already integrated in Flemish HE and on which possibilities open up for a further integration in the (near) future. By applying the MLP to the HE system, which – in our knowledge – has never been done before, we also wish to test if this analytical framework is applicable in this field and if it offers an added value for future (theoretical and empirical) research on sustainability in higher education.

#### *Methodology, Methods, Research Instruments or Sources Used*

The methodology of this study is based on the above described multi-level perspective which has been characterised as a transdisciplinary middle-range theory for understanding profound socio-technical change (Geels, 2007; Paredis, 2013). Defining and connecting a limited set of concepts and propositions, it is constructed with the potential to function as a communication tool or boundary object between different disciplines.

MLP research has shown that transitions more often take place when the stability of the dominant regime is called into question by landscape pressures, by the emergence of mature niches and by internal contradictions of the regime itself. It is thus the multilevel dynamic that takes central stage in MLP inspired transition studies. Hence, our study consists of 4 subsequent phases:

- (1) The analysis of the landscape based on an explorative literature study on sustainability, HE, research in HE institutions, and sustainable HE; and on content analysis of relevant policy documents at the European and transnational level (EU, UNESCO, UN etc.).
- (2) The analysis of the regime consists of a literature study on HE, sustainable HE, research in HE and HE policy; content analysis of policy documents on higher education at the Flemish level; content analysis of the websites of the HE institutions in our sample; two surveys for educators, researchers and university staff with a general view on the integration of sustainability in their institution; and 9 in-depth interviews with a selection of respondents from the surveys.
- (3) The analysis of niches is based on 12 in-depth interviews with researchers, educators, general staff, management and students who are strongly employed with sustainability in small-scale, experimental settings.
- (4) The analysis of the multi-level dynamics, finally, entails both a meta-analysis of the results of our analysis of landscape, regime and niches, and a focus group with regime and niche actors.

#### *Conclusions, Expected Outcomes or Findings*

We identified and described nine landscape trends which have an important influence on Flemish higher education and its attention for sustainability. This helps us to situate higher education in the bigger scheme of things and to understand how bigger societal trends have a concrete impact on higher education institutions.

The analysis of the regime allowed us to identify and describe 20 regime characteristics which provide a comprehensive overview of important aspects of higher education (institutions) that affect, enable or constrain the incorporation of sustainability. Some characteristics open up possibilities for sustainability to find a way in and to become more important (e.g. the growing attention to societally relevant research and education), while others function as a lock-in that preserves the status quo (e.g. the dominance of a market logic).

The analysis of niches resulted in defining five broad areas or themes in which the studied niche activities differ from the studied regime. These areas entail both new topics which have to compete with the existing regime and extreme interpretations of some of identified regime characteristics.

Our analysis of the multi-level dynamics revealed important lock-ins of the regime which impede the upscaling of sustainable

niches. Furthermore, we identified a series of internal problems and contradictions within the regime which might open-up opportunities for niche practices to become mature and viable alternatives. The analysis also showed where to situate the most influential and effective instigators for sustainability in higher education in Flanders.

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#### *Intent of Publication*

We aim to publish this paper in the *International Journal of Sustainability in Higher Education* or in *Environmental Education Research*.