



Exploring the scientific discourse on cultural sustainability



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ABSTRACT

There has been growing interest in policy and among scholars to consider culture as an aspect of sustainable development and even as a fourth pillar. However, until recently, the understanding of culture within the framework of sustainable development has remained vague. In this study, we investigate the scientific discourse on cultural sustainability by analyzing the diverse meanings that are applied to the concept in scientific publications. The analysis shows that the scientific discourse on cultural sustainability is organized around seven storylines: heritage, vitality, economic viability, diversity, locality, eco-cultural resilience, and eco-cultural civilization. These storylines are partly interlinked and overlapping, but they differ in terms of some contextualized aspects. They are related to four political and ideological contexts, conservative, neoliberal, communitarian, and environmentalist, which provide interesting perspectives on the political ideologies and policy arenas to which cultural sustainability may refer. Some of the story lines establish the fourth pillar of sustainability, whereas others can be seen as instrumental, contributing to the achievement of social, economic, or ecological goals of sustainability. The eco-cultural civilization story line suggests culture as a necessary foundation for the transition to a truly sustainable society.

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1. Introduction

1.1. Background

The concept of sustainable development was introduced in 1987 by the Brundtland Commission, formally known as the World Commission on Environment and Development (WCED), as part of the report 'Our Common Future'. In the report, sustainable development was specified as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, 43). The definition broadly refers to global and intragenerational equity and fairness in the distribution of welfare, utilities, and resources between generations. Since this time, the concept has frequently been used in research and policy. The concept has become a part of educational programs and is well known among the general public. Although the concept has faced considerable criticism, its relevance has persisted and, with increasing environmental and social challenges, has attracted attention in science and policy. This popularity may be explained by the way the concept unites imaginative and reformist views of environmental policy (Dryzek, 2013) as well as by its elusiveness. Due to the multi-interpretability of the

concept, many stakeholders may connect with it (Buckingham and Turner, 2008).

Sustainable development is often considered to consist of ecological, economic, and social dimensions, or 'pillars' (Connelly, 2007; Black, 2007). These pillars were established in the Sustainable Development Congress in Johannesburg (2002) and have been developed further by scholars. The origins of sustainable development lie within ecological concerns, and the environmental dimension has consequently been the most frequently discussed dimension. Nevertheless, the social dimension and institutional aspects are increasingly seen as important in achieving environmental aims (see, e.g., Boström, 2012). Economic sustainability, as an aspect of its own, is relatively seldom discussed explicitly, but it is an essential part of discussions on ecological modernization, green economy, and bio-economy, which aim to combine ecological and social goals of sustainability through economic means.

In the policy field, culture has been mentioned as an aspect of social sustainability and occasionally even as an aspect or dimension of its own. In particular, during the UNESCO Decade of Culture and Development (1988–1997), the interrelationship between culture and development was discussed, resulting in the WCCD Report 'Our Creative Diversity' (WCCD, 1995). Since this time, the connection between sustainable development and culture has been discussed in other international policy documents and conventions, such as 'In From the Margins' (European Council, 1997),

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'Convention for the Safeguarding of the Intangible Heritage' (UNESCO, 2001), and 'Convention on the Protection and Promotion of Diversity of Cultural Expressions' (UNESCO, 2005). UNESCO is currently working to include culture in the UN Post-2015 Millennium Development Goals. However, the relationship between culture and sustainable development or culture and the environment has not been thoroughly explored in these documents.

There have been other policy initiatives to introduce culture as an aspect of sustainable development at the international, national, regional, and even local levels. Internationally, United Cities and Local Governments (UCLG) has actively worked to promote culture as an aspect of sustainable development. In 2009, UCLG adopted *Agenda 21 for Culture*, suggesting that culture needs to be taken into account in local policy processes. UCLG also imported culture into the Rio + 20 process (*Agenda 21 for Culture*, 2012). Although governmental policies and NGOs increasingly recognize the importance of culture as an aspect of sustainable development, it can be argued that culture is not yet institutionalized as an aspect of sustainability because it has not been systematically included in sustainable development policies, practices, or assessments compared to ecological, economic, and social sustainability. Consequently, international, national, regional, and local policy aimed at sustainable development often examines the cultural dimension as part of the social one or completely ignores it (Chiu, 2004; Throsby, 2008).

Among scholars, there has been growing interest in considering culture within sustainable development. Hawkes (2001) introduced cultural sustainability as a fourth pillar of sustainability, emphasizing the role of culture in local planning. Chiu (2004) discussed the social and cultural dimensions of sustainability within the area of housing. Nurse explored the culture of sustainable development (2006), whereas Birkeland studied the regeneration of post-industrial communities in terms of cultural sustainability (2008). Throsby (2001) treated the topic from a cultural economy point of view, assessing the cultural economy against the general principles of sustainability. He subsequently explored the linkages between ecological and cultural sustainability (2008). Duxbury and Gillette (2007) examined cultural sustainability from a community development perspective. However, until now, there have been no scientific studies systematically aimed at analyzing and elaborating the role and meanings of culture in sustainable development, and culture in the framework of sustainable development has remained under-emphasized and under-theorized (see also Throsby, 2008).

We suggest that one explanation of this new focus on culture is relatively recent acceptance of and openness to the geographical and cultural diversity of the world associated with globalization and localization. We also assume that this interest in culture in relation to sustainability and sustainable development reflects a recent interest in the new roles of culture in society (McGuigan, 2004) and the cultural turn in the sciences, which involves a new way of looking at causality (Ray and Sayer, 1999) and language (Alvesson and Skoldberg, 1994). The cultural turn is associated with the new role of language and discourse, which is seen as not only representing but also constructing realities. Therefore, the cultural turn is often called a linguistic turn, where language and representation as part of culture is questioned, particularly in poststructuralist thought. What do words do? Are our concepts able to represent reality? Or are they ways of seeing the world that reproduce existing power structures in society? Such ideas have influenced many environmental researchers, such as Hajer. These researchers have shown that concepts such as sustainable development are socially constructed and contested in a struggle about meaning, interpretation, and implementation (Hajer, 2005; Hajer and Versteeg, 2005). As meanings and concepts are contested, it becomes obvious that a diversity of meanings exist and that there is no one authoritative interpretation.

Given the political and academic interest in culture in sustainable development, we became interested in how the concept of cultural sustainability has been used by scholars. We conducted an analysis of peer-reviewed scientific articles that use the term "cultural sustainability". In this study, we discuss the results of this analysis by asking the following questions: what are the objects and representations of culture in the cultural sustainability discourse? To what is cultural sustainability constructed as a solution? To whose interests do these solutions speak? By examining the concept of cultural sustainability in scientific discourse, the overall aim of the paper is to increase the understanding of the role and meaning of culture in sustainable development.

We begin with a clarification of the theoretical background for the research to explain how we understand the concepts of culture and discourse in an attempt to distinguish the meaning of cultural sustainability from social sustainability and how to deal with cultural sustainability within sustainable development discourse. We then describe the method and data. In the main part of the article, we present the seven story lines and discuss the implications of the results for research and sustainability policies.

1.2. Theoretical perspectives: culture, discourse, knowledge, and society

By making the obvious semantic connection between 'culture' and 'sustainability', a path has been laid to make sense of sustainable development through the lens of culture. What does culture mean? The growing interest in culture and sustainability draws on many conceptualizations of culture, both wide and narrow. A wide understanding of culture makes culture a condition and premise for action, meaning, and communication (all humans have, share, and "do" culture). Culture refers here to the meaning content of human communities, the symbolic patterns, norms, and rules of human communities (Hylland-Eriksen, 2001) that divide humans from nature. Culture also divides humans from other humans (Hastrup, 1989), making it one of the most complex concepts (Williams, 1985). In a narrower sense, culture refers to civilization, to the improvement of the human, and to that which is excellent (for example, in the arts and science).

An important question is how cultural sustainability is related to sustainable development. We can imagine several options. Culture can be viewed as "cultural sustainability" as a fourth and parallel dimension to ecological, economic, and social sustainability. We can also imagine that the cultural sustainability discourse departs from the discourse on sustainable development in ways that are not anticipated. When culture is considered a fourth pillar in sustainability, it obviously must be distinguished from the other three pillars of sustainability, particularly social sustainability. Culture has often been considered part of social sustainability, socio-cultural sustainability, covering cultural aspects such as equity, participation, and awareness of sustainability (Murphy, 2012); the behavior and preservation of socio-cultural patterns (Vallace et al., 2011); and social capital, social infrastructure, social justice and equity, and engaged governance (Cuthill, 2009). Social and cultural phenomena are, of course, interconnected. Cultural structures and values influence social life and therefore also social understandings of sustainability and social sustainability, as Chiu (2004) shows. It is likewise the case that social structures affect cultural patterns and practices, and, as Chiu (2004) shows in the case of housing, the social and cultural dimensions of sustainability are interlinked. We also suggest that cultural sustainability is linked but not equal to issues of social sustainability, such as social justice and equity, social infrastructure, participation and engaged governance, social cohesion, social capital, awareness, needs and work, and issues of the distribution of environmental "goods" and "bads" (as reviewed in Boström (2012)).

Thus, our broad understanding of culture suggests that cultural sustainability moves beyond social sustainability and that there can be important issues of sustainable development that are missed without a further examination of the role of culture. However, the cultural dimensions of sustainability do not have to be understood as a separate and fourth pillar. Culture can also be seen as the foundation or necessary condition for meeting the aims of sustainable development in the first place or as a perspective through which understandings of social, economic, and environmental sustainability may appear.

Concepts such as cultural sustainability do not evolve in a vacuum but in the interaction between science, policy, and society. For almost two centuries, science has spoken to society with success (Nowotny et al., 2001). There is now an inherent generation of uncertainties and complexity in society and science, which explains why both fields have developed in co-evolution and in a reflexive and interpretative way. It is difficult to establish a clear demarcation between society and science, for instance, because both are subject to the same driving forces, such as economic rationality, flexibility of space, and the transformation of time into an extended present (Nowotny et al., 2001, 48).

This complex situation also affects the evolution of concepts. The ways in which problems are perceived and defined through concepts have implications for the ways in which scientific activities are organized (Nowotny et al., 2001, 117). A concept does not represent a solution because solutions are only temporary. Concepts also cannot be regarded as successes or failures. Concepts are provisional in this new situation and should be viewed as socially robust or not. Following Cuthill (2009), who discusses the robustness of social sustainability, cultural sustainability is put to work in a strongly contextualized scientific field, where the development of the concept is closely integrated to its social context. Thus, contextualization can mean, as we interpret it, the promotion of more meaningful interaction between policy makers, scientists, businesses, and the general public, where concepts are useful tools. This contextualization is important because environmental problems, like other problems, are socially constructed, building on expert language and concepts, research practices, and available technology (Feindt and Oels, 2005; Cronon, 1996).

A variety of concepts can be used to frame, articulate, and specify different analyses (Bal, 2002). We argue that cultural sustainability needs to be framed to be adequately understood and addressed (Goffman, 1974). The concept of cultural sustainability can be seen as parallel to the construction of a particular environmental problem (Hannigan, 1995), which needs scientific research, media visibility, and economic support to be constructed by society and policies. We assume that there are several ways to argue for the role of culture in sustainable development through the concept of cultural sustainability that cover different political and normative positions.

2. Method and data

2.1. Discourse analysis, storyline, and discourse

The meanings of cultural sustainability can be explored through concept analysis. In our case, this analysis would imply a thorough theoretical investigation of the concepts of culture, development, and sustainability and their relationships. This is a somewhat challenging task because all of the concepts are highly contested (Redclift, 2005; Connelly, 2007). Because it can be assumed that cultural sustainability is at least a multidisciplinary or even a transdisciplinary concept that moves beyond disciplines, it is more relevant to consider discourse analysis. We examine cultural sustainability through a discursive approach following Hajer (1995,

2005, Hajer and Versteeg, 2005). A discourse refers here to “a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities” (Hajer, 1995, 44, see also Hajer, 1996, 2005; Neumann, 2001; Flyvbjerg, 2001; Alvesson and Skoldberg, 1994; Fairclough, 1995 for other definitions of discourse).

We have analyzed the discourse on cultural sustainability through a focus on storylines partly following Hajer (1995). A story line is a generative sort of narrative in which certain various discursive categories, ideas, or concepts are used to give meaning to specific physical or social phenomena (Hajer, 1995, 56). Story lines structure and re-order meanings of discourse and are semiotic tools; meaning is evoked through story lines. Once a discourse is formulated, it will create story lines. One cannot draw upon the complete discourse on cultural sustainability. Instead, one must make discourse understandable through story lines in the same way a metaphor stands for something else. A story line is therefore a mechanism for creating and maintaining meaning, and it speaks to particular ways of constructing a problem. We view story lines as devices for ordering meaning rather than as classificatory tools to which meanings can be added. We suggest that story lines speak to at least one, but presumably more than one, political context. These contexts are discussed with reference to political ideologies where possible. It may also be possible to say that story lines speak to more than one political context.

Discourse analysis is useful to identify the construction of a particular problem that cultural sustainability is meant to address, how the problem is framed, and how the solutions are envisioned in society, in policy, and in practice. The discourse on cultural sustainability does not belong to one particular scientific community or discipline and does not exist as a closed universe. The order of a discourse does not concern causality or individual author's intentions and actions. The level of analysis is the discourse and its story lines and contexts, not the author's intentions and utterances. It is expected that all authors/researchers using the term cultural sustainability use the term without knowledge of the whole discourse and do not refer to all others who use this concept. Although science and research represent institutionalized discourse, we expect a wide variety of contexts in which the concept of ‘cultural sustainability’ is used. We also expect that the data cover understandings and concepts of cultural sustainability that are more or less theoretically rigorous. The scientific discourse on cultural sustainability is not a “singular” discourse. An analysis of discourse can indicate that the same event or the same concept has been described in diverse and perhaps conflicting ways.

2.2. Data and analysis

The data for this analysis consist of peer-reviewed scientific articles because this study focuses on scientific discourse, not policy discourse. Peer-reviewed articles comprise homogenous data. Non-peer-reviewed scientific articles would have made the data much more heterogenous, and non-peer-reviewed and non-academic popular articles are difficult to define.

A preliminary review was conducted in 2009 (Soini and Birkeland, 2009), and a more thorough literature search was conducted at the University of Jyväskylä based upon electronic social science databases in the spring of 2012. “Cultural sustainability” was used as a keyword for the search, although we were aware of the wide range of literature that concerns the relationship between culture and sustainability. However, we argue that it is precisely the concept of cultural sustainability, similar to ecological, social, or economic sustainability, that matters in science and policy. Therefore, we limited our analysis to articles using the concept of cultural sustainability. In addition, we restricted the search to articles written in the English language.

The final analysis comprised 50 full papers, 34 abstracts (including book abstracts), and two book reviews published during 1997–2011. We are aware that all of the peer-reviewed articles on cultural sustainability are not included in this study and that another type of search would have yielded different data. Therefore, the data should be seen as a sample of the whole population of scientific articles on “cultural sustainability”. However, the search reached a point of saturation, a point at which no new relevant articles considering the analysis came to light. We conducted the search twice and identified similar results and conclusions.

The data represent publications from all sciences: natural sciences, human and cultural sciences, and multidisciplinary landscape research. The concept of cultural sustainability was used in the articles in very different ways. In most articles, it was only mentioned once or a few times. Very few articles discussed it more thoroughly or aimed to define it. By using the concept of cultural sustainability, however modest the discussion might have been, the authors contributed to the discourse on cultural sustainability. In addition, authors who used socio-cultural sustainability without any attempt to make a distinction between the social and cultural meanings of sustainability were excluded because we were interested in exploring how cultural sustainability as a concept was constructed independently of social sustainability.

In the first phases of the analysis, the data were examined according to contexts. Then, a more detailed investigation was performed based on the following contextual aspects that were discussed in most of the abstracts and articles analyzed: objects of cultural sustainability; representations of culture in spatial and temporal dimensions; problems related to cultural sustainability; and policy needs and solutions.

From the reviewed material, we organized the scientific discourse on cultural sustainability around seven story lines that function as buzz-words or metonyms that embody various meanings, some of which might be contradictory: heritage, vitality, economic viability, diversity, locality, eco-cultural resilience, and eco-cultural civilization. These story lines were partly interlinked and overlapping, but they differed in terms of clustering of contextualized aspects.

3. Results

3.1. Cultural heritage

In many articles, the meanings of cultural sustainability were associated with and organized around a story line of cultural heritage. The basic assumption was that cultural heritage comprises a stock of cultural capital that has been inherited from previous generations and can be handed onto future generations (Throsby, 2008). Both intangible and tangible heritage were discussed. Tangible heritage concerned the conservation of material cultural heritage, such as historical buildings, monuments, and nature conservation areas, whereas intangible heritage covered issues such as knowledge and traditions associated with tangible heritage. In many cases, material and immaterial aspects of heritage were interlinked. In the context of landscape, for instance, built heritage was viewed as contributing not only to physical and visual sustainability but also to the social and cultural viability of landscapes, local identity, and sense of place (Vileniske, 2008).

The view of culture constructed from this story line is cumulative in temporal terms and local in spatial terms. Cultural heritage was usually seen as a source of identity connected with a local sense of place and providing legitimate reasons for preserving heritage for the future. As Farsani et al. (2011) put it, “Cultural sustainability is the concept for the recovery and protection of cultural identities. It is linked to previous traditional practices through

celebrating local and regional histories and passing down cultural values to future generations.” The heritage story line represented culture as temporally and spatially embedded (particular places and time periods), and cultural capital was considered to accumulate on a temporal scale. Thus, the meaning of historical stocks of culture and their importance for the future and cultural sustainability essentially concerned the continuation of this culture in a linear time perspective.

The main challenge related to the conservation and preservation of heritage is derived from the increasing effects of globalization, namely human mobility (immigration and outmigration) and trade and their impacts on languages, ethnic heritage, identity, and the distinctiveness of landscapes. Hickey (2004), for example, suggested that migration is threatening the traditional roles of Asian-American females. Discuss the effects of mobility on people and foreign languages in relation to the continuation of Estonian culture. Another threat to cultural sustainability was the introduction of new livelihood practices in farming as a result of modernization or changing environmental conditions, such as global warming, leading to the extinction of old farming practices (Whitney and Upmeyer, 2004).

Considering policy needs and means, the heritage story line faces specific challenges. Because not everything can be preserved for the future, the objects for preservation need to be selected somehow (Wang and Zeng, 2010). This is an economic question as much as a cultural one. A further challenge is how to balance so-called traditional and modern forms of material culture, such as in urban development, when new architecture develops in proximity to old buildings (Tavenor, 2007; Gunce et al., 2008), bringing visual and aesthetic issues to this story line. Technology may provide efficient means for the preservation of cultural heritage, such as concrete conservation work, but it also involves risks in terms of destroying the historical layers of sites (Short, 2005). Although the heritage story line represents expert knowledge and a top-down cultural policy, it has also been noted that local, ecological knowledge constitutes an important resource for the protection of tangible cultural heritage (Gerhardinger et al., 2009) and for livelihood practices (Costa-Neto, 2000).

3.2. Cultural vitality

Some articles have discussed cultural services and the uses of heritage (buildings, traditional events) for culture-led development in the context of globalization. These articles are particularly concerned with how cultural services, events, and heritage meet the changing needs of their users. They also address people's participation in the use and sharing of cultural capital and how to make cultural heritage accessible in a sustainable way so that heritage can be preserved in an authentic and undamaged form for future generations. Briefly, these articles focus on sustainability in terms of cultural vitality within communities by developing cultural capital and what the sustainable use of cultural capital may represent. Artists are often seen as actors who transmit various forms of cultural capital (such as heritage), and the role, income, and intellectual property rights of artists are also discussed (Van den Bosch, 2009).

Amberg (2010) discussed the role of libraries in sustaining cultural vitality in rural areas. She drew upon Hawkes (2001), who considered cultural vitality a fourth independent dimension of sustainability, and argued that cultural vitality is essentially about “providing a sense of belonging, shared meaning of recognition of identity, respect for society, creativity and education”. According to Amberg, technological development fundamentally affects libraries, and the critical challenge is how to meet this development in a sustainable way to strengthen the cultural vitality of rural communities.

Kong (2009) explored how the cultural space of Shanghai and Singapore meets the changes taking place in these cities. In her article, she understands cultural sustainability as the ability to support the development of indigenous content and local idioms in artistic work: “Cultural sustainability should be able to nurture cohesion and develop common identity without suggesting a simultaneous xenophobic rejection of external influences.” Although cultural sustainability is based on local culture, it is constantly changing due to the external influences and the work of artists. She therefore suggests that “we should move beyond the spaces themselves and examine the historical and contemporary context of their cities and countries, for contingencies of history and place, the relative urgency of the sustainability agenda and the relative importance and viability of environmental, cultural and social sustainability”.

The vertical integration between heritage and the performed arts was a topic of research by Trimarchi (2004). She suggests that it is possible to utilize the built heritage in the production of live performances or other cultural activities by taking into account the goals and constraints of preservation. Trimarchi refers to the four criteria introduced by Throsby (2001) for cultural sustainability: the advancement of material and non-material well-being, intergenerational equity, equity within the present generation, and the recognition of interdependence. She concludes that the “introduction of public regulation and institutional agreements to set the correct criteria and constraints to guarantee physical and cultural sustainability” is necessary to achieve these aims.

To summarize, in contrast to the heritage story line, this story line views cultural change driven by globalization, increased mobility, and the exploitation of technology mainly as positive and inevitable. However, the key question concerning sustainability is how change can take place in a way that does not damage the cultural continuity or identity of cultural capital and that promotes social inclusion and the sharing of cultural capital. In the cultural vitality story line, the main policy instruments are within cultural policy. Regulations are needed, for example, to balance the use of heritage in performing arts. In contrast, as the study by Kong (2009) demonstrated, many other forces in urban development affect the cultural sector, indicating that not only policy but also market forces define the development.

3.3. Economic viability

The third story line adopts culture, particularly heritage, such as historical sites, buildings, traditional food, and gastronomy, as a resource for economic vitality and local and regional development, such as in the form of tourism (Farsini, 2011, McCartney and Osti, 2007). It is suggested that cultural centers simultaneously nurture, develop, and sustain local culture while at the same time acting as tourist destinations. The problems related to the combined use of culture are recognized but are seen as increasingly inevitable in a global cultural economy.

In this story line, culture is placed and examined on a global scale, with some authors referring to sociologists of globalization and modernity (Askegaard and Kjeldgaard, 2007). It is suggested that due to global mobility, global tourism and labor relations as well as places of significance to us are increasingly less likely to be organized according to concentric circles of geographic equidistance: “When the aim is to generate regional development and strengthen local culture and industry in the face of globalized competition, one must begin with culture as a resource” (Askegaard and Kjeldgaard, 2007). Thus, the instrumental use of culture in sustainability is emphasized and legitimized in the story line of economic viability.

Drawing on local cultural capital for economic development, local culture is not merely maintained or sustained, as is the case in

the heritage or vitality story lines; it is constructed in and for the global space. One article even suggests that there is no possibility to return to a more authentic culture (Askegaard and Kjeldgaard, 2007). Locally constructed places and new versions of local culture are equally authentic as nostalgic or museumized versions. In this way, this story line emphasizes a dynamic approach to culture and the reproduction of culture. Although globalization is often seen as leading to the homogenization of culture and threatening authentic local culture, particularly in the heritage story line, this story line focuses on the possibilities for creating sustainable small-scale production–consumption relationships. Some authors argue that the local does not always have to be thought of as something authentic in the sense of ‘traditional’ or ‘pure’, essentializing the local. Rather, the local may be just as hyper-real as the global space if it is based upon pure nostalgia. Logically, the means of promoting cultural sustainability are mainly based on market forces, such as place branding and marketing.

3.4. Cultural diversity

The fourth story line represents cultural diversity, which, in broad terms, refers to the recognition of the diversity of values, perceptions, and attitudes as well as material cultural manifestations that are linked to these values. This story line appears in the context of environmental planning and development, in landscape perceptions, urban development and regeneration, and agricultural practices as well as in relation to issues such as multiculturalism and ethnicity (Hickey, 2004; Beckerman and Kopelowitz, 2008).

Central to this story line is that we are living in an increasingly culturally diverse society where different values and perceptions meet. Cultural homogeneity does not exist here. Some authors note that there is no objective truth about the aims and character of development; rather, there are diverse perceptions that need to be taken into consideration. That is, culture is considered context-specific and dynamic in spatial and temporal terms.

Cultural sustainability is related in this story line to the social and cultural acceptance of decisions concerning development. Such acceptance, it is assumed, leads to the long-term and “sustainable” commitment of stakeholders and to a strengthened sense of community or local identity (Oh et al., 2005). Cultural acceptance is seen as important to promote the successful implementation of development schemes to reach environmental goals or to improve the quality of life of local people (Nassauer, 2004; Schaich, 2009). The integration of the perceptions of laymen or non-professionals is found to be useful for decision-making: “Being aware of the ways non-professionals [farmers] interpret the landscape is thus the foundation for culturally sustainable landscape design” (Egoz et al., 2001). Stephenson (2007) holds that it is especially the duty of decision-makers to gain detailed knowledge of the particular values of the place concerned and to recognize how the values help support cultural identity and diversity.

A key argument of this story line is that the diversity of cultural values needs to be considered in any development activity to achieve social acceptance for the development activities. Diversity is an important value in itself. Therefore, this story line strongly calls for participatory planning methods and for educational programs aimed at sustaining the cultures of diaspora, indigenous, and minority groups (Beckerman and Kopelowitz, 2008).

3.5. Locality

The fifth story line is closely associated with cultural diversity. However, this story line goes even further by incorporating space, time, and culture and emphasizing the perceptions and cultural

rights of those living on the margins of society: ethnic minorities, indigenous people, marginalized people, and other groups whose capabilities to participate or defend their rights are considered threatened.

This story line creates a clear distinction between local, place-based and global culture. It favors locally based development against global development, assuming that locally based development will (automatically) involve and respect local values. In this sense, this story line can be considered anti-globalist. The critique of globalization and external interventions in local development is examined, for example, through the essentialization and commodification of culture in tourism, which is “inseparable from the space and places in which it is created, imagined, perceived and experienced” (Jamal and Stronza, 2008). It is also argued that the commodification of culture will reduce the rituals and handicrafts for consumption, hiding the social relations that contribute to the production of commodities, such as in advertising (Dorsey et al., 2004). This paradox also emerges in ecotourism, which draws upon locally situated interactions and embodied perspectives to illustrate ecological and cultural interrelationships but where local culture is not involved. Jamal and Stronza (2008) explained this paradox by the local–global space in which we live.

Not surprisingly, external interventions in local development, such as modern technology, development projects, or new livelihoods and activities such as tourism, are often seen as threat. A territorial approach to place is emphasized in dealing with environmental management. A study on water management techniques in Tunisia revealed that traditional (local) methods for water management, which include local vernacular and decentralized knowledge formed through community-based local custom, craftsmanship, and Islamic law, can reduce the negative impacts caused by modern water management systems (Hill and Woodland, 2003). Similarly, a study related to the forest sector in Ukraine revealed that the viability of forest landscapes can best be maintained with local and regional territorial approaches that acknowledge traditional village systems (Elbakidze et al., 2010). This is argued in an article concerning a forest ecosystem threatened by dam construction (Choy, 2004) that provided a source of indigenous communities’ social fabric and cultural identity.

From a policy perspective, cultural sustainability here essentially concerns territorial or regional questions that call for an integration or synthesis of spatially different knowledges. This means that community- or place-based development may or should include a dwelling perspective. As Dyer et al. (2003) noted, cultural sustainability is dependent upon the locals’ [Aboriginals’] control over their intellectual property and cultural events. Therefore, community-based management and locals’ efforts to develop their own management plans are important for promoting not only the survival of local or indigenous knowledge, values, and traditions but also for ecological and economic sustainability (Grinspoon, 2002; Costa-Neto, 2000). In addition, decision-making that concerns locals should be transparent, and locals should be well informed (Macbeth, 2005). The pace of development should also be reconsidered (Tresender and Krogman, 2003); development should not exceed the ability of the local people to adapt to it. Moreover, local customary laws, the autonomy of communities, and community resources in the context of international protection of traditional knowledge should be acknowledged.

With regard to the diversity story line, this calls for the involvement of locals in planning and decision-making that concerns their life and culture as well as a deeper understanding of local cultural practices. This presumes an intimate understanding of local ways of life and culture. Here, Heidegger’s notion of ‘dwelling’ and ‘care’ are considered useful research approaches for understanding the local way of life and for identifying intangible relationships and development considerations that are crucial to cultural sustainability

(Jamal and Stronza, 2008; Dorsey et al., 2004) because “cultural sustainability requires that development preserve and foster the cultural meanings and practices of the societies in which it takes place” (Macbeth, 2005). Similarly, in urban design teaching, a “locally attuned approach to cultural sustainability” is emphasized, and it is suggested that “the other should remain other” in urban development (Radovic, 2004).

3.6. *Eco-cultural resilience*

Although the diversity and locality story lines include some environmental aspects, the sixth story line is different from the others in that it focuses on the human/community–nature relationship within various contexts, landscapes, and ecosystems and seeks a balance between humans and nature (Martinez-Ballaste et al., 2006; Sumberg, 2002; Michaelidou et al., 2002; Jadgwiss, 2002).

This story line emphasizes that ecological and cultural processes are interlinked, affecting, for example, the sustainability of local crop management within a particular region. Culture is thus seen as composed of the spatial and temporal coherence of an area, such as a farm, as a complete cultural, social, cultural, and ecological system (Van Mansvelt, 1997).

Following from systemic thinking, this story line implies that both cultural and ecological aspects should be considered in development, and both natural and social knowledge are needed in policy making. For example, successful nature conservation cannot be carried out without taking the local livelihood development into consideration (Lynch, 2010). Therefore, policies that promote ecological and cultural sustainability require collaboration between natural and social scientists at the territorial regional level, which means facilitating an integration or synthesis of different knowledges. This story line suggests that community management of natural resources fosters a greater sense of responsibility and better stewardship of the land. It also integrates indigenous knowledge and tradition in management decisions (Grinspoon, 2002).

3.7. *Eco-cultural civilization*

The seventh story line constructed from the data is called eco-cultural civilization. Briefly, this story line refers to an ecological turn of the values and behavior of people. In this story line, the importance of cultural aspects in achieving the overall aims of sustainability is emphasized, and the integration of culture in sustainability is considered critical for coping with change. That is, cultural change is seen as a necessity to transition to sustainable practices. Culture determines the rate of sustainable change because it is considered a system of values, basic principles, and beliefs for local and/regional societies that control the rate of societal change, the main driving force for either rejecting or accepting a sustainable situation of “cultural transformation” or for “evolutionary redesign of worldviews, institutions, and technologies to reach the goals of sustainability” (Beddoe et al., 2009). It is noted that individuals are not only utility maximizers, and decisions concerning the environment are often not made on the basis of economic rationality (Burton and Paragahawewa, 2011). Thus, eco-cultural civilization does not necessarily depend on financial resources.

Eco-cultural civilization exists both at the individual and the group levels. For example, Burton and Paragahawewa (2011) assimilated cultural sustainability with a cultural turn in the environmental attitudes of farmers, which should be embedded in their ideologies, cultural norms, and behaviors. Ball (2002) examined the ability of existing environmental management system standards to make the construction industry more environmentally

sound. He emphasized the role of culture in achieving the changes because “restorative culture must first be one that is environmentally aware. A society that is working towards the minimization of harmful environmental impacts, (...) must be considered to be at least environmentally awakening” Birkeland (2008) holds that the transition to a sustainable future depends on mobilizing social and cultural resources associated with a re-animation of place.

This story line implies a certain distrust in the ability of environmental management systems and programs to solve environmental problems. Rather, the articles call for cultural change in values, consciousness, and attitudes, which can only partly be achieved by these programs, although not necessarily (Nassauer, 2004; Burton and Paragahawewa, 2011). The key way of promoting eco-cultural civilization is education for various groups and levels. Education may aim at the appreciation of ecologically sustainable practices. In addition to education, the role of bottom-up initiatives (Goncz et al., 2007; Birkeland, 2008) and uses of art (Haley, 2008) are seen as useful for enhancing cultural evolution. Therefore, although not clearly stated in this story line, the main threat to sustainability seems to be human capacities for understanding and human knowledge production itself.

4. Discussion

4.1. Representations of culture in cultural sustainability discourse

Our study demonstrates that the scientific discourse on cultural sustainability covers surprisingly wide contexts and meanings and that it is broader than we anticipated. Although the number of articles using the concept of cultural sustainability is still relatively low, the concept of cultural sustainability has continuously been in use since 1997. The concept was used in the reviewed articles, but it was rarely defined or discussed. Therefore, it can be argued that cultural sustainability is still in the first stage of concept evolution (Altman and Low, 1992). The diverse use of the concept as well as the lack of discussion of its meanings could indicate that there is a taken-for-granted or assumed consensus related to meanings of culture. We found representations of culture in the story lines ranging from both narrow (culture as arts and heritage) to broad (culture as way of life; network of meanings).

The study also revealed a variety of contexts for the uses of the concept of culture. The contexts were connected to human livelihoods (particularly farming and tourism), development projects with technological interventions, and the conservation and management of heritage. Spatially, the contexts represented both rural and urban environments, communities, regions, and areas with a larger spatial scale, even global contexts. This variety of contexts indicates that cultural sustainability, like sustainable development itself, is a meaningful term to use in many contexts. In the reviewed articles, culture is considered important for understanding environmental issues and, increasingly, necessary and relevant to understand many aspects of societal development. Thus, culture gains importance as a fundamental issue for discussing development in general, not only particular forms of development.

Based on our analysis, cultural sustainability seems to work more like a transdisciplinary than a multidisciplinary concept. The concept's meaning is useful in many contexts, but it works at a supra-disciplinary level stressing the role of culture in and for sustainability. In this sense, cultural sustainability is a concept that refers to contexts that move beyond scientific disciplines, research interests, and contexts. It is a concept, but, as we suggested in the introduction, it seems to refer to a shift in thinking, a cultural turn in the perception of both sustainability and culture.

Questions regarding the spatial and temporal scale of culture are among the most problematic issues in relation to sustainable development. Considering the spatial scales of culture, in most cases, it is treated as a territorialized phenomenon, a locally embedded way of life or local cultural manifestation, material or immaterial, that should be conserved, preserved, or used in the name of sustainability. The eco-cultural civilization story line is primarily concerned with sustainability on a global scale. It presumes that any cultural practices on the local scale should turn to an ecologically more sustainable direction to meet the global challenges of the environment. Thus, although the human–nature interface at the local level is important, it is the global environment that ultimately matters. In most of the story lines, cultural sustainability, like locality, heritage, the eco-cultural approach, and eco-cultural civilization, is seen as threatened by globalization, whereas the economic viability story line represents globalization in positive terms. Cultural vitality and cultural diversity story lines represent adaptive approaches to globalization, whereas the locality story line is clearly anti-globalist.

In temporal terms, cumulative, dynamic, and reconstructive approaches to culture are presented. The pace of cultural change is also discussed: rapid change is often considered a threat to the way local culture is able to adapt. The heritage and locality story lines are most strongly associated with the temporal perspective of culture, although in different ways. The heritage story line highlights the cumulative character of cultural capital, whereas the locality story line emphasizes relativism in temporal terms.

4.2. Political and cultural contexts of the story lines

In this section, we will consider how these story lines represent solutions to political problems and how they relate to the political context (Fig. 1). Despite some differences, the *heritage and vitality story lines* represent culture as tangible or intangible cultural capital to be preserved for future generations and to be used in the creation of collective identities and social and cultural inclusion through, for example, artistic means. Here, the safeguarding and accumulation of cultural capital, its share and transformation—in other words, the continuity of culture—is considered a central aim in culturally sustainable development. This implies that culture is seen as an object of development while providing some social benefits, such as social cohesion and well-being. Therefore, there are reasons to argue for a certain *conservative* approach to problem solving, ranging from technological development and modernization to environmental hazards to climate change, although cultural vitality is a more dynamic and liberal way to treat cultural capital than the mainstream heritage story line.

The *economic viability story line* constructs culture as a resource to be reproduced in various contexts and to be used for its instrumental promotion in markets to serve the economic viability of places and communities, particularly through tourism and the creative economy. Here, *liberal or neoliberal ideas* of culture are evoked to construct culture as a resource for (economic) and regional development. That is, rather than seeing culture as something authentic to be preserved, this cluster views culture as something to be reconstructed, if needed. Sustainability is considered primarily in economic terms, and culture is seen as an asset for economic development.

Both the *diversity* and *locality story lines* can be said to form a cluster of meaning that stresses culturally sound social and cultural acceptance of any development issue or activity. This position emphasizes cultural sustainability not only in terms of the inclusion of various perceptions and values but also with regard to the cultural rights of cultural groups. The story lines seem to share a communitarian political ideology, where cultural development is to be treated in the specific and local cultural context, a community,

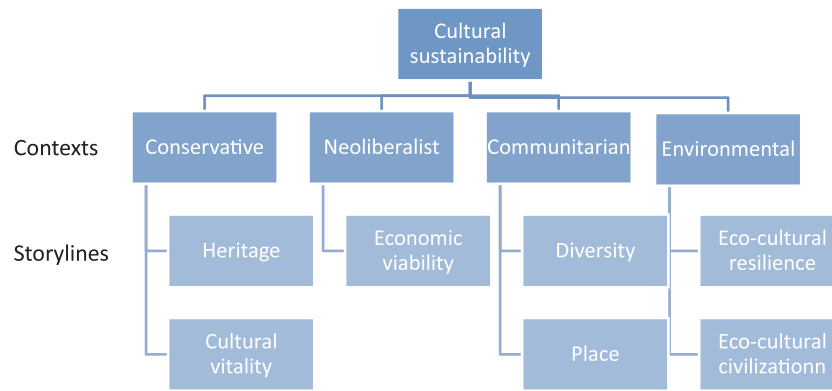


Fig. 1. Summary table of story lines and political contexts of “cultural sustainability”.

which requires the social and cultural inclusion of people in the planning and decision-making that concerns their lives. Culture is considered broadly as a process and as a diversity of ways of life, values, and, as always, change. Although community-based development is favored, it is also admitted that local communities cannot be treated as isolated from the external world and the cultural development that takes place in the modern world.

The *eco-cultural resilience* and *eco-cultural civilization* story lines differ from the other story lines because of a strong ecological emphasis and understanding of nature as an important part of the human system and as the ultimate limit for sustainable development. Here, culture is considered in terms of the *human–nature interface* and in ways that avoid non-dualistic representations of nature and culture, where culture is constructed as that which is non-human (and *vice versa*). These story lines seek better integration of human and natural systems, reconnection, even a paradigm shift, seeing sustainable development through ecological lenses. They construct an ecological turn of culture in the way we are being and behaving in the world. The name for this political position could be *environmentalism*. Although the focus of eco-cultural system thinking is often local, it is characteristic of this ideology that a better understanding of the human–nature relationship at all scales is needed and that a cultural change in this relationship needs to occur, which contributes to a global transition toward a more sustainable society.

Thus, we suggest that there are several ways to consider culture in sustainable development, which cover different political and normative positions. Some may be anthropocentric, others eco-centric or non-centric (Plumwood, 2002). In an eco-centric perspective, one would arrive at “a new cultural narrative that is explicitly designed for living on a finite planet, a narrative that overrides humanity’s outdated innate expansionist tendencies”, as Rees (2010) puts it. From an anthropocentric perspective, we would see cultural narratives of sustainability that reproduce existing social and economic structures. Independently of the normative position, culture can be viewed as a lens through which sustainable development is understood by different stakeholders because it is through cultural practices and processes that values and ethical choices related to sustainable development – including social and environmental aspects – are negotiated and communicated (see also Stefanovic, 2000; Plumwood, 2002; Jenkins, 2011). If we analyze these contexts against various narratives, the conservative and (neo)liberal contexts can be characterized as anthropocentric: the assessment of sustainability is made exclusively from the human perspective. There is a clear transition toward a more eco-centric perspective in the communitarian context, although human aspects and human well-being prevail.

Environmentalism is naturally at the heart of the eco-centric perspective.

4.3. Cultural sustainability in relation to other dimensions of sustainability

We lastly will discuss the meanings of cultural sustainability in relation to the ecological, economic, and social pillars of sustainability. These meanings are also under debate, but they are still more established than cultural sustainability.

Based on our analysis, we argue that the heritage and cultural vitality story lines can be seen most clearly as a fourth, *cultural pillar of sustainability* parallel to ecological, social, and economic sustainability. These story lines emphasize the importance of conserving and preserving cultural capital for the next generations. A central issue is that culture, in its many forms, has to be sustained. When the sustainability of development is in question, cultural aspects in addition to economic, social, and economic aspects need to be taken into account. In addition, these story lines stress the implications of heritage and cultural life for social cohesion and local identity, linking these story lines to social sustainability. However, these story lines do not critically discuss the meaning of culturally sustainable development. Sustainability is taken as a given.

The other story lines seem to suggest that culture is an *instrument* to achieve economic, social, and ecological sustainability. The economic viability story line links culture with economic sustainability. Here, material and immaterial culture is seen essentially as a resource for local and regional economic development at the local and regional level even within a global context. Cultural sustainability defined in this way refers to the cultural and creative economy and emphasizes the economic value that can be achieved with the help of culture, which has many impacts for social and ecological development as well. In contrast, cultural diversity and locality story lines recognize the diversity of perceptions, values, and lifestyles linked to certain contexts or places that need to be taken into account to achieve the social and ecological dimensions of sustainability. Moreover, these two story lines have many similarities with social sustainability, emphasizing equity and well-being resulting from participation and social inclusion. Ecological sustainability is clearly an underlying aim in the eco-cultural resilience and eco-cultural civilization story lines. Culture is considered as the means to achieve ecological sustainability by linking cultural values either with conservation policies or discourses.

Lastly, the seventh story line, eco-cultural civilization, can also be interpreted in a way that brings into discussion a third role of

culture in sustainability: culture is not only an instrument but a necessary foundation for meeting the overall aims of sustainable development. In this story line, culture is considered in terms of a new, overarching concern or even as a new paradigm in sustainable development thinking.

Thus, our analysis reveals that although the articles use the same concept, cultural sustainability, they seem to suggest very different roles for culture in sustainable development. Moreover, they provide different meanings for culture that are necessary and important to consider in further sustainability studies.

5. Conclusions

This study aimed to contribute a theoretical and political understanding of culture in sustainable development by analyzing the scientific discourse on “cultural sustainability”. We have approached cultural sustainability as an evolving concept in scientific discourse in society, where culture is becoming a vehicle to discuss, interpret, and relate to change in the meaning and role of sustainable development. The concept of cultural sustainability, we suggested, refers to phenomena requiring a combination of knowledge that evolves from different discourses and that may transform the discursive order regarding sustainable development and create alternative policy options.

The review revealed that a number of story lines are at play through which cultural sustainability is articulated in the scientific literature, indicating that it is at an early stage in its conceptual evolution. Furthermore, we have seen that under the umbrella of cultural sustainability, there is a range of representations of political ideologies, from conservatism to liberalism to communitarianism and environmentalism that express solutions to various social and environmental problems related to sustainable development. In this sense, the discourse approach has been productive for our analysis to clarify how the cultural sustainability discourse is transdisciplinary (neither mono- or multidisciplinary) (Kastenhof et al., 2009; Kagan, 2011) and to show the institutional ambiguity that characterizes the debates on both culture and sustainability.

The problems that cultural sustainability discourse addresses are very complex, ranging across many spatial and temporal scales and across many qualitative dimensions. They have in common complex representations of the nature–culture interface, many uncertainties, many value systems and ideologies, and ways of doing research. We see cultural sustainability as an emerging discourse with concepts and meanings that challenge the discourse on sustainable development. The story lines of cultural sustainability have different positions and roles within sustainable development. Some of these roles are more autonomous, whereas some of them are more instrumental. However, it is clear that culture adds to and extends sustainable development discourse by making it both more complex and easier by stressing the need to explain, clarify, and legitimate itself in relation to not only science and policy but to a broader public.

This study is pioneering in the context of the need for more transdisciplinary and broader understandings of culture in sustainable development discourse. Previous research has mainly focused on specific aspects of cultural sustainability or examined cultural sustainability within particular empirical cases. This work is also new in the sense that, even though social sustainability is a much more established concept in both science and policy, there have been few attempts to define it explicitly (Vallance et al., 2011; Boström, 2012). The meanings of cultural sustainability should be analyzed further in relation to the discourse on sustainable development and other related concepts, such as eco-social

resilience, ecological modernization, and cultural diversity. We also suggest that the story lines of the cultural sustainability discourse should be explored in more detail to focus on communication with the stakeholders, interests, and actors associated with the particular story lines in cultural sustainability discourse.

The story lines identified in this article in cultural sustainability discourse show that concepts and language are ways of not only representing the world but also of constructing environmental and social problems and their solutions. We have identified the diversity of meanings of cultural sustainability through a review. We found that there are a variety of meanings (story lines) that represent different interests and solutions and are differently placed in relation to the discourse on cultural sustainability. The debate therefore seems to be more confusing and complex than it initially seemed because it became obvious that the discourse is not only multidisciplinary but transdisciplinary. Cultural sustainability does not belong to one discipline or within a hierarchical system of concepts; it is transversal and overarching at the same time. The unfolding of the complexity of this discourse has only begun.

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