

Introduction: the pivotal role of culture in the drive for sustainability

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Abstract

In this Introduction to Exchanges' special issue on Sustainability Culture, I argue that the concept of culture plays a crucial role in understanding the sustainability crisis. I propose that the concept of Sustainability Culture that originally developed in organisational studies may be expanded to a more generally applicable concept, which may serve the purpose of understanding our experienced anthropocenic life situation more deeply. After discussing the organisational concept, I examine the ideas of cultural dynamics that can clarify how people form their cultural awareness. I argue that even though people may have the wish to be more sustainable, they may not act upon this wish, to the extent they have a belief system that makes them think the world does not allow them to live sustainably. And finally, I conclude that the concept of sustainability culture could provide answers to questions surrounding how people could want to live more sustainably.

Keywords: sustainability, Anthropocene, sustainability culture, cultural dynamics

Introduction

It is with great pleasure that I write this Introduction to *Exchanges'* special issue on Sustainability Culture. I was doing a small research project for my university on the interdisciplinary issue of culture in the field of agriculture—a pilot online study of youths in Italy, Taiwan and the United States—when I first came upon the concept of Sustainability Culture. The research focused on the re-migration of young people from the cities to the countryside out of a desire to leave behind the stressful lives of techno-economic bureaucracy and start new ones as farmers, especially organic farmers. These young people were motivated by the belief that it was important for them to 'go back to the land' and contribute to healthy food security by changing their lives in this way. They made the explicit choice to become more sustainable in their ways of living and working as an essential part of their (new) value system.

This Introduction, and the special issue itself, position themselves exactly in this culturally dynamic space where people decide to live and work (more) sustainably. In my research, I find that the same core question arises time and again: how is it possible that even though we already have all the knowledge and technology required to live and work sustainably, we do not seem to be able to fully achieve sustainability? I postulate that the answers are found in how we form our culture and how we relate to the technology that gives us our comforts. Which values do we have, how do we think the world works, and do we really want to be sustainable in our daily lives no matter what? I propose that this is, at the same time, the basis for the definition of the concept of Sustainability Culture. I examine the role and importance of culture in the drive for sustainability and, more precisely, sustainable development as defined by the United Nations' 17 Sustainable Development Goals (SDGs). The extent of this drive, I argue, will be decided by whether people believe that sustainability is important and *also* wish to behave in ways that support Sustainability Culture.

In order to reach this point, it is important to become aware of how culture—the general customs, norms and beliefs of people—influences the attainability of sustainability goals. A successful transition to sustainable development in any aspect of life and society will not only depend on technological developments but also on the generation of systems of meaning that are conducive to this transformation. Such systems are to a large degree structured by narratives (Bruner, 1990; Ghosh, 2016). Accepting sustainability as a core value through which to enact our daily lives depends on which narrative we tell ourselves about the Anthropocene and how we shape the cultural dynamics that decide on how that narrativisation will play out.

My introduction therefore seeks to further the debate on how ‘glocal’ culture—culture that reflects both local and global considerations—defines our drive toward sustainability through an interdisciplinary approach. It seeks to further the dialogue on what exactly Sustainability Culture means in the twenty-first century and seeks to explore the issues that hinder or promote the drive for sustainable development. It explores how to develop the cultural awareness needed for adapting to, or fighting, climate change, and what cultural change is needed to advance this.

Sustainability Culture and Organisational Studies

Nowadays, sustainability is literally a ‘hot’ topic. Generally, sustainability means ‘the ability to maintain at a certain level’, with the common varieties being ‘sustainable living’ and ‘sustainable development’. This last term is used by the United Nations to frame discussions of how to sustain life in a way where present needs are met without compromising the ability of future generations to meet their own needs. The UN has formulated its famous 17 Sustainable Development Goals (SDGs) on this principle. This elaborate framework was introduced more than ten years ago, but so far it has failed to achieve its ultimate goal of curbing climate change. We are still releasing more (and not less!) climate change-driving greenhouse gases into our atmosphere every year, with record-high emissions in 2024 (**World Meteorological Organization, 2024**).

By 1964, Kenneth Boulding had already coined the term the ‘Great Transition’, what he called the process of change that humanity needs to go through to transition from modernity into a postmodern civilisation in a sustainable manner (**Boulding, 1964**). For this transition to succeed, there is a general need to adopt and prepare for the entering of the Great Transition. While many governments have underwritten SDGs and have been working towards ‘greening’ their policies, many of their attempts relate to technological and operational activities only, executed from the top down through policies and changes in laws and regulations and an overall focus on technological solutions like carbon capture, renewable energies, smart buildings, and recycling programs. But the literature shows that technological solutions are not enough and do not deliver durable effects (**Adams et al., 2018: 435**).

Sustainability Culture attempts to address this shortcoming. The idea of Sustainability Culture is drawn from the Sustainable Management Studies concept of ‘organisational culture’. Based on the work of renowned MIT management professor Edgar Schein (**Schein, 1985: 1997**), organisational culture is ‘a collection of values and norms that are shared by people in an organisation which governs members’ behaviours and actions in pursuit of organisational goals’ (**Adams et al., 2018**). For Jacobs et al., (**2013**), ‘the culture of an organization provides a sense of identity, it is central to the

sense of “who we are as an organization” and makes consistent and coherent organizational action possible’. In Sustainability Culture, this focus on shared values and norms is applied to the question of how to cultivate a culture of sustainability within organisations such as corporations and higher education institutions (HEIs).

There is some literature on how to achieve this cultural change in HEIs through application of management principles on changing corporate/business culture. I propose to look at these ideas and concepts to learn how to achieve the cultural shift to sustainability. In the field of organisational studies, it is commonly argued that groups of people bound within individual organisations like universities have their own culture in the form of shared values, belief systems, and understandings that are expressed in the routines, practices, symbols, and narratives of their community (**Adams et al., 2018**). These understandings become visible in how people work in their community and are reflected in a shared identity about 'who we are' and 'how things are done here', while behaviour and culture show patterns of reciprocal interaction (**Schneider & Barbera, 2014**). According to Adams et al.:

*[S]ustainability is conceived as a journey recognisable as a set of transformatory stages in which the behaviour and attitudes of groups of people within an organization become increasingly aligned around and consistent with the principles embodied in and implied by sustainable development (**Adams et al., 2013**).*

An important insight from Sustainability Culture, as seen through the lens of organisational studies, is that a community culture is generally made up of two layers, a visible cultural layer and an invisible one (**Adams et al., 2018, 437**). Visible culture is formed by outwardly visible factors, including ‘group behaviours and actions, which are more observable and easier to measure and change’ (**Adams et al., 2018: 437; Kotter & Heskett, 2011**). Invisible culture is formed by the deep-seated, implicit beliefs of people regarding how the world works, ‘shared values that tend to persist over time and are self-evidently less visible and so less amenable to change’ (**Adams et al., 2018: 437**). To make a structural cultural shift, both these levels of culture need to change. Generally, invisible culture is formed by the structural enactment of visible cultural elements, meaning change must be driven by these visible factors, which over time will transform into ‘invisible’ beliefs. Change must be made on the level of these implicit beliefs, or it will not be embedded properly or deeply. But it also must be made gradually: ‘The process of changing deep-seated, implicit beliefs and assumptions that govern action takes place slowly and through the manipulation of visible factors: for example, changing a mission statement or reward structures’ (**Adams et al., 2018: 438**).

Any proposed cultural changes in aid of transforming attitudes toward sustainability and achieving sustainability goals need to follow these same principles, from local communities all the way up to humanity as a whole. As Adams et al. say, organisational Sustainability Culture can be seen as the 'aggregate of people's beliefs, values, customs and norms to the extent that it regulates their [sustainability] behaviour in an organization' (**Adams et al., 2018**); or, as the former chief executive of Barclays Bank, Bob Diamond, expressed it, what matters is 'how you behave when nobody is looking' (quoted in **Adams et al., 2018: 438**). On the basis of their analysis, Adams et al. conclude that the development of sustainability culture is:

a process of organizational change, that (i) requires change across diverse groups, (ii) is composed of visible and invisible elements, (iii) in which the visible elements are manageable and accessible via quantitative research methods, and (iv) in which invisible elements less amenable to management, change slowly over time in response to changes at the visible level and observable only through rich insights derived from a qualitative approach (Adams et al., 2018: 439).

Naturally, this time-consuming process requires a long-term commitment by universities to constantly evaluate and renew their policies and practices throughout the whole of their organisation and in co-operation with all stakeholders involved, including staff and students.

The Difficulty of Embedding Sustainability Culture

Unfortunately, to my knowledge no research has been done on Sustainability Culture with any international or even national scope. At present, only organisations such as universities and corporations have done Sustainability Culture surveys, for example. Such surveys have proven to be an important tool for universities because they allow them to not only take inventory of current attitudes and beliefs among their various stakeholders, but also to explore what needs improvement and what can further be done. The study done by Adams et al., focusing on the University of Worcester in the United Kingdom, shows that the university's new 'green' programmes raised awareness about campus sustainability to levels of 25 percent for students and 53 percent for staff, but that they then became static around those levels (**Adams et al., 2018: 439**). The University of Michigan in the United States, which also monitored the student and staff awareness levels on its key sustainability initiatives, found similar levels of awareness, which remained stable despite all the activities done (**Maranz et al., 2017, 2018**). These surveys generally show that there seems to be a gap between peoples' proclaimed attitudes and their subsequent behaviours: they may say they support sustainable action, but they struggle to incorporate it into their everyday lives.

Lasting results of initiatives taken by universities in the context of greening campuses or to rise up the various green sustainability rankings, such as UI GreenMetrics and the Sustainability Tracking, Assessment & Ratings System (STARS), are lacking. This is likely because of the unwavering beliefs and behavioural systems of the people within the organisational structure of the universities. Changes on the levels of behaviour and systems are needed, changes that move beyond the technological. As Adams et al. write, 'The sustainable organization will remain elusive until, at least, sustainability becomes embedded within the culture of the organization' (Adams et al., 2018). The university should be viewed as a holistic organisation where structural changes can only be made from the bottom up through cultivation of awareness and the heartfelt engagement of staff, teachers, students, and outside stakeholders. In this way, their value and behavioural systems need to be redirected away from 'Business as Usual' (BAU) toward wanting to live sustainably, for themselves and others. For universities to achieve an integrated and holistic sustainable organisation, they need to transform their structures, processes, practices and culture. This requires a strong cultural shift. Attempts at introducing Sustainability Culture have been criticised for being technologically opportunistic (Cotton & Alcock, 2013) and for an overall lack of coordination, leadership and coherence (Ramos et al., 2015; ISCN Secretariat, 2014; Butt et al., 2014; Martin et al., 2013), while leaving major components undealt with, such as the social dimension of sustainability (Bone & Agombar, 2011). For Cotton & Alcock, 'embedding of sustainability in higher education has been far from straightforward [...] implementation has been patchy both in terms of disciplinary spread and in terms of the understandings of sustainability' (2013: 1458).

The obvious gap between people's proclaimed attitudes and their actual behaviour is not new (Argyris & Schoen, 1978). This gap has also been observed in organisational culture studies, where it is argued that change fails to occur because the target is in 'conflict with deeply held internal images of how the world works' (Senge, 1982: 5, quoted by Adams et al.: 441). There is an obvious irony here: community members express their support for sustainability practices, but they do not act upon them. This is a situation where there are two levels of reality people are grappling with: the ideal situation and the practical one (See 'Reimagining the Anthropocene by Examining Sustainability Culture Through the Lens of Paradox' in this issue). There may be other complicating factors: the desired action may be too difficult or costly in a world that supremely values time-based productivity and low-cost efficiency. The case study of the University of Worcester mentioned earlier found that students had difficulty with the uptake of smart heating controls despite their general expressed support of them due to three potentially factors: insufficient

motivation levels, apparent absence of fuel poverty, and privacy concerns (Adams et al., 2018: 441).

The comprehensive field sweep done by Adams et al. shows that a crucial element in whether people act sustainably and how they behave 'when nobody is looking', is in fact their belief in how the world works. This is confirmed by a study done by Nuttasorn Ketprapakorn and Sooksan Kantabutra in 2022, which resulted in their proposed model and theory of Sustainability Organisational Culture, where the first basic theoretical proposition is founded on the 'sustainability assumptions' of people. For Ketprapakorn and Kantabutra, 'sustainability assumptions lead to a sustainability vision' (their 'theoretical proposition #1'), which then leads to 'aspiring sustainability values', or 'theoretical proposition #2' (Ketprapakorn & Kantabutra, 2022). Their theory includes ten more propositions, but the main takeaway for my purposes is its starting point about sustainability assumptions and belief systems about how the world works. In the end, the core question seems to be: Do people (really) believe that acting sustainably will reward them on a scale large enough to be important to them?

The Findings of Cultural Dynamics

To get closer to the heart of this matter we need to turn to the psychology of culture and the study of cultural dynamics, to how culture is formed. I will be leaning here on the work of one of the main experts in the field, Professor Yoshihisa Kashima (2019), who offers a valuable perspective on sustainability and climate change and discusses culture as a method of adaptation. To better understand how culture forms, it is important to be aware of the dynamics of it. For example, when we talk about networking and hybridisation in the context of inter- or transcultural studies, we in fact refer to the ways people acquire cultural information. According to cultural dynamics, knowledge accrues through genetics, individual learning and social learning (Kashima, 2014). These three methods of information gathering play a major role in the three main processes of cultural dynamics, which, according to Kashima, are (1) generation of variation of information, (2) transmission of cultural information among individuals, and (3) retention of information, where some information is kept and some lost (Kashima, 2014). These processes of generation, transmission and retention shape the distribution of cultural information among a population in a community and therefore determine how a culture develops over time.

If we bring this framework of cultural dynamics into our discussion of the embedment of Sustainability Culture, it seems obvious that our biggest challenges are in the proper transmission of the relevant information, and maybe even more so, in the retention of the information by the people

who are receiving it. They need to then make this information part of their value system and act on it, or, as expressed above, they need to at least think the world will meaningfully reward them for it. According to Kashima, there is a major functionalist drive in this process of information retention. Often information that is functional, adaptive and useful for survival is likely to increase in frequency while the opposite information is likely to decrease. Yet it is not only through selection that retention takes place. Attraction also plays a part, meaning that cognitive or communicative biases can work to guide and/or maintain retention of information. A very important part of cultural dynamics addresses the issue of adaptation to threats to the intragroup environment. Social integration is not a given and requires cultural ideas and practices to maintain. Kashima says that the most fundamental problem here is the maintenance of social cooperation among large numbers of people who are genetically not related to each other. It is generally understood that humanity as a species can gain greater benefits when everyone cooperates and contributes to the greater good. However, individually, it is also true that a person may gain bigger benefits for themselves (saving costs or getting rewards) by not participating and not contributing to the greater good. So here we have a Great Dilemma: can a person be expected to contribute to the greater good—for example, fighting climate change—at their own expense? If it is easy and profitable to get a ‘free ride’, how can cooperation be achieved? Right now, for example, being in the oil and gas industry is simply too profitable to give up for many. Our cultural norms based on free-market principles are not directed to its phasing out. Crucially, economic rewards are determined by a neoliberal system that has become dominant in the Western world, one in which money ‘rules and efficiency and productivity set the standard for meaningful activity.

Research has provided some possible solutions to this dilemma, with the most important mechanism for sustained, large-scale cooperation among strangers being the formation and maintenance of a cooperative cultural norm where government plays a crucial role (**Chudek & Henrich, 2011**). Another mechanism that can enhance social integration is emotion sharing: ‘emotionality of cultural information tends to facilitate its diffusion because people tend to share emotional experiences’ (**Rimé, 2009, as quoted by Kashima, 2019**). Social sharing of emotional experiences facilitates social bonding between those who share information and has an important social solidarity function (**Peters & Kashima, 2007; Páez et al., 2015**). A third mechanism is the performance of ritual, which increases social solidarity. In particular, low-arousal and high-frequency rituals (like drills or morning classroom rituals) can increase participants’ identification with a large-scale social unit or purpose (**Atkinson & Whitehouse, 2011**).

Kashima offers a further theory on how humanity can develop a culture of sustainability which is based on the concept of human environment (or 'niche') construction and has four critical elements: human–nature connectedness, human–artifact relations, interpersonal conversations, and visions of an achievable utopia (**Kashima, 2020**). If we look at the foundational element in his theory, Kashima suggests that the development of Sustainability Culture starts with an improved sense of connectedness between human beings and nature. This model proposes the assumption should be that the world will reward people meaningfully if they feel more connected to nature. This is a reasonable assumption: the disconnect between people and their environment is a foundational problem in the Anthropocene and for sustainable development. But it is also clear that this disconnect is not going to be solved by drawing up a theoretical model. However much sense his theory makes, Kashima ends up in the same loop of logical paradox, concluding that a culture of sustainability is 'what makes such niche construction possible', while proposing that it is through the appropriate niche construction that sustainability culture can be developed (**Kashima, 2020**).

Conclusion

It is the purpose of this Introduction to show that culture plays a crucial role in the processes that could hopefully lead to a more sustainable development of our lifeworld. As the above examination has shown, even though people largely may wish to be more sustainable, they may not actually act upon it if they also feel they will not be rewarded for it because that's 'the way the world works'. It is clear that culture, in the sense of a shared value system, often decides whether we make individual sustainable life choices. A very important question is still left unanswered: how do people meaningfully connect with their environment if their overarching belief system equates environmental sustainability with personal reward?

As the proud lead editor of this special issue, I hope the articles gathered here contribute to the clarification not only of what Sustainability Culture is or entails, but also to the factors that may help solve the Great Dilemma surrounding its proliferation. Many of the papers assembled here arose from contributions made to the International Conference on Sustainability Culture (ICSC) editions one through three, held from 2022 through 2024 and hosted by National Chung Hsing University in Taichung, Taiwan. I founded and organised the ICSC exactly for the purposes of exploring the above issues, triggered by my curiosity regarding why young people would move from their prosperous, relatively easy city lives into the difficult life of organic farming in the countryside. Why would these people, or any people, want to live more sustainably? That is the question.

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