This is the accepted manuscript version of the contribution published as:

Fischer, A., Spekkink, W., **Polzin, C.**, Díaz-Ayude, A., Brizi, A., Macsinga, I. (2018): Social representations of governance for change towards sustainability: perspectives of sustainability advocates

Environ. Polit. **27** (4), 621 – 643

The publisher's version is available at:

http://dx.doi.org/10.1080/09644016.2018.1448559

Social representations of governance for change towards sustainability:

perspectives of sustainability advocates

Anke Fischer^{1*}, Wouter Spekkink², Christine Polzin³, Alberto Díaz-Ayude⁴, Ambra Brizi⁵ and

Irina Macsinga⁶

¹Social, Economic and Geographical Sciences, James Hutton Institute, Aberdeen, Scotland,

UK

²Delft University of Technology, Faculty of Technology, Policy and Management, the

Netherlands. Present address: Sustainable Consumption Institute, University of Manchester,

UK

³Helmholtz Centre for Environmental Research GmbH – UFZ, Germany

⁴People-Environment Research Group, Faculty of Educational Studies, University of A

Coruña, Spain

⁵Roma Tre, Department of Education, University of Rome, Italy

⁶Department of Psychology, West University of Timișoara, Romania

*Corresponding author: Email: anke.fischer@hutton.ac.uk

Accepted for publication in Environmental Politics

Abstract

There is a substantial body of literature on public understandings of large-scale 'environmental' phenomena such as climate change and resource degradation. At the same time, political science and economics analyse the governance arrangements to deal with such issues. These realms of research rarely meet: there has been little research into people's understandings of the *governance* of environmental change. This study adds a psychological perspective to governance research by investigating social representations of governance that promotes societal change towards sustainability, and related practices. It examines data from qualitative interviews with sustainability-interested people in seven European countries (n=105). The analysis identified building blocks of representations suitable as an analytical framework for future research on governance representations. The diversity of their content reflected a range of pathways to societal change. Representations often seemed to have a creative function as a guiding vision for individuals' own practices, but their wider transformative potential was constrained.

Key words: community initiatives; environmental governance; grassroots; practices; social psychology; transition management

Introduction

A missing link between environmental psychology and governance studies

Recent research has yielded a wealth of insights into public and stakeholder views on global environmental challenges (albeit mostly for 'western' countries). Numerous studies have addressed understandings of climate change (Dunlap 1998, Lorenzoni and Pidgeon 2006), ozone depletion (Ungar 2000), invasive species (Selge *et al.* 2011) and biodiversity management (Buijs *et al.* 2008). Focussed surveys elicit acceptance of specific policy

mechanisms to address these challenges (Dietz *et al.* 2007, Attari *et al.* 2009). At the same time and usually disconnected from this body of literature, economists and political scientists develop and analyse governance arrangements to deal with such issues. Examples include studies on collective action (Ostrom 1990), adaptive (co-)management (Allen *et al.* 2011), international conventions (Tompkins and Amundsen 2008) and transition management (Loorbach 2010).

These two large fields of research rarely meet: sociological analyses of discourses (Bäckstrand and Lövbrand 2006) aside, there is little research on how people perceive, feel about and make sense of the governance of global environmental change and large-scale sustainability transformations. Psychological perspectives on environmental governance are still a niche topic (Castro and Batel 2008, Fischer 2010, Fischer *et al.* 2011, DeCaro and Stokes 2013, Schulz *et al.* 2017), and governance as such – beyond the study of attitudes towards very specific policy tools such as taxes – receives little attention in environmental psychology.

We define governance as 'the sum of the many ways individuals and institutions, public and private, manage their common affairs' including both formal, i.e., codified, and informal mechanisms (Commission on Global Governance 1995, p. 4), and focus on people's understandings of environmental and, more precisely, sustainability governance. We understand societal change towards sustainability as change towards a society that meets the social, economic and environmental needs of current generations without compromising the ability of future generations to meet their own needs (WCED 1987). Our argument is that a psychological approach to examining sustainability governance is important and relevant, not least because people's understandings will shape their practices, including one-off behaviour such as voting as well as reactions to governance arrangements in everyday behaviour (e.g.,

Cichoka and Jost 2014). However, to date, little research has unpacked and analysed people's understandings of environmental governance.

The conceptual frame of our analysis is the theory of social representations (Moscovici, 2001). Social representations – 'webs of interrelated meanings' (Buijs 2009, p. 74) that people attribute to an object (here: sustainability governance) – are explicitly conceptualised as simultaneously social and individual (Buijs *et al.* 2012), and thus suited to the analysis of individually expressed understandings in their social context.

The perspective of sustainability advocates

Our investigation focuses on people who are generally supportive of sustainability, in particular those who engage pro-actively in making societal change happen. The literature labels such sustainability advocates as frontrunners (Loorbach 2010), sustainability pioneers (Belz and Schmidt-Riediger 2010), change agents for sustainability (Benn *et al.* 2014) and sustainability citizens (Barry 2006).

Sustainability advocates exist in many different institutional contexts, including government (Brown *et al.* 2013), business (Bendell and Kearins 2005) and civil society (Seyfang *et al.* 2007, Zapata Campos and Zapata 2017). We concentrate primarily on the latter, in particular on actors in community-led sustainability initiatives. As these form, to some extent, the *avant-garde* (or 'engine') of societal change towards sustainability, insights into their visions and sense-making of sustainability governance will help us understand their engagement, their expectations, the conflicts and obstacles they encounter, and the degree to which their work can be translated onto a systemic level.

Conceptual framing: Social representations

Social representations are networks 'of ideas, metaphors and images, more or less loosely tied together' that are socially developed and shared (Moscovici 2001, p. 153). In their cognitive dimension, social representations reflect ideas of the *current* systems of governance while their normative dimension represents ideas of how sustainability governance *ought* to be. Both dimensions may have emotions and practices associated with them. Representations thus 'justify value judgements and moral opinions' and 'orientate the way members of the group act' (Wagner and Hayes 2005, p. 143, p. 123). Social interactions from the micro-(e.g., family and friends) to the macro-level (e.g., national media) are the basis of the formation and change of social representations, but, within any social group, representations are never entirely homogeneous and consensual as they arise from the interplay between the social and the individual. Scholars have rarely applied social representation theory to issues of environmental governance (Castro 2012), which is surprising given the theory's contributions to understanding social structures and political events (Wagner and Hayes 2005).

A key issue in social representations research, widely implied but rarely explicitly addressed, concerns the links between representations and practices, i.e., how representations and practices interrelate and potentially shape each other. From an applied perspective, this amounts to the question whether understanding social representations helps us to understand behaviour. We focus here on the performative aspect of practices (Warde 2013) related to environmental governance, understanding practices broadly as social patterns of behaviour. Castro and Batel (2008, see also Batel *et al.* 2016) highlight the complexity of the nexus between representations, practices and change by emphasising the distinction between transcendent and immanent representations, i.e., representations that exist independent of practices, and those that emerge from practices. They also begin to unpack the dynamic relationships between the creative potential of transcendent representations and the

emergence and generalisation of (legal) societal-level change. A benefit of studying the perspectives of sustainability advocates, as we do here, is that we can expect the creative aspects of their representations to be particularly well developed and visible.

While representations are by no means prescriptive of behaviour, as the literature on gaps between knowledge, attitudes (i.e., elements that are an inherent part of social representations, Moscovici 2001) and behaviour illustrates (Kollmus and Aygeman 2002), representations can relate to practices in a number of ways. First, expectations of how other people will behave in a given governance setting are likely to influence one's own actions (Fischer *et al.* 2011), as – in a generic form – proposed by the idea of a 'self-fulfilling prophecy' (Merton 1995), and empirically illustrated through game theoretical approaches (Herrmann *et al.* 2008). Second, representations typically include normative dimensions (Wagner and Hayes 2005; Fischer *et al.* 2012), which can – to some extent – guide behaviour. For example, people's perceptions of the legitimacy of institutional arrangements and their fit with one's own values inform responses to these arrangements (Castro and Batel 2008, Glenk and Fischer 2010, DeCaro and Stokes 2013, Schulz *et al.* 2017).

However, not only the alignment, but also potential misalignment between representations and practices need to be understood, i.e., the question of what happens when people's representations and their behaviour do not coincide. Some people experience their idea of a sustainable lifestyle and their actual practices to be in conflict (Fischer *et al.* 2012). In the context of legal innovation, Castro (2012) has highlighted tensions between people's governance representations and their own practices. In such cases, people often employ coping strategies to ease the experience of contradiction or failure of meeting one's own expectations (Fischer *et al.* 2012, Castro and Batel 2008). We investigate whether such tensions and coping behaviours also arise when sustainability governance representations and associated practices are misaligned.

In summary, we focus on three aspects of sustainability governance representations. First, we aim to better understand the structure of these representations. Second, we examine their diversity across a range of cultural and political contexts, and the implications that this diversity might have for societal change. Third, we explore how our interviewees enact their governance representations and what happens in those cases where representations and practices do not coincide.

Methods

Approach

As part of the EU FP7-funded Project GLAMURS (Green Lifestyles, Alternative Models and Upscaling Regional Sustainability), we conducted loosely structured qualitative interviews in study areas in seven European countries (Table 1). With a multidisciplinary team that included psychologists, political scientists, sociologists, economists and geographers, we jointly developed an interview guide that combined a small number of broad questions with optional prompts and probing questions. The guide included questions on the interviewee's own behaviours in relation to sustainability issues in the broadest sense, and whether there was, in the participant's view, 'anything in our society that should change in order to reduce' situations where people felt that their behaviour was not sustainable. Probing questions ensured that interviewees had the opportunity to consider a range of governance perspectives, including the role of governments, other stakeholders, and themselves. In addition, the guide for members of sustainability initiatives (see below) included questions on their experience, practices and feelings related to their own involvement in the initiative.

To complement the data on practices derived from the interviews, we used information gathered through workshops with the study initiatives (for details see Omann *et al.* 2016). These workshops focused on relationships between the focal initiatives and other

social actors, and were therefore particularly useful to explore the links between representations of these relationships and their enactment.

Sampling

Our sample was composed of members of the focal sustainability initiatives (Table 1, n=62), and other individuals known to us as supportive of sustainability ideas but not necessarily formally organised (n=43). In each of the seven countries, interviewees came from a relatively small, bounded area, centred around the town or area where the initiative was based.

As the focal initiatives were located in very different contexts and engaged in different domains (e.g., food, transport, energy), our sample included a wide range of different socio-demographic and cultural groups. Most initiatives were to some extent grassroots-based, building on the engagement of 'ordinary' citizens. However, their organisational forms and degree of formalisation varied, ranging from ecovillages and student co-operatives to a Transition Town and 'bioregion'. The Scottish case was an exception in that it included the staff of two Local Authorities, some of whom had professional roles as sustainability officers (Table 1). We selected interviewees who were not members of the focal initiatives such that they provided contrast and diversity in terms of their lifestyles and other socio-cultural variables, while still being generally supportive of the sustainability idea.

Insert Table 1 about here

Data analysis

We started our analysis with a joint exploration that identified themes recurring across study areas. We then developed a shared coding framework which we extensively tested in all study areas, and test-coded each other's transcripts (language permitting) to make sure that all coders understood the coding categories in a similar way.

Each team then coded their transcripts (the Galician team coded audiorecordings) using computer-assisted qualitative data analysis software (NVivo or Atlas.ti) – again, we conducted training and exchange sessions to ensure all coders used the software in a similar way – and wrote detailed analytical summaries. Based on these summaries, we refined the theoretical approach to analysis, and chose social representations as a conceptual lens.

Our approach therefore combined theory-led and grounded analysis. The following sections present our findings; first, in terms of the emergent *structure* of sustainability governance representations (Section 'Key features') and then outlining the diversity of the *content* such representations across our sample (Sections 'Group-specific types' and 'A spectrum'). Finally, we explore the relationships between governance representations and practices (Section 'Relationships'). Here, we include a wide range of governance-related practices, notably the various forms of engagement in a sustainability initiative and the ways these were cast and enacted in relation to other societal actors, but also other political behaviours such as voting in elections.

Results

Key features of representations of sustainability governance

As expected given the selection of study participants, we found overwhelmingly strong and almost consensual support for societal change towards sustainability. Some interviewees called for fundamental changes, such as the abolition of the growth paradigm. Other suggestions were rather limited in scope and referred to specific governance mechanisms, for example, food pricing and building standards.

For many interviewees, their commentary on current sustainability governance and their thoughts on other, possibly more effective approaches arose from explicit dissatisfaction with current systems and practices. Some interviewees had experienced this rather strongly as

disillusion and alienation, and where it was coupled with distrust in specific actors or structures, they often used it as an argument for a reduction in the role of these actors or structures (see examples below). However, they usually did not express these experiences in emotional terms, and only a few interviewees used words such as 'angry', 'sad', 'frustrated' or even 'worried'.

Although there was a striking diversity in our interviewees' views on existing and potential future governance arrangements, we found marked similarities in the *structure* of their arguments. We interpret these patterns as six major components of social representations of sustainability governance. Table 2 presents these components; they form the basis of our group-specific analysis in the following section.

Insert Table 2 about here

Group-specific types of social representations

Within our overall sample, a number of representations of sustainability governance seemed to converge to recognisable, distinctive 'types'. In line with the theory of social representations, these appeared to be shared within each of the study initiatives, often also with non-member interviewees in the same locality, whilst allowing individual interviewees to express variations of these representations that were not always entirely congruent.

Here, we present a selection of social representations that typify the views held in three of our study initiatives, chosen to exemplify diversity, especially with respect to the degrees to which current governance was rejected and grassroots action was seen as essential. The selection we present here is by no means exhaustive of our data, nor is it meant to be a generalizable typology of approaches to sustainability governance overall; it includes: representations of sustainability governance as emerging from government-facilitated collective action from the bottom up, which the members of the energy initiative in the Netherlands argued for; individual action, as the interviewees within and around the

Transition Town in Germany put forward; and a managerial approach, which our participants from the Scottish local authorities promoted. We loosely organised each of these analyses according to the structure proposed in Table 2 (see Table 3 for summaries and additional illustrative quotes).

Insert Table 3 about here

Building on collective action: bottom-up, with a facilitative government?

The interviewees from the energy initiative in the Netherlands (Table 3, Column 2) saw joint action at grassroots level as key to achieving societal change towards sustainability. They argued that governmental action alone was not sufficient to bring about substantial change, and that citizens should use their opportunities, take responsibility and play an active part in sustainability governance. Some interviewees backed this up with statements that criticised governmental organisations for their incompetence in fostering societal change towards sustainability. They saw citizen initiatives as stepping in where government failed, with the hope that others would consider these a role model, and that government might eventually take their cue from them.

Although our interviewees also discussed examples of individual action, they tended to see community initiatives to allow citizens to achieve things together that they could not achieve alone. However, our interviewees did not regard citizen initiatives as a replacement for traditional government but argued that grassroots action required facilitation by and support from government, including financial incentives, appropriate infrastructure and information.

I think that in the Netherlands we can do much more if the government provides financial support. More subsidies, more participation, more impulses for greening...

NL-M-#10-M-53ⁱ

However, according to some interviewees, government was ineffective as a facilitator and in some cases even did the opposite, stifling enthusiasm and progress made by grassroots organisations:

I still think that it is a success factor: Keep the government out [of your initiative's work] as long as possible, because they don't have that creativity. (NL-M-#12-M-55) Participants saw their own role as that of frontrunners who set a positive, concrete example to others, thereby mobilising their engagement for sustainability.

Individual action: that is all we can do

By comparison, interviewees in the German sample seemed profoundly disillusioned by current governance arrangements: 'I don't vote, because I have nothing to do with those people' (D-NM-#5-M-55) (Table 3, Column 3). They tended to see the entire system, including the economy, polity, society and media, manifested in capitalism and mass consumption, as set up to prevent sustainability transformations. Consequently, the entire system had to change – but given current power structures and the resulting 'lock-ins', the system was clearly not in a position to transform itself. Our interviewees thus regarded standard ways of governance, such as regulations, pricing and administrative approaches, as inadequate to achieve change.

Instead, they suggested two ways of change. First, and with small variations all in the German sample including the non-members interviewed shared this view, change had to start at the individual level. While interviewees conceptualised this as building up the 'critical mass' needed to achieve sufficient impact, they did not portray it as organised in any way, and emphasised personal freedom. The proposed approach was therefore fundamentally different from collective action:

People often focus on persuading others. Instead, they should just live the way they think is right, then others will recognize that anyway. (D-M-#14-M-40)

Education and provision of information would enable this process by fostering the knowledge base of those individuals who want to adopt a sustainable lifestyle and disseminating examples set by role models.

Second, if this process failed or did not proceed sufficiently fast, radical system change would happen quasi automatically. Several interviewees predicted a collapse of the current system if overexploitation of resources and rising inequalities were not stopped.

Key actors in this field were, apart from 'the EU' and 'government', also 'the corporations', i.e., large businesses whose only goal was to maximise profits. Political actors were the executors of this ambition. Our interviewees saw the media as in cahoots with them, too, which made it difficult for individuals to develop alternative views. By contrast, the interviewees regarded small local businesses, which could potentially play an important role in a sustainable economy, as suppressed by both corporations and governmental regulations. Local administration constrained pro-sustainability action, hampering, for example, the activities of community initiatives.

Following our interviewees, this cast of actors was embedded in an oppressive system that gave individuals, who were dependent on their salaries, consumption patterns and media-provided information, and therefore 'trapped', little room to live alternative lives.

In this vision of change starting from the individual, the interviewees regarded themselves as victims of the current governance system, but also as potential role models for the passive majority of the population that the respondents perceived as being even more stuck in the existing system.

While some of the interviewees did actively share their views with others in their initiatives, they also described how their views on sustainability governance had been part of

their lives for a long time. For many, it appeared likely that their representations already existed in a similar form before they joined the initiatives, and that they expanded and refined these views through interactions within the wider network.

A managerial approach to sustainability governance

Our interviewees in the two Scottish councils framed governance largely in relation to the role that local authorities played in the governance of societal change towards sustainability (Table 3, Column 4). The emphasis and almost exclusive attention that they gave to a managerial approach towards sustainability governance was striking. They scarcely mentioned a need for more systemic change. Instead, our interviewees saw statutory and regulatory processes, especially local planning procedures, standards, assessments and action plans, as important avenues to achieve 'less unsustainability' (SCO-M-#3-M-43).

A duty to care for the public good, localisation, trust, respect and integrity were key principles that supported this approach. However, the councils saw themselves faced by powerful antagonists. For interviewees involved in local planning, these were the large construction and development companies and Scottish Government where it overruled local planning decisions; for council staff working in other fields, these were businesses more generally and the car-based mobility culture that governed the local public. Companies could not exist 'without making money' (SCO-M-#6-F-37), so the public good was simply not in their interest. In this environment, local councils had to stand up for sustainability objectives. The concrete means to work towards such aims were, for example, the streamlining of sustainability considerations into 'procedures or safeguards to ensure that is filtered through where appropriate' (SCO- M-#5-F-45), including also the councils' own work practices and resource use:

...but yes, embedding it as much as possible – interweaving is their favourite phrase of the moment – as much as possible into everything and then a healthy way should start to come forward. (SCO-M-#5-F-45)

This also included an extremely disciplined and structured process of defining Local Development Plans, in response to expectations of the behaviour of other, antagonistic actors: as construction companies were likely to find and exploit any loophole, planners had to manage the planning process tightly with tools such as Gantt charts. In line with this, societal change was portrayed as gradual and incremental.

Our interviewees, whether directly engaged in sustainability matters (as a sustainability officer) or indirectly (in a community development role), all seemed to identify with their tasks, and strived towards greater environmental, economic and/or social sustainability:

It's trying to change things from the inside. Local Authorities have a key role in creating less unsustainable communities. So it's very much for me trying to influence things from the inside, as an officer. (SCO-M-#3-M-43)

However, they were well aware of the constraints of their approach: for example, improving building standards was much more difficult than enforcing existing ones.

A spectrum of representations: Comparison and synthesis

Drawing on our overall sample, we identified several distinct representations of sustainability governance that were shared between initiative members and, in some instances, non-members. To illustrate this diversity, we outlined three of these above. Here, we situate these in the wider spectrum of representations that we found.

Representations expressed in our Galician and Italian samples featured a combination of individual lifestyle change, grassroots collective action and education. The Italian

interviewees' representation of sustainability governance was, in many ways, similar to the one of the Dutch energy cooperative: respondents saw change as happening from the bottom up, but the support of governments, especially local government, was also important.

By comparison, in our Austrian study case where the initiatives were an explicit part of the regional sustainable development strategy and received significant support in the form of public funding and advice, representations built on the notion of a strong partnership between citizen activities and government. This was much more pronounced than in the Dutch energy cooperative, where several interviewees were very critical of the role of the government.

Although many interviewees referred to systemic change as a hope and ideal, they usually did not elaborate much. The Scottish students were possibly clearest in their argument for radical system change. They essentially equated sustainability governance with the abolition of the paradigm of economic growth, and saw environmental and social issues as intrinsically intertwined:

There is no socialism without environmentalism and there's no environmentalism without socialism. (SCO-M-#11-M-21)

The students saw activism, including their own activities in their cooperative and through campaigns, as a contribution towards change. However, while the students were clear in their overall vision, they had less firm ideas about ways towards achieving change, and effectively doubted that radical system change was likely and feasible. Current efforts were, realistically, just 'damage limitation' (SCO-M-#11-M-21), and the students recognised that it was easier to talk about radical change than to implement it. As this student, calling himself a 'theory communist', put it:

... if I was gonna be in charge of policies I'd probably be really, really cowardly and a little bit more centrist. (SCO-M-#13-M-26)

Overall, while the social representations we identified across our sample were characterised by different (combinations of) governance approaches, there were notable similarities between these representations. First, representations were built on dissatisfaction with the *status quo*, and the extent and nature of this dissatisfaction was linked to the governance approach that interviewees saw as a solution. For example, while Scottish council staff tended to believe that current governance structures just need to be improved and more strongly orientated towards sustainability objectives, German interviewees were so fundamentally disillusioned that they did not consider any structure effective any more, and instead saw individual-level change as the only possible pathway.

Second, interviewees often attributed the role of sustainability antagonist to companies, especially non-local or multi-national ones, while they ascribed the role of sustainability protagonist to various actors depending on the orientation of their representation. In most cases, citizen initiatives took this latter role, but there were also strong voices that called for individuals to act, and those who emphasised the role that local authorities could play.

Third, all study initiatives mentioned education, variously portrayed as an engine of profound value change (Galicia, Austria, Italy), a way to heal a broken society (Romania), or the means to complement, consolidate and broaden change achieved at grassroots level (Romania, Germany). However, from a critical perspective we could also interpret some of these as a way to project responsibility for change onto the next generation, as in this 19-year old's statement about how societal consumption patterns could be changed:

No, I honestly can't see anything that there is [anything we can do about this]. I think you can influence individual people and maybe teach kids and maybe hopefully something sticks in but I think on the whole it's really hard to.... (SCO-NM-#9-F-19)

Relationships between governance representations and practices

In our data from interviews and workshops, we found three types of relationships between governance representations, in particular the normative views that they entailed, and governance-related practices. First, where people had a positive view of certain governance aspects (e.g., where they felt that the role of civil society should be stronger), this was often connected to behaviours that enacted or supported this aspect in practice, a typical example being the active support of grassroots action. Second, negative views on aspects of governance could be linked to resistance against this aspect, for example, the Scottish Local Development Planner who adapted his team management to reduce the likelihood of loopholes in the development plan that self-interested businesses could exploit. Third, representation and practice could be misaligned where interviewees did not follow their own normative views. We will describe each of these types in more detail below.

Related to the first type of relationships, in those contexts where grassroots initiatives played a strong role in governance representations (including the Romanian, Spanish, Dutch Repair Café and Scottish student samples), engagement in (or even the founding of) such an initiative was a practice that clearly aligned with the interviewees' governance representations. In the Scottish Local Authorities sample, several interviewees saw themselves, in their professional roles, as actively contributing to the incremental change towards a more sustainable society that they had described.

Practices could also be related to negative evaluations of certain governance structures, usually those currently in place, and thus constitute resistance to these existing arrangements. For example, the Scottish students deliberately chose the organisational model of a co-operative as the least harmful way of trading goods within the existing (capitalist) system. One German interviewee stressed that he refused to vote, out of a strong feeling of alienation from the political system.

Governance practices and representations also often aligned – through affirmation or resistance – with respect to the ways in which ideas of a 'cast of actors' (Tables 2 and 3) were enacted, and both representations and the experience of previous practices were deeply entwined. For example, the Dutch energy initiative was initially very careful to keep all governmental actors at a distance to ensure its independence. Over time, the initiative developed a positive relationship with the municipality, and experienced them as helpful in facilitating connections and synergies with other grassroots initiatives. This experience then found reflection in a more positive view of the role of governmental actors as facilitators. By contrast, in the German Transition Town, strong disillusionment with governmental actors and the general focus on individual action (Table 3, Column 3) remained a strong constitutive element of people's relationships with other actors. At the time of data collection (2015), the Transition Town had no systematic or regular communication, meetings or even an office. There were no hierarchical relations apparent, and very little effort was put into cooperation with external actors. The flexible and informal means of communication through social media and personal contact that allowed a large degree of personal freedom suited the character of the initiative – a network of individuals and small sub-groups rather than a clearly structured group – although its strong inward focus might have come at the cost of potential impact and access to resources.

Generally, our findings illustrate the creative and dynamic edge of the governance representations of the sustainability advocates we interviewed, oscillating between the existing and the potential translation into practice. Their representations often seemed to have a creative function, working as a guiding vision that would transcend, sometimes precede and sometimes align with actual practices. Practices would adapt to representations (for example, with respect to expectations of the behaviour of other actors) and vice versa. The links between representations and practices were thus complex: while some interviewees felt their

views pre-dated their current practices and that their current social and organisational environment just offered them the opportunity to enact their representations, others developed their ideas and representations after joining a group, through interaction with others. A member of the Scottish student initiative illustrates parts of this complexity:

I think by the time I'd come into the end of my second year [...] I was very firmly hard-left, anti-capitalist, pro free education and stuff like that but I hadn't really developed much of a politic on sustainability or environmental issues as much; and I think that from stumbling in and getting involved with [the student initiative], that helped me kind of shape a bit more of a politic on why I think it is necessary for us to make a shift towards renewable energy and why it's super-important that we stop relying on fossil fuels. But that's not something that had really shaped my politics before. (SCO-M-#11-M-21)

We then explored potential tensions and conflicts between governance representations and practices, and our interviewees' responses to such tensions. Generally, through their engagement in existing sustainability initiatives, the creation of spaces and organisational forms that they saw as more sustainable (e.g., ecovillages and co-operatives) and other behaviours (e.g., refraining from voting), our interviewees enacted their representations at least to some extent, whether at the local or at the regional level. However, the more transcendent parts of people's representations reached beyond these existing opportunities and did not find reflection in reality (yet). Representations and practices were thus often misaligned: our interviewees had visions for future sustainability governance, but the arrangements that they saw as desirable were, if they existed at all, still in their infancy. Surprisingly, this misalignment did not seem to be a source of cognitive or emotional conflict, or of significant feelings of failure. Our findings on the relationships between representations and practices thus illustrate how governance representations that are

transcendent and 'visionary', i.e., that include norms that diverge from the status quo, can be important elements in processes of change. However, they also imply that there are limits to the extent to which such representations, if enacted largely through grassroots initiatives, can drive societal-level change.

Discussion

Our analysis suggests that our interviewees' ideas of sustainability governance could be usefully considered as distinctive – but neither necessarily clearly delineated nor comprehensive – representations that were shared with other, like-minded people, within and beyond the initiatives. These shared representations seemed to have developed through interactions within the initiative, and with non-member interviewees where these had contact with the initiative, but we can assume that the shared experience of a similar cultural and political background also played a role in shaping such representations.

In a data-driven, grounded way, we identified building blocks of sustainability governance representations that together made up a common structure of the representations expressed across our entire sample (Table 2). While research on social representations has to date offered little insight into recurring structural patterns of representations (see Buijs *et al.* 2008 for an exception related to representations of biodiversity), the structure we found in our data is not entirely dissimilar to the one sometimes used in environmental discourse analysis which also includes 'agents and their motives', normative judgements, and assumptions about relationships in the natural system (Dryzek 2005, Doulton and Brown 2009). We propose that the building blocks that we identified could also be useful for the deconstruction of other governance representations, including those unrelated to sustainability or environmental change.

Social representations of sustainability governance do not develop in a vacuum; they are embedded in wider societal discourses. We cannot here expand on these links, but highlight that governance representations have strong political dimensions, for example, in relation to the degree to which they evoke contestation of or collaboration with existing arrangements, which in many cases align with the discursive categories proposed by Bäckstrand and Lövbrand (2006).

We thus found conceptual similarities between discourses and social representations regarding both structure and content, but deliberately chose a social representations lens as this allowed us to take the perspective of our interviewees and focus on the ways in which they make sense of sustainability governance in sometimes incomplete and 'messy' ways.

Thereby, we begin to illustrate how a concept from social psychology – social representations – can provide fruitful insights into shared understandings of governance.

Our third research question addressed relationships between governance representations and practices in the context of change. Our findings provided us with a better understanding of the multiple and complex ways in which representations and practices are entwined, and of the role of transcendent representations in processes of change.

Interestingly, unlike Castro and Batel (2008) for legal innovation and Fischer *et al.* (2012) for everyday resource use (see also Soneryd and Uggla 2015), we did not find that misalignment between representations and practices led to cognitive or emotional conflict and related coping responses, such as discursive strategies to deal with the tension (Castro and Batel 2008). It might be that the transcendent nature of many people's representations – i.e., a reality that matched this representation did not seem to exist yet – meant that normative pressure to act in line with one's representations might have been lower than in situations where opportunities to act are already available (for example, in many areas of sustainable consumption). In addition, norms implied in these visions of change were likely to be much

more malleable and less clearly defined than those implied in top-down legal innovation (Castro and Batel 2008), and, because of their malleability, less likely to provoke cognitive or emotional conflict.

Taken together, our findings suggest that transcendent representations can act as a motivator for relevant practices, such as engagement in an initiative, when the opportunity arises. At the same time, governance representations can change through the experience of a certain practice, for example, the positive experience of collaboration with another actor; representations will also change in interaction with others. Representations and practices thus interact in producing (as well as being affected by) change. However, where practices diverge from representations, this does not necessarily lead to a strong drive to instigate *further* governance change, as such divergences seemed to be accepted. This may point to limits to the transformative power of transcendent representations held by citizens. Complementary and supporting action by other actors, such as governments, will thus be required to make larger societal change happen.

With a broader sample, including, for example, sustainability advocates from cultural contexts with more radical traditions, the emerging representations and their relationships with practices would have been even more diverse. However, our findings illustrate that in the eyes of the sustainability 'avant-garde', there are many different governance pathways to a more sustainable society. Therefore we recommend that political decision-makers actively support a range of these pathways, rather than relying on a managerial approach combined with support for only a very narrow set of community groups (Aiken 2014). Encouraging diversity might also reduce disenfranchisement and mobilise citizens beyond those already active.

Acknowledgements

We thank interviewees and study initiatives, and colleagues who contributed to the work by helping with interviews, transcriptions, coding, or through discussions, including Ines Thronicker, Mirijam Mock, Felix Rauschmayer, Ines Omann, Vlad Pandur, Fridanna Maricchiolo, Adina Dumitru, Eugenio De Gregorio, Catriona MacLeod, Moritz Petri, Karoline Weber and Eva Stede. Kirsty Holstead, Anthony Zito and two anonymous reviewers provided helpful comments on earlier versions of the manuscript. This work was part of the EU FP7-funded GLAMURS project (http://glamurs.eu; Grant Agreement #613420).

References

- Aiken, G.T., 2014. Common sense community? The Climate Challenge Fund's official and tacit community construction. *Scottish Geographical Journal* 130(3), 207-221.
- Allen, C.R., Fontaine, T.J., Pope, K.L. and Garmestani, A.S., 2011. Adaptive management for a turbulent future. *Journal of Environmental Management* 92(5), 1339-1345.
- Attari, S.Z. *et al.*, 2009. Preferences for change: do individuals prefer voluntary actions, soft regulations, or hard regulations to decrease fossil fuel consumption? *Ecological Economics* 68(6), 1701-1710.
- Bäckstrand, K. and Lövbrand, E., 2006. Planting trees to mitigate climate change: contested discourses of ecological modernisation, green governmentality and civic environmentalism. *Global Environmental Politics* 6(1), 50-75.
- Barry, J., 2006. Resistance is fertile: from environmental to sustainability citizenship. In: A. Dobson and D. Bell (Eds.) *Environmental Citizenship*, Cambridge, MIT Press, pp. 21-48..
- Batel, S., Castro, P., Devine-Wright, P., and Howarth, C., 2016. Developing a critical agenda to understand pro-environmental actions: contributions from Social Representations and Social Practices Theories. *WIREs Climate Change*. DOI: 10.1002/wcc.417

- Belz, F.M. and Schmidt-Riediger, B., 2010. Marketing strategies in the age of sustainable development: evidence from the food industry. *Business Strategy and the Environment* 19(7), 401-416.
- Bendell, J. and Kearins, K., 2005. The political bottomline: the emerging dimension to corporate responsibility for sustainable development. *Business Strategy and the Environment* 14(6), 372-383.
- Benn, S., Dunphy, D. and Griffiths, A., 2014. *Organizational Change for Corporate Sustainability* (3rd edition). New York: Routledge.
- Brown, R.R., Farrelly, M.A., and Loorbach, D.A., 2013. Actors working the institutions in sustainability transitions: the case of Melbourne's stormwater management. *Global Environmental Change* 23(4), 701-718.
- Buijs, A., Fischer, A., Rink, D. and Young, J., 2008. Looking beyond superficial knowledge gaps: understanding public representations of biological diversity. *International Journal of Biodiversity Science and Management* 4(2), 65-80.
- Buijs, A.E., 2009. *Public natures: Social representations of nature and local practices*. PhD Thesis, University of Wageningen.
- Buijs, A. *et al.*, 2012. Understanding people's ideas on natural resource management: research on social representations of nature and the environment. *Society and Natural Resources* 25(11), 1167–1181.
- Castro, P., 2012. Legal innovation for social change: exploring change and resistance to different types of sustainability laws. *Political Psychology* 33(1), 105-121.
- Castro, P. and Batel, S., 2008. Social representations, change and resistance: on the difficulties of generalizing new norms. *Culture & Psychology* 14(4), 475-497.

- Cichoka, A. and Jost, J.T., 2014. Stripped of illusions? Exploring system justification processes in capitalist and post-Communist societies. *International Journal of Psychology* 49(1), 6-29.
- Commission on Global Governance, 1995. *Our Global Neighbourhood*. Oxford: Oxford University Press.
- DeCaro, D.A. and Stokes, M.K., 2013. Public participation and institutional fit: a social psychological perspective. *Ecology and Society* 18(4), 40.
- Dietz, T., Dan, A. and Shwom, R., 2007. Climate change policy preferences: social psychological and social structural influences. *Rural Sociology* 72(2), 185-214.
- Doulton, H. and Brown, K., 2009. Ten years to prevent catastrophe? Discourses of climate change and international development in the UK press. *Global Environmental Change* 19(2), 191-202.
- Dryzek, J.S., 2005. The politics of the Earth, 2nd edition. Oxford: Oxford University Press.
- Dunlap, R.E., 1998. Lay perceptions of global risk: public views of global warming in cross-national context. *International Sociology* 13(4), 473-498.
- Fischer, A., 2010. On the role of ideas of human nature in shaping attitudes towards environmental governance. *Human Ecology* 38(1), 123-135.
- Fischer, A. *et al.*, 2011. Energy use, climate change and folk psychology: does sustainability have a chance? Results from a qualitative study in five European countries. *Global Environmental Change* 21(3), 1025–1034.
- Fischer, A. *et al.*, 2012. Climate change? No, wise resource use is the issue: social representations of energy, climate change and the future. *Environmental Policy and Governance* 22(3), 161–176.

- Glenk, K. and Fischer, A., 2010. Insurance, prevention or just wait and see? Public preferences for water management strategies in the context of climate change. *Ecological Economics* 69(11), 2279-2291.
- Herrmann, B., Gächter, S. and Thoeni, C., 2008. Antisocial punishment across societies. *Science* 319(5868), 1362–1367.
- Kollmuss, A., and Agyeman, J., 2002. Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research* 8(3), 239-260.
- Loorbach, D.A., 2010. Transition management for sustainable development: a prescriptive, complexity-based governance framework. *Governance* 23(1), 161-183.
- Lorenzoni, I. and Pidgeon, L.F., 2006. Public views on climate change: European and USA perspectives. *Climatic Change* 77(1-2), 73–95.
- Merton, R.K., 1995. The Thomas theorem and the Matthew effect. *Social Forces* 74(2), 379-424.
- Moscovici, S., 2001. *Social representations Explorations in social psychology*. New York: New York University Press.
- Omann, I., Mock, M., Polzin, C. and Rauschmayer, F. (eds.), 2016. Report on sustainable lifestyle initiatives in 7 case studies. EU FP7 GLAMURS. Available online:

 http://glamurs.eu/wp-content/uploads/2016/01/WP5_Deliverable_D5.1.pdf [last accessed 31/8/2017]
- Ostrom, E., 1990. Governing the commons The evolution of institutions for collective action. New York: Cambridge University Press.
- Selge, S., Fischer, A. and Van der Wal, R., 2011. Public and professional views on invasive non-native species a qualitative social scientific investigation. *Biological Conservation* 144(12), 3089–3097.

- Seyfang, G., Smith, A. and Smith, D.A., 2007. Grassroots innovations for sustainable development: towards a new research and policy agenda. *Environmental Politics* 16(4), 37–41.
- Schulz, C., Martin-Ortega, J., Glenk, K. and Ioris, A.A.R., 2017. The value base of water governance: a multi-disciplinary perspective. *Ecological Economics* 138, 241-249.
- Soneryd, L. and Uggla, Y., 2015. Green governmentality and responsibilization: new forms of governance and responses to 'consumer responsibility'. *Environmental Politics* 24(6), 913-931.
- Tompkins, E.L. and Amundsen, H., 2008. Perceptions of the effectiveness of the United Nations Framework Convention on Climate Change in advancing national action on climate change. *Environmental Science & Policy* 11(1), 1-13.
- Ungar, S., 2000. Knowledge, ignorance and the popular culture: climate change versus the ozone hole. *Public Understanding of Science* 9(3), 297-312.
- Warde, A., 2013. What sort of a practice is eating? In: E. Shove and N. Spurling (eds.) *Sustainable Practices*. London, Routledge, pp. 17-30.
- Wagner, W. and Hayes, N., 2005. Everyday discourse and common sense the theory of social representations. Basingstoke: Palgrave Macmillan.
- WCED (UN World Commission on Environment and Development), 1987. Our Common Future: Report of the World Commission on Environment and Development. WCED, Switzerland.
- Zapata Campos, M.J. and Zapata, P., 2017. Infiltrating citizen-driven initiatives for sustainability. *Environmental Politics* 26(6), 1055-1078.

Country (code)	Initiative (n where multiple	Interviewees	Age range
	organisations of the same	in/outside	(years)
	kind were included)	initiative (n)	
Austria (A)	Network for organic	8/5	45-60
	consumption and production		
	('Bioregion'); energy model		
	region and cooperative		
Galicia/Spain (E)	Organic food consumption	11/4	27-60
	cooperative; network for		
	responsible consumption		
	(clothing)		
Germany (D)	Transition Town movement	10/4	31-61
Italy (I)	Agricultural cooperative	7/8	28-72
Netherlands (NL)	Repair Cafés (3)	7/3	40-70
	Energy initiative	5/3	
Romania (RO)	Ecovillages (3)	7/8	30-60
Scotland/UK (SCO)	Student food cooperative	3/2	19-65
	Local Authorities (2):	4/6	
	sustainability officers		

Table 1: Sample composition (total n=105).

Component	Findings across entire sample	Sample quote
Key governance	• Focus on different governance approaches depending on social	I think that the
approaches and	context (e.g., radical system change among the Scottish student	institutions hav
instruments for	and the Galician initiatives; on individual lifestyle change in the	They can build
change	German case)	that 'things cal
	Complemented by comments on cross-cutting and supporting	M-30)
	approaches (e.g., education and information)	
	• Education as an essential component of sustainability governance,	
	but hardly ever proposed as the sole or even main approach	
Key principles	• Key examples of positive values and principles: localisation,	I genuinely thin

and values	frugality, a long-term perspective, solidarity, compassion,	Britain and in
related to	personal freedom, equity, enjoyment, enthusiasm	to change. [
sustainability	• Usually implicit, used as arguments in favour of certain	and everything
governance	governance approaches or as part of a critique of existing ones	
Cast of actors	• Typical cast: general public, policymakers, businesses, local	If there isn't a
(roles and	sustainability pioneers (e.g., their own initiative) or the local	politicians, po
interactions)	administration	their business.
	• Often described in terms of their typical behaviour, at a	
	generalised level	
Implicit	 Often complemented views on specific actors 	I don't think p
assumptions	• Could also refer specifically to people in one's own country	People are ver
about people,		have realized
human behaviour		is right. I don
and society		inherently lazy
overall		consumption.
		Romania is co
		an individualis
		because in Roi
		everybody mus
		and put food o
		30)
Social change:	While some portrayed change as a gradual, incremental process,	It can only be
Vision, how it	others used the notion of 'tipping points'	crash, when si
happens, what is	 Includes ideas of pathways of change 	anymore. No o
needed, how	• Includes descriptions of political and social mechanisms through	#4-M-57)
failure can be	which these pathways might work (or fail)	All of us could

dealt with	• Includes notions of the boundaries of achievable change	Starting from
		composed of in
		change, the en
		#8-F-38)
One's own role	• Both individually and as part of a collective	I admire that [
in governance	• Individuals both as subjects (and sometimes even victims) of	cooperate to ti
	current governance arrangements and agents of change	the governmen
		whole discussi

Table 2: Components of social representations of sustainability governance as derived from qualitative analysis of 105 interviews across seven case studies

Component	Example of group-specific types of social represent (Section 'Group-specific types')			
(see Table 2)				
, , ,	Government-facilitated collective	Individual action	A m	
	action			
Key governance	Joint grassroots action; government	Individual-level change, non-	Stati	
approaches and	support needed	organised; pro-sustainability education		
instruments for		and information		
change				
Key principles and	Innovation, creativity and freedom,	Political participation, localisation and	Cari	
values related to	citizens should have ownership of	decentralisation, equity, personal	trust	
sustainability	their own initiatives	freedom		
governance				
Cast of actors (roles	Government often ineffective or	Governmental actors: executors of	Scot	
and interactions)	even stifling, should facilitate	business interests, stifling;	over	
	sustainable choices; grassroots is	corporations: profit-maximising;	com	
	creative and citizens can and should	media: supporting governments and	auth	
	initiate change	corporations; local businesses:	publ	

suppressed; public: passive

Implicit assumptions	In the sustainability context,	Overall system is oppressive: people	Bus
about people, human	government fails, but citizens can	being made dependent, are trapped	influ
behaviour and	step in. People can be motivated by	and have little room for change	indi
society overall	inspiring examples of frontrunners.		cult
Social change:	Frontrunners: develop alternatives,	Current system prevents any change.	poin Incr
Vision, how it	are example for others. 'Second	Individual-level change, building up to	of si
	•		
happens, what is	wave' is motivated by frontrunners.	critical mass, is the only option – if	dom
needed, how failure	Government will be influenced by	this fails, system will collapse and will	avoi
can be dealt with	grassroots action.	then be able to be rebuilt in a more	"It's
	"It is mainly that they [the initiative]	sustainable fashion.	tran
	should keep looking for ways to to	"It's probably going to be governed	com
	involve the younger residents more.	by hardship. Because affluence will	thing
	And more generally, to stimulate	not help us settle this. Solidarity	impe
	residents that still do less with	among people is created by necessity.	incr
	sustainability. [] The frontrunners	And I think we are going to face this,	thing
	and then the rest. And perhaps even	also here in Germany. []	and
	broader, to the surrounding	Humankind is beyond help.	happ
	districts." (NL-M-#11-M-46)	Humankind must fall down. The	slow
		human being must lie with their face	
		in the dirt before they realise what's	
		happening. Unfortunately that is so."	
		(D-NM-#2-M-39)	
One's own role in	Initiative is frontrunner and role	Both a victim of the system and a role	Loca
governance	model	model for others	char
-			

Table 3: Overview of three group-specific social representations of sustainability governance, with illustrative quotes (see Section 'Group-specific types' for detail)

isources of quotes are labelled as follows: country code – member (M), non-member (NM) of an initiative – identifier of discussion/interview in country – gender – approximate age; for country codes see Table 1; F: female; M: male.