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The inner dimension of sustainability: personal and cultural values

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Transformation to sustainability has been defined as the fundamental alteration of the nature of a system, once the current conditions become untenable or undesirable. Transformation requires a shift in people's values, referred to as the inner dimension of sustainability, or change from the inside-out. However not clear is what values are and how they differ from beliefs, attitudes and worldviews. The central question addressed in this article is what the role of values is in transformational change towards sustainability. Values have been operationalized in various ways, varying from economic value, motivational values, symbolic values, processes of e-'value'-ation, mediating values, to value systems. Values are not self-standing concepts which can be mapped our analyzed as atomized issues. They are intertwined, context determined, culturally varied and connected to how we see our self and perceive our environment. This paper provides an overview of recent advances in the literature on values, making a distinction between personal values and collective cultural values.

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Introduction: the inner dimension of sustainability

Since the presentation of Our Common Future, 'sustainable development' is a leading concept in policies related to the environment. Sustainable development has become an ever more encompassing framework over the past decades [1]. The concept not just applies to pollution control, the availability of natural resources and protecting species and their ecosystems, but also to wider notions of human and social development, including human rights, good governance and solidarity. The concept of sustainable development can be seen as a quest for developing and sustaining 'qualities of life' [2] and thus contains objective and subjective dimensions. Sustainability should therefore not be studied as a 'value-free' science but as a science inclusive of values and responsibilities [3]. This includes giving attention to the way we view ourselves and the world (philosophy), what forms of improvement appear to be most appropriate (development) and how to motivate and help direct us to get there (leadership) [4]. Transformation to sustainability can be defined as physical and/or qualitative changes in form, structure or meaning-making, but can also be understood as a psycho-social process, involving the unleashing of human potential to commit, care for and effect change for a better life [5]. This means different things to different people or groups, and it raises ethical concerns such as what constitutes a more beneficial state, for whom, at what scale and who determines this [6].

Transformation to sustainability is accelerated by several spheres: the practical sphere, larger systems and structures, and individual and shared beliefs, values, worldviews and paradigms that influence attitudes and actions [7••,8]. This latter sphere is also referred to as 'change from the inside-out' [5,9], interior transformation [10], or the inner dimension of sustainability [11]. Long-term commitment towards sustainable development resides within people's choices, grounded in people's deepest motivations. Westley *et al.* have underpinned the relevance of this 'inner' dimension, as sustainability transitions '*may require radical, systemic shifts in deeply held values and beliefs, patterns of social behaviour, and multi-level governance and management regimes*' [12•]. However, not clear is what values exactly are, what the differences are between values, beliefs and worldviews, and how these notions can be linked to culture.

Recently it has been argued that culture is having a separate, distinct, and integral role in sustainable development [13,14••,15]. Culture as such is a difficult, open and contested concept. There are many conceptualizations of culture, both wide and narrow. Culture is a condition for action, meaning to the symbolic and communication, as all humans share and 'do' culture. It refers to how human communities give meaning and to the symbolic patterns, norms and rules. In a more narrow sense culture refers to civilization [14••]. New cultural geographies see culture as a construction enmeshed in webs of social, economic and political power. Culture is symbolic, active, constantly subject to change, and a process which can explain action [15]. Mitchell argues that there is no such (ontological) thing as culture, but

only the very powerful idea of culture, put into play by particular political and social interests [15].

We would argue that culture is the medium through which people give meaning and assign value to their place and environment. Values are central in understanding human behaviour. Values refer to what people consider as important, to principles, priorities, processes of sense-making and value systems. In the context of sustainability debates human values can provide insight in questions such as: why would people take action and contribute to change, how do people value things, and which symbolic meanings to they ascribe to their place and environment? Hedlund-de Witt argues that values are a predictor of policy opinions and support, indicative for environmental behaviour, a major driver of consumer trends and economic spending patterns, and part of the subjective dimension of sustainable development [8].

This paper aims to provide more insight in the role of values in transformative change towards sustainability. We have reviewed the literature on values, drawing upon different bodies of literature from geography, behavioural psychology, anthropology, sociology and economics. A distinction will be made between personal values and collective cultural values. The next section elaborates on the question how values have been conceptualized.

What are values?

Values have been the subject of theoretical consideration in many disciplines and areas of study [16,17]. When we think of values, we think of what is important to us in our lives, for example, security, freedom, wisdom, pleasure, independence. Values point to what is desirable or not. Multiple definitions of the word 'values' indicate that it has personal, cultural, biological and social meanings [18].

The literature shows a distinction between values as abstract goals or used in an instrumental sense. Appleton for example sees values as abstract concepts and objects for which individuals have a range of positive feelings [19•]. In an instrumental sense values are criteria or standards for evaluation or a system for ordering priorities, in varied notions such as economic value, environmental values and nutritional value [16,20].

Values also appear in sustainability debates as situational or culturally independent. Appiah for example makes a distinction between project-dependent values and universal values, the latter are independent from activities and identities [21]. Other distinctions are those between held and assigned values [22], and between articulated and basic or given values, acquired by experience [23]. Some values may be unconscious. '*As one experiences diverse conditions and situations, one discovers or realizes one's values as they become known aspects of one's unconscious and implicit reality*' ([19•, p. 23]).

Values and beliefs are often used interchangeably but are not the same. Beliefs can be seen as forms of mental representations and one of the building blocks of our conscious thoughts. Beliefs mediate a range of explicit and implicit behaviours ranging from moral decision making, to the practice of religion [24]. Religious beliefs can be institutionalized, but also be informal, individual or communal. Narrative ethics play an important role in discussing and negotiating cultural and ethical values in theology and belief systems.

Values are a broader construct than attitudes. Bell points out those attitudes develop within a normative or value-based context [25, p. 26]. Attitudes can be considered to be emergent from, or an expression of values. The characteristics of our attitudes are not just shaped by values and beliefs but also by our personal situation, behaviour, education, knowledge, character, etc. The opinion that attitudes can change, while values and beliefs are less malleable [19•], is however contested.

Value is often used in the context of economic value, to put a prize on something. The dominant economic approaches assume that to make rational choices we must adopt some common measure of value, and that money provides that measure. Value refers here to monetary worth, relative worth, or a fair return on exchanges, which are typically measured as numerical quantities [2]. The price of something does not reflect its value or benefit but its scarcity [26]. Scholars have studied economic values in the context of economic systems, for example Marxist value theory [27] and capitalist value theory [28]. Shiva has criticized the dominance of an economic system which reduces the society to the economy and the economy to the market: '*Economic systems influence culture and social values. An economics of commodification creates a culture of commodification where everything has a price, and nothing has value*' [29, p. 8]. Polanyi has described the effects of commodification and reduction of nature and society to the market. This can contribute to economic growth, but also undermine the rights of women and local communities and the economies of both, and can reduce local cultural milieus and destabilize ecosystems [30, cited by 19•].

Economic value has also been used in the context of economic evaluation. Cost–benefit analysis (CBA) is based on rationality assumptions and utilitarian welfare economics and offers an instrumental method of economic evaluation that values all benefits against all costs. CBA has been criticized, especially in those cases where 'priceless' valuables such as nature and culture are at stake. Thus broader approaches have been developed such as ecosystem services, based on the notion that 'nature has value' [31].

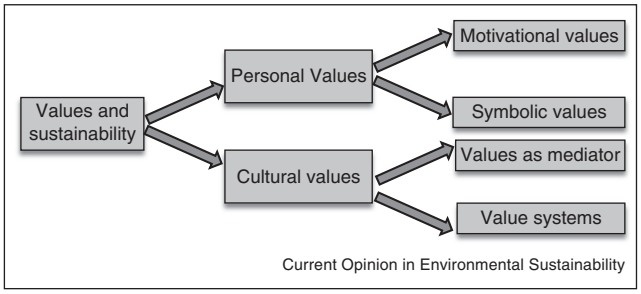
Endogenous approaches to development address the question how to add economic value to places. Rural sociologists have emphasized the characteristics (natural, human and cultural) and distinctiveness of places and how this may become the focus of sustainable economic activity [32]. The endogeneity of economies refers to the degree in which they are built on local resources; based on local control over the use of these resources, and strengthened through the distribution and reinvestment of the produced wealth within the local or regional constellation [33, p. 53].

Values are also used in the context of environmental concern and people's motivation for environmental action [34,35]. The notion of 'intrinsic value of nature' in environmental debates points to the importance of nature in itself, apart from its anthropogenic use and functions [35]. Environments matter to us in different ways as we live from, in and with environments and these different relations to the world all bring with them different sources of environmental concern [34]. Sammuelsson puts the point nicely by saying that '*the point of establishing that nature has intrinsic value is that such values would lay claims on us — that they would supply us with reasons for action*' [36, p. 530].

Appleton provides a broad overview of the role of values in sustainable development, which includes not only the ecological, but also the social and cultural dimension of sustainable development. Values are considered relevant in the varied contexts of engagement, implementation and conflict, in relation to religious and ethnic aspects, in the context of educational strategies and development of sustainable competencies and in planning, with the challenges of implementing sustainable initiatives and aligning multiple stakeholders. The development and engagement of participant's values can build co-creative capacity in sustainable development projects, contributing to change. An example is to start a project with a 'Participants Values Analysis', an ethnographic survey including the development of a values profile for each potentially interested party [19•]. Another way of mapping values, which has been applied in Zambia in the context of participatory community development, is to make an inventory of what people perceive as precious in their life and environment, combined with observations of cultural practices [37].

We would argue that the inner dimension of sustainability especially points to personal values and collective cultural values [38] (see Figure 1). Personal values refer to people's motivational values and to the ways they make sense of their environment in a symbolic way, as people attach meanings and assign value to their place. Cultural values refer to the mediating role of values in practices and styles of behaviour (e.g. cultural food patterns, agri-culture), as well as to overarching worldviews and value-systems. In the remainder of this paper we will further explore these notions.

Figure 1



Values and sustainability.

Personal values

Long-term commitment towards sustainable development resides within people's choices, grounded in people's deepest motivations, convictions and human intentionality. These issues lead to the question of *why* people would contribute to sustainable change. Values — and how we work with them — are a vital determinant for whether sustainable development remains a dream or solidifies into reality. Values have been conceptualized as principles, motivations and intentions, expressing what guides the selection and prioritization of people's actions. Values appear here as desirable goals which vary in importance.

Motivational values can be directed towards conservation but also be open to change, contribute to self-enhancement and to self-transcendence. Schwartz describes ten basic, motivationally distinct values (such as power, hedonism, conformity, self-direction, etc.), which he considered as universal and recognizable in varied cultures across the globe [20]. Such values are inextricably tied to emotions, not objective cold ideas. They are not rational principles of the mind, but also refer to people's will and heart [39] and linked to our deepest psychological convictions on how to make sense to the world. The assumption is that, ideally, if we become more aware of our values, this can lead to a more inspired (sustainable) use of our environment.

Leadership — inspired by values — plays a crucial role in sustainable development. Leadership can enable regions to branch out onto a new path in order to create more balanced and sustainable regional development. In these contexts leadership is not a solo activity but is shared and multi-faceted, present on different scales and shaped differently according to various institutional and cultural contexts [40,41•,42].

Values also influence the way we make sense of our environment in a symbolic way, as people attach meanings and assign value to their place. Such values are the result of people interpreting social phenomena through negotiation and communication and have a geographical

dimension [43]. The values people assign to specific places are linked to individual psychological dimensions that comprise sense of place and sense of belonging. Several authors refer to the values people ascribe to resources in places [44,45]. The concept 'sense of place' is central here. Sense of place is a multi-theoretical, complex and contested concept [46•], which has been approached from a phenomenological and behavioural perspective. It has many components such as place attachment, place identity, place commitment and dependency, place satisfaction, belongingness or rootedness, community connectedness, and community cohesion [47–49].

Sense of place has been linked to sustainability, suggesting that in spite of processes of globalisation, in order to create sustainable communities '*...more people need to reconnect with a place that they call home, valuing the ancestral heritage that comes with development and maintaining a rooted sense of place*' [50]. Sense of place can also inspire people to act as a response to unwanted spatial and sometimes unsustainable developments [51], which should not be interpreted as ignorant or selfish NIMBY responses, but as founded upon processes of place attachment and place identity [52].

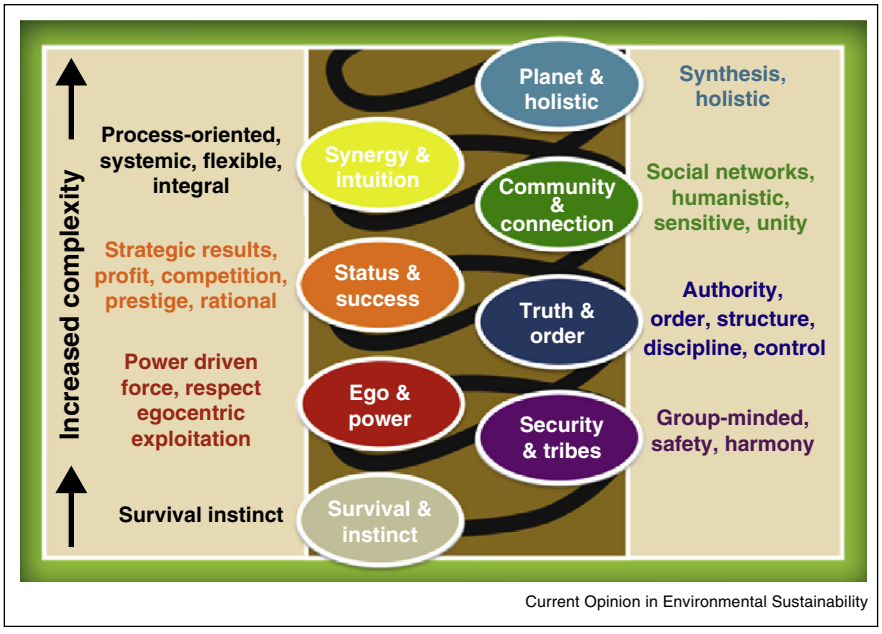
Collective cultural values

Without pretending to be exhaustive, some contexts will be described where collective cultural values have been linked to sustainability.

Cultural values play a mediating role in practices and styles of behaviour and influence the construction of narratives and place identities. Such values have been analyzed in the context of regional development. The concept of 'territorialization' points to the dynamics and processes in regional development, driven by collective human intentionality and stretching beyond localities and geographical or administrative boundaries. Territorialization thus is the outcome of the multi-scale interaction of structuring processes and agency/social relations, which are expressed in practices. Dessein *et al*. argue that culture is the fertile ground in which territorialization can flourish. The natural environment and culture are constitutive of each other. Territorialization is a lens to understand how culture and cultural values mediate the three dimensions of territorialization — reification, symbolisation and institutionalisation — in multi-scale spatial development [53]. The authors argue that this concept can help to improve the framing of sustainable regional development, as it highlights the time-space dimension and the role of people in the use and consumption of resources [54].

The notion of value is also used in the context of worldviews. Worldviews are considered as the inescapable and overarching frameworks of meaning and meaning making that profoundly inform our very understanding and enactment of reality [55]. These notions emphasize the urgency of sustainable change on the level of human society and debate the role of worldviews in transformative change. Distinctions have for example been made between an egocentric, ethnocentric, sociocentric, world

Figure 2



Value systems as social development stages [60]; drawing Auke van Nimwegen.

centric and planetcentric worldview [56]. It has been argued that 'ecoculture', here understood as a specific worldview and vision for the future society, is a core condition for transformational change towards sustainability. Ecoculture is considered from an evolutionary perspective, as a continuing process of change implying authentic, positive or healthy self-development for humans, societies and nature [57].

Transformational change is also discussed in the context of stages of human development or value systems [58,59]. Stages of human development are not linear or hierarchical, but collective intelligences that emerge at each level of human development, thus comprising a cultural DNA map. Stages represent units of cultural information – vMEMEs, where the v stands for value – which change and adapt over time as these are passed on from one generation to the next (e.g., ideas, songs, theories, dances, habits, values, practices). The 'Spiral Dynamics' framework [60] (see Figure 2) shows eight vMEMEs, divided in three tiers of human's consciousness, visualized via different colours. 'Blue' values for example emphasize the role of authorities and rules, 'orange' values focus on the role of science and competitiveness and 'green' values point to a sense of community. vMEMEs are the product of 'Life Conditions' and express an increasing level of complexity up the spiral from selfcentric, sociocentric to worldcentric. In terms of crisis certain values (solidarity, aesthetics, humanity), may come under pressure, in favor of risk-avoiding or survival strategies ('beige' values). Till now there have been just a few attempts to map value systems in places [38]. An example is Hamilton's (2010) extensive empirical work in Abbotsford in Canada [61].

Discussion and conclusion

We have provided an overview of the inner dimension of sustainability, distinguishing between a personal and collective cultural dimension, rooted in underlying values which express what people consider as worthwhile. Values have been operationalized in various ways, varying from economic value, motivational values, symbolic values, processes of e-'value'-ation, mediating values, to value systems. Values are not self-standing concepts which can be mapped or analyzed as atomized issues. They are intertwined, context determined, culturally varied and connected to how we see our self and perceive our environment.

There are many ways to conduct research and to evaluate or map people's values, many of them drawn from anthropological research: in-depth interviews, ethnographic observation, surveys, thematic and perceptive test evaluation, content analysis and associated literature, analysis of participant self-reporting and recording, psychometric testing, word association analysis, group participatory techniques, and so on [19•]. When testing values one most consider espoused values and observed behaviour; the two are often not congruent [62]. People are not always aware of their values. One does not always act in accordance to one's own values. Discourse analysis can be used to understand how people use language to accomplish social and emotional goals along with communicating ideas and how different ideas in turn reflect different worldviews and different priorities. The assumption here is that human language does not simply reflect the values and preferences of speakers; it also shapes them [63].

Changing worldviews on the level of human society is considered increasingly important to address the challenge of sustainability [8,64••,65•]. The challenge of a value-oriented approach on a more practical level is to create a dialogue between actors on sustainability, not based on personal interests, but on joint motivational, symbolic and cultural values, and directed to the common good. Such a dialogue should encompass an 'inclusive' attitude towards sustainability and a broad set of values such as survival, social inclusion, esthetical aspects, solidarity, quality of life, etc. A value-oriented approach pays attention to short-term as well as long term sustainable development, is linked to economic, ecological, social and cultural aspects of sustainability, and offers insight into the drivers and consequences of our actions in time and place.

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