Chapter 24

Working institutions from the inside out: action research for transformations towards sustainability

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Abstract

Considering the recent resurgence of debate surrounding the role of the university in the 21st century, and the complexity of interconnected sustainability challenges we face as a species, more reflexive and embedded research methods are required. In the context of analysing transformations towards sustainability at universities, I discuss the example of action research at Maastricht University to exemplify the utility of participation and the social impact of organisational research. There is a systemic relationship and interconnectedness that exists within the university and its surroundings. Appropriate research methods must follow suit by disentangling these associations in insider-academic research of the system in question, clarifying the dynamic role science must now play in society towards greater socio-ecological wellbeing. Challenges present in this kind of embedded research range from being privy to information (whether tacit or explicit), pre-understanding, role duality, and managing organisational politics associated with perceived implications of one's research to its stakeholders.

24.1 Why universities need to become more sustainable

A sustainable university is "A higher educational institution, as a whole or as a part, that addresses, involves, and promotes, on a regional or global level, the minimisation of negative environmental, economic, societal, and health effects generated in the use of their resources in order to fulfil its functions of teaching, research, outreach and partnership, and stewardship in ways to help society make the transition to sustainable life-styles" Velazquez et al. (2006)

Universities have been lagging behind other sectors in terms of embedding sustainability into their organisational structures (Lozano, 2011). Much research has been undertaken into the "what" of organisational transformation, corporate responsibility, sustainability reporting and accounting, (Aras and Crowther, 2008, Aras and Crowther, 2009, Clark and Master, 2012, Eccles et al., 2012, Lozano, 2006, Zadek, 2006), yet relatively little has been performed on the "how" (Shelley, 2013), and less still for a specific integration of sustainability into the core business of higher education institutions (HEIs). Progress towards embedding sustainability across departments, faculties, facilities, and operations at HEIs has been slower than expected and there is a definite lack or "clear orientation on exactly what a sustainable university should be" (Velazquez et al., 2005).

Considering their unique position and legacy in society, as well as their significant capacity for innovation and the honest brokerage of knowledge at the boundaries of science, policy, and politics (Pielke Jr., 2007), it is notable that their potential has remained largely untapped. It is still nonetheless encouraging to see headway being made post Rio+20, especially with the Higher Education Sustainability Initiative (HESI) commitments playing an enabling role in mobilising HEIs to ensure a sustainable future (Simon and Haertle, 2014). Another positive trend is the rate of uptake of sustainability standards, social impact measures, and corporate social responsibility (CSR) communications strategies by businesses and universities, as well as partnerships and collaborations with NGOs and civil society over the last decade. This has done much to change the landscape of superficial and reactionary policy for sustainable development towards a deeper recognition to make it part of organisational DNA (KPMG, 2013, Hespenheide and Koehler, 2012, Gray and Stites, 2013).

This plays against the backdrop of a series of charters and declarations signed by global networks of HEIs to cement their commitment to the global transition towards a more sustainable society, such as the Talloires Declaration (1990), the Copernicus Charter (1994), the Handvest Duurzaamheid HBO1 (1999), Agenda 21 (1992), and the most recent UN Decade for Education for Sustainable Development (2005–2014) (Boer, 2013). If there was no problem of sustainability at universities then why would a whole decade have been dedicated explicitly to achieving it? HEIs need to become more sustainable yet they claim to find it difficult to meet their social and environmental

responsibilities. Many institutional barriers exist, such as decentralisation, a lack of environmental literacy, and lack of democratic principles. The boundaries between public and private have become increasingly blurred; managerialism logics have predominated over bureaucratic ones leading to a "marketisation" of HE (Howells et al., 2014, Natale and Doran, 2012). This shift in ideology experienced in the last couple of decades is unprecedented in the history of universities, and certain managerial standards have swiftly become the norm, further complicating matters. Universities must nevertheless justify how they contribute to solve ecological, social, and economic challenges of unsustainability with the knowledge that they produce and implement in research and education. Such challenges and external drivers are represented in the conceptual map of institutional governance for sustainability shown in Figure 24.1.
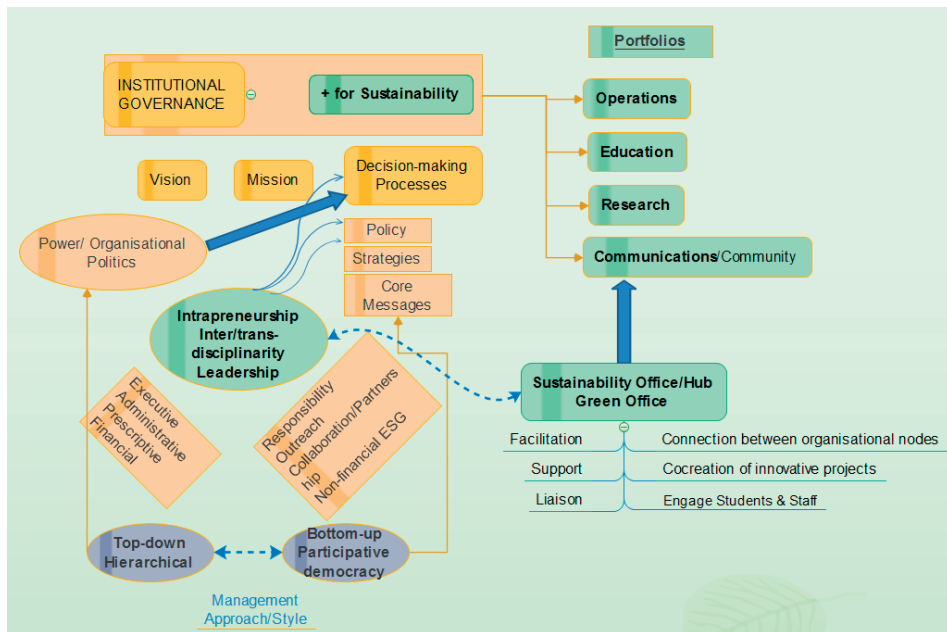

Figure 24.1 A concept map of internal institutional governance for sustainability

However, the dynamics of how this process of transformation takes place are not yet well understood (Hoover and Harder, 2014), which calls for greater focus on such processes that embed sustainability at HEIs (Stephens and Graham, 2010) and recommendations that they must be promoted in policy that targets a shift in the behaviour of the citizens of the institution (Velazquez et al., 2006). According to Yarime et al (2012), this means taking into account the deep structure and inter-personality of a university, all its sub-systems, facilities, and departments, including their interdependencies, in a systemic and dynamic understanding.

This represents an emerging paradigm in institutional governance that goes beyond the traditional "third mission" (Trencher et al., 2013) of an entrepreneurial, knowledge-

producing, and technology-innovating institution; however it is unclear exactly what form this will take since "the wheel is still in spin" and paradigmatic changes in and of science change as a result of external perturbation and crisis (Kuhn, 1996). Accordingly, co-production and design of solutions and societal transformations will grow as global trends, complemented by the launch of the Future Earth initiative, the expected renewal of the UNDP's Millennium Development Goals after 2015 into Sustainable Development Goals at upcoming international conferences in Paris, and the growth of sustainability science as a discipline and profession in its own right (Trencher et al., 2014).

24.2 Sustainability transformation of HEIs

Taking the background of macro-societal drivers that the University of the 21st century is tasked with in Figure 24.2, I argue that a sustainability transformation of the HEI is needed towards a more desirable and resilient end state. This systemic transformation required of and by universities is here conceptualised as a change in the very nature of a system (the university) from one state to another; a shift in the equilibrium of the means, methods, and processes by which the subject, whether individual, faculty, organisation, institution, or region, functions. This adds components of societal wellbeing, effective management of socio-ecological systems and resilience to such a system – or as some have proposed "a public university aimed at the common good" (Halffman and Radder, 2015) – and gives it equifinality: a choice in the manner of arriving at a destined state of higher sustainability that is not absolute but guiding; in other words there are multiple paths but no absolute sustainability. The end state of a "sustainable university" should be context-based and developed according to the organisational culture, values, strategy, and structure. This holds true if the system is open in that it has an inextricable environmental relationship with its surroundings, in addition to it having a developmental growth pattern.
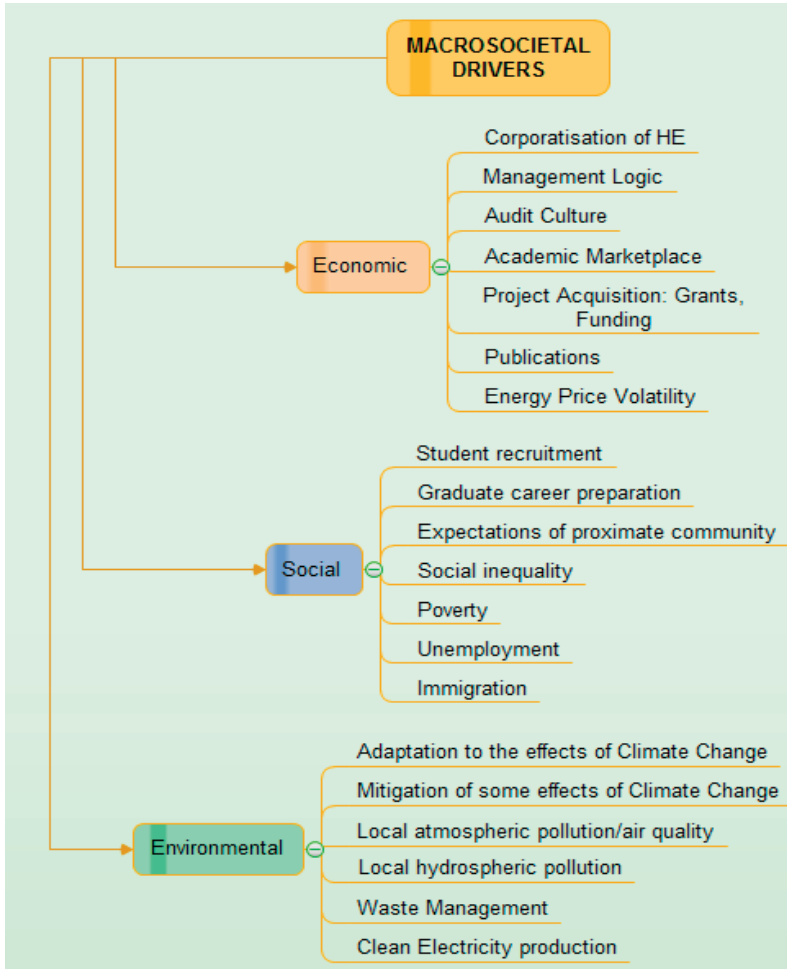
Figure 24.2 Macro-societal drivers of change at HEIs

24.3 Nitty-gritty: why this organisational research demands social impact

Considering the systemic relationship and interconnectedness that exists within the university and its surroundings, appropriate research methods must follow suit. Sarewitz and Pielke (2007) argue that it is rarely considered in science-policy discourse or decision processes that "alternative research portfolios might better achieve stipulated societal outcomes". The supply and demand of science clarifies the dynamic role of science in society by ideally matching the needs of end-users of scientific knowledge produced (Sarewitz and Pielke, 2007). My research project is geared towards

having a positive societal outcome in the form of policy recommendations for Maastricht University (UM) on its management of sustainability, based on a four-year scientific investigation. Advice will be based on the results of case studies of pioneering institutions as to how to transform UM structurally into a sustainable institution.

This research can essentially be boiled down to providing and brokering scientific knowledge so that university management and 'Green Offices' (student-driven, staff-supported sustainability departments: http://greenofficemaastricht.nl/) have a balanced account of how to gear up their institutes as trans-sectoral actors and facilitators of transformational change in the 21st century. This bolsters the usual indicators of successful performance of HEIs (student numbers, research project acquisitions, rankings etc.) as well as emphasising governance for sustainable development and corporate responsibility. It operates at the science–policy interface, defined by van den Hove (2007) as a social process that encompasses "relations between scientists [students, practitioners and decision makers] in the policy process.." allowing "for exchanges, co-evolution, and the joint construction of knowledge", enhancing social impact.

The ideal goal of all this is social and organisational learning: a change in understanding occurring in the individuals populating and influencing the university's transformation – stakeholders, co-researchers, policy makers and management – at the surface and at a deeper level "demonstrated by a change in attitudes, world-views or epistemological beliefs" (Reed et al., 2010) towards a sustainable development of and by their institute in its urban, regional, and international settings. Central to this aim at UM are just such a group of individuals, the Green Office, whose mandate is to manage the sustainability portfolio of UM in the areas of research, education, operations, and community engagement. This project also looks at how it is fulfilling its role towards the overall sustainability transformation of this university. This fundamentally requires a level of embeddedness by the researcher as an "insider" that goes beyond conventional case-study research.

24.4 'Insider' action research

> "Action research is a period of inquiry, which describes, interprets and explains social situations while executing a change intervention aimed at improvement and involvement. It is problem-focused, context-specific and future-oriented." (Waterman et al., 2001)

In order to understand the nature of complex systems, we must dismantle them into units to examine the underlying complex relationships and mechanisms internal to the case under study (Wallerstein (1974) in Moses and Knutsen (2012)). We have to

untangle the complex knot of interactions, with the focus on the internal causal mechanisms from which an organisational transformation takes hold and propagates.

To understand the hermeneutic tradition of organisational research is to see the researcher going in, or entering the site with a clean slate; that is, few or no theoretical preconceptions. This is a target which, although it can never be attained, allows the subject's (a university sustainability department for example) empirical evidence to guide the emergence of key themes and concepts (Brannick and Coghlan, 2007). Taking the decision to actively involve stakeholders in research is a necessity given the action research approach (see Figure 24.3), which builds on the philosophical tradition of Pragmatism; the notion that knowledge (whether obtaining it or sharing it) is based on observing the consequences of intentional action. It is inherently participatory, following a democratic approach to knowledge production, with the researcher being actively involved in intentional change to increase the chances of social and organisational learning taking place at UM.
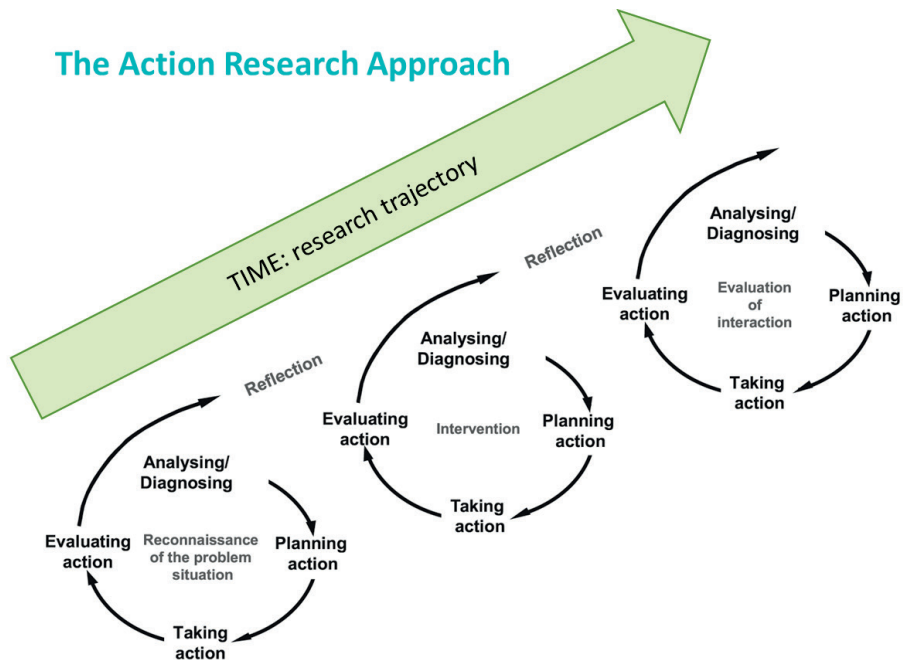

Figure 24.3 The action research process, adapted from Coghlan and Brannick (2014)

It aims to facilitate social learning and the development of novel, scientifically sound yet practicable knowledge by involving relevant stakeholders, including the researcher, in multiple cycles of planning, action, observation, and reflection (see Waterman et al. (2001)). The objective is to be aware of where the researcher places him/herself on the spectrum between the "objective" observer and the active team member; balancing the

role between acting as a "critical insider or friendly outsider" or vice-versa. Or more technically, as Brannick and Coghlan (2007) put it, action research is one of three major research paradigms where one can do "insider research", defined as "research by members of organisational systems in and on their own organizations". Progress is made after several cycles in terms of awareness and implementation of sustainability strategies and responsible internal leadership.

It is ultimately both an essential opportunity and a risk in any research that requires an inside-out perspective, where you as the researcher are deeply embedded in the organisation that is both paying you and that you are required to investigate. Challenges inevitably arise from access, pre-understanding, role duality, and managing organisational politics (Brannick and Coghlan, 2007). The last aspect is considered of particular relevance for any study approaching the often thorny issue of integrating sustainability into an organisation. It does not therefore take too much of a leap to imagine that there is a political context in which projects such as this operate (Brannick and Coghlan, 2007, Hoover and Harder, 2014). It is also thus logical to assume that the institutional context becomes an essential part of the appraisal process and can significantly affect the success of the organisational-level shift that aims to better contribute to sustainable development at multiple levels of society and the ecosystems it depends on.

In essence, universities educate and prepare future leaders, whether politicians, NGO leaders, social entrepreneurs, or those who will be concerned with regulating and monitoring the international business community, with respect to the complex challenges of the 21st century. In response to worsening crises of climate and capitalism alike, they also have a moral obligation to provide, through education and research, the societal transformation required of current modes of production and consumption based on economies that do not currently respect ecological limits. The way public institutions are managed has been changing at an unprecedented rate. Accordingly, researchers ought to adapt their methods to go above and beyond the convention in order to meet increasing societal demands to breach the walls of the ivory tower, enhancing the role of the university in cross-sectoral governance for sustainable development. This article has aimed to explain one way of doing this in the context of UM's sustainability portfolio.

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