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Minding the Mundane: Everyday Practices as Central Pillar of Sustainability Thinking and Research

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Introduction

Global efforts to initiate sustainability transitions that reconcile economic development with the twin goals of social justice and environmental integrity have had limited success to date (Lorek and Fuchs 2013; Kropp 2015; Lorek and Spangenberg 2017). Greenhouse gases continue to rise globally, despite international efforts to halt their generation and emission (Allen et al. 2014). This is matched by rising rates of consumption of key resources such as water and energy (OECD 2013; IEA 2014). The 'Brundtland vision' for a new type of development that meets the needs of the current generation without undermining the ability of future generations to meet their needs has hit both anticipated and unprecedented obstacles since its publication thirty years ago (WCED 1987).

Debates also continue to rage about the feasibility of achieving universal human well-being at moderate energy and carbon levels, for example

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through a more equal global distribution of natural resources (Steinberger and Roberts 2010; Wilkinson and Pickett 2009; Barry 2012). For example, Wilkinson and Pickett's seminal work *The Spirit Level: Why More Equal Societies Almost Always Do Better* treats as closely interconnected the prevalence of income inequality, health and social issues and environmental impacts. Arguments also abound against the systematic externalisation of social and environmental costs of (over)development (Lessenich 2016; Brand and Wissen 2017).

What exactly is hampering efforts towards greater sustainability? Undoubtedly, prevailing social, economic and political conditions and hard-to-change systems of production and consumption are central to the puzzling persistence of 'actually existing unsustainability' (Barry 2012). However, this chapter will reveal how the inherently paradoxical nature of how sustainability is currently thought about, debated, and measured plays an equally significant role. Although the idea of sustainability is intended to offer a positive vision for a flourishing society that encourages people to take action, skepticism and inaction regarding the concept itself and its measurement have persisted. This has coincided with a significant conceptual narrowing of the sustainability agenda to politically palatable and quantifiable goals, most of them in the area of climate change adaptation and mitigation, and related sustainability assessment (SA) tools. This chapter challenges currently dominant forms of 'weak' sustainability thinking that treat as more or less easily reconcilable economic growth, human flourishing and environmental integrity and that ignore many people's experiences of a highly unequal distribution of social and environmental benefits and risks associated with projects and initiatives labelled as 'sustainable' (Barry 2012; Rau et al. 2014; Roberts et al. in this volume).

This chapter also questions the dominance of technocentric and managerial approaches to sustainability. It is argued that framing the environment as a problem to be managed by technical means has denuded the public's imagination in relation to sustainability, and has fueled public disengagement from sustainability debates, especially by those with limited technical expertise (Welzer 2013; Fox and Rau 2016). For example, current debates in Germany concerning the 'energy turn' (*Energiewende*), a suite of political, economic and technical measures intended to replace

non-renewable energy sources with renewable ones, illustrate this. Here, a heavy emphasis on economic and technical aspects (e.g. incentives for homeowners to energy-retrofit their property, R&D investment in heating and cooling technologies, expansion of wind and solar sectors) contrasts with an almost complete absence from public debate of related social issues (e.g. rent increases following energy retrofitting) or opportunities for changing energy-intensive everyday practices (e.g. driving, space and water heating). The proliferation of sustainability indicators that record public support for ecologically less harmful forms of consumption (e.g. of energy-efficient light bulbs, 'green' cars, insulation), as opposed to a radical reduction in consumption, mirrors this trend towards 'light green' managerial approaches (Rau et al. 2014).

Many technocentric and managerial views of sustainability also promote forms of SA that concentrate solely on directly measurable and quantifiable aspects of economic development and environmental degradation (e.g. CO_2 emissions reductions). An emphasis on goals such as measurable and numerically expressible reductions in greenhouse gas emissions by 2020 or 2050 or a halving of energy use, viewed by many as integral to successful sustainability transitions, exemplifies this. This mirrors Meadows' (1998, 4) observation that 'indicators arise from values (we measure what we care about), and they create values (we care about what we measure)'. Consequently, less tangible and difficult-to-measure impacts of sustainability policies and projects remain invisible, including long-term effects (Rau and Edmondson 2013; Rau 2015) and potentially negative social consequences (e.g. Dempsey et al. 2009; Rau and Fahy 2013, see also Boström (2012) on the missing social dimension in many sustainability debates). Perhaps more importantly, the persistent marginalisation in sustainability debates and assessment of non-technical, non-quantifiable sustainability solutions such as the transformation of people's everyday practices have greatly reduced the mobilising momentum of the sustainability agenda.

As a way of responding to these conceptual and methodological contradictions, this chapter proposes a redefinition of sustainability as a suite of shared socio-material practices that serve the resource-conscious (re)production of social life and a fairer distribution of the benefits of development. This redefinition is intended to encourage those who research sustainability, including environmental social scientists, to direct their attention towards

manifestations of the mundane that occur through the recurrent realisation of everyday practices by large numbers of people or 'practitioners', and their social and environmental consequences (Kammen and Dove 1996; see also Huddart Kennedy and Hauslik in this volume). This practice-focused perspective treats the local and the mundane as central to global efforts towards sustainability thinking and action.

The remainder of this chapter is divided into five sections. Second section reviews current trends in sustainability research and assessment. Recognising the growing popularity of practice theory, the chapter subsequently presents arguments for a practice-centred approach to sustainability (third section). Fourth section reflects on the benefits and drawbacks of a practice-centred approach to sustainability and its potential linkages with already established challenges to pro-growth thinking such as the degrowth perspective. The chapter finishes with a set of conclusions (final section).

Sustainability Theory and Assessment: Trends and Challenges

Debates continue about what counts as 'sustainable' and how to design tools for measuring (lack of) progress regarding specific sustainability goals (e.g. Sachs 1997; Krueger and Gibbs 2007; Khoo 2013; Rau and Fahy 2013). These regularly reveal the often paradoxical nature of most conventional consensus-oriented approaches to sustainability. For example, the often-cited Brundtland definition (WCED 1987) advocates a needs-based, intergenerational perspective that implicitly endorses a linear growth logic that equates 'development' with continuous improvements in (material) standards of living. Moreover, it adopts a 'three pillar' perspective whereby economic, social and environmental concerns are seen as reconcilable (as opposed to presenting conflicting and incompatible interests). The 'Brundtland view' thus often translates into 'light green' ideas, public discourses and policies that view democratic consumer capi-

talism and ecological sustainability as mutually compatible (cf. Lorek and Fuchs 2013; Rau et al. 2014).

This said, a broad spectrum of proposals exists for amending this consensus-oriented view of sustainability. These include human development and capabilities approaches (Khoo 2013; Nussbaum 2015), 'strong' sustainability thinking that grapples with the idea of integrating social, ecological and economic interests (Ott 2009; Lorek and Fuchs 2013) and efforts to incorporate ethical concerns (Vogt 2013; Fredericks 2014; Hannis 2015), emotions (Norgaard 2011; Davidson 2017) or a nuanced concept of power (Partzsch 2015). As early as 1997, Wolfgang Sachs critiques the oxymoronic nature of the term 'sustainable development'. In particular, he cautions against overly optimistic, consensus-oriented views that ignore the inherent conflict potential of sustainability and that lend themselves to cooption by advocates of a business-as-usual development agenda (Sachs 1997). Here, he identifies a dominant eco-modernist competition perspective that promotes the 'greening' of economic processes without fundamentally altering the capitalist system and its competition logic. This starkly contrasts with two alternative perspectives, the 'astronauts' perspective' that adopts a planetary view of sustainable development and the 'home perspective' that focuses on local sustainability solutions. Interestingly, the obvious conceptual and practical tensions between these three perspectives are rarely discussed even today.

Wilkinson and Pickett's (2009) aforementioned study also shifts attention away from a sole focus on economic growth and towards the frugal use and fair distribution of existing human and material resources. These authors argue that removing income inequality rather than indiscriminately increasing income should be the main focus of sustainable development efforts, eliminating key social and health problems in the process. Wilkinson and Pickett's perspective thus clearly departs from development approaches rooted in classical economics that uncritically assume economic growth and rising income to automatically cure many societal ills. Importantly, their work explicitly draws attention to the complex relationship between income inequality and environmental degradation, a core sustainability issue. As will be shown later in this chapter, this relationship can be fruitfully analysed through the lens of everyday practices and the wider societal conditions that shape them (third section).

Similarly, Ehrenfeld (2004) criticises business-as-usual approaches to sustainability, including more narrow efforts towards eco-efficiency, because for him these simply serve to slow down the pace of unsustainability. Calling for a paradigm shift in how sustainability is conceptualized and measured, he promotes the pursuit of 'true sustainability' that is, the 'possibility that human and other forms of life will flourish on the Earth forever' (Ehrenfeld 2004: 4). People need to be able to imagine what a flourishing society might look like and to take action to realise these ideas. 'Unsustainability is measurable; it can be managed and incrementally reduced. But sustainability—the possibility of flourishing in the future—is aspirational' (ibid.).

Yet others have advocated a radically different vision for a flourishing society that recognizes the inherent conflict potential of sustainability and that advocates radical social action, not quick technological fixes. For example, Campbell's (1996) conflict model of sustainability addresses potentially insoluble tensions between economic growth, the desire for equity and need to protect the environment. Others focus explicitly on efforts towards redistribution (of wealth, work, time, or social and ecological benefits) that require little or no economic growth (Douthwaite 1993; Parris and Kates 2003; Latouche 2009; Martinez-Alier et al. 2010; Schor 2010; D'Alisa et al. 2014; O'Neill 2014, 2015). Some steady-state and degrowth approaches also promote forms of exnovation, that is, the deliberate disassembling or discontinuation of existing unsustainable infrastructure, systems of production and consumption, or everyday practices (Kropp 2015).

Key Trends in Sustainability Assessment (SA)

Surprisingly, the question how particular sustainability concepts shape SA processes and tools has received limited attention in research and practice to date.'[I]n most cases the development of indicators has started while there are still arguments over what constitutes sustainable development' (Singh et al. 2009: 191). This has produced a large body of 'disconnected' empirical work that combines assessment methods based on potentially incompatible conceptual foundations (Rau and Fahy 2013).

To be clear, the purpose of this chapter is not to dismiss the many diverse and increasingly sophisticated efforts in the field of SA (for an overview see Gibson et al. 2005; Morrison-Saunders et al. 2015). Recently introduced indicators of (sustainable) human development such as the Human Development Index (HDI) or the Happy Planet Index (HPI) constitute promising efforts by social scientists to broaden debates about (un)sustainable development and economic growth as exclusive measure of human progress. Nevertheless, increasing diversification of sustainability indices hampers systematic comparisons across time and space. This is further exacerbated by a lack of continuity in measurement that results from large policy-making institutions abandoning old and adopting new SA tools because of financial constraints, changes in the data landscape, or successful lobbying by those who have developed new indicators.

The issue of time also remains underrepresented. In fact, the short-term or 'snapshot' nature of much conventional SA cannot adequately capture cause-effect-relationships within complex social-ecological systems that evolve over long periods of time (Rau and Edmondson 2013; Rau 2015; Lockie and Wong in this volume). For example, empirically grounded knowledge about rebound effects, that is, medium- and long-term increases in consumption that cancel out some or all efficiency gains and that may transgress sectoral boundaries (e.g. savings made through a reduction in domestic energy use being spent on a long-distance holiday) remains at best patchy.

Regarding mainstream SA efforts to date, at least seven key trends can be identified. First, assumptions about the nature of human behavior that underpin these assessment efforts have often over-emphasised the role of cognitive efforts and individuals' capacity for rational decision-making, largely ignoring structural influences and emotional aspects in the process.[1] Similarly, empirical investigations of individuals' attitudes, behaviour and choices that pay limited attention to their dependence on prevailing material, social and political conditions continue to dominate. For example, willingness-to-pay experiments that aim to capture the (monetary) value people attach to particular environmental public goods (e.g. the ocean, their local park) enjoy considerable popularity in environmental economics and psychology; however, it remains unclear what it is exactly that these experiments measure (see Yearley in this volume). Surprisingly few efforts exist to systematically examine how particular

standpoints regarding the nature of human behaviour and its measurement shape sustainability research, with significant consequences for both intra- and interdisciplinary collaborations (Rau and Fahy 2013; Pahl-Wostl et al. 2013; Byrne and Mullally 2016).

Second, there is a proliferation of sustainability indexes that compete for funding and public attention (cf. Parris and Kates 2003). For example, in 2015 the *Compendium of Sustainable Development Indicator Initiatives* (CSDII) listed 895 entries from around the world.[2] These range from ecological footprinting tools that capture specific material impacts of individual products or complex production-distribution-consumption chains to local, national and global sustainable development indicators. Similarly, a plethora of sustainability indicators is used across the European Union (EU), making comparisons rather difficult. For example, Ruddy and Hilty (2008: 91) record five main SA frameworks that vary considerably in both focus and level of application. Similarly, the proliferation of sustainability indicators that target different levels of social organization (e.g. local communities, nation-states, supranational regions) poses considerable challenges concerning comparability (Ness et al. 2007; Singh et al. 2009).

Third, a clear tendency exists towards quantification and the use of numeric sustainability indicators. For example, most sustainability indicators used by the EU, the United Nations (UN), the World Bank and the Organisation for Economic Co-operation and Development (OECD) are large-scale, quantitative and focused on the nation-state as primary unit of analysis, although the latter may be complemented by a focus on global trends. In contrast, social and environmental data collected at subnational levels feature less frequently. This is regrettable given their importance for understanding social and political action, including people's motivations for acting more sustainably within their community (Edmondson 1997; Edmondson and Rau 2008). Moreover, the power of qualitative work remains under-appreciated, despite widespread recognition that hard-to-measure qualitative aspects such as wellbeing, quality of life, or attachment to place are central to sustainability.

Fourth, there is a prioritization of environmental information, at the expense of social and cultural data (cf. Rau and Fahy 2013; Fredericks 2014). As Gaube et al. (2013) observe, the parallel development of

Material Flow Analysis (MFA), Human Appropriation of Net Primary Production (HANPP) and the Ecological Footprint (EF) has significantly advanced environmental SA. However, these three indices inadequately capture important social, cultural and political dimensions of sustainability:

> […] the indicators presented are biased towards understanding the biophysical aspects of society-nature interactions. […] Attempts to understand and measure levels of sustainability thus have to move beyond mere ecological considerations to include social considerations too. (Gaube et al. 2013: 128)

Similarly, efforts to complement more ecologically focused Life Cycle Analyses (LCA) of products, services, particular technologies or entire systems with an assessment of their social impacts (Social Life Cycle Analysis or SLCA) remain in their infancy (Jørgensen 2013). Consequently, important societal processes that influence the emergence of (un)sustainable environment-society relations remain invisible.

At the same time, many social scientists hesitate to systematically engage with the material aspects of human behaviour. For example, social-scientific inquiries into the resource implications of different time use patterns remain scarce (cf. Rau 2015 for an overview). Given the continued prominence of certain historical efforts in sociology and cognate disciplines to identify both material and socio-economic aspects of work and leisure (e.g. Veblen 1899), this seems rather surprising. Similarly, many conventional development indicators, most notably Gross Domestic Product (GDP), have ignored environmental problems arising from increased economic activity (as well as ignoring pressing social issues such as rising income inequality) (Costanza et al. 2009; Khoo 2013).

Fifth, it is possible to observe a narrowing of how environmental sustainability is defined and assessed, having become equated more or less exclusively with GHG emissions and climate change. This has led to some serious omissions, for example the lack of attention to toxicity issues in many environmental assessment tools (Gaube et al. 2013). For example, the Ecological Footprint, one of the most prominent environmental

SA tools, cannot account for pollution through toxic waste, which seems particularly problematic given that many environmental conflicts and related justice movements around the world have revolved around the release of toxins into the environment.

Sixth, many SA tools either implicitly or explicitly embrace a pro-growth perspective that views sustainable development as contingent upon the expansion of current economic activity—but without the negative environmental impacts. For example, 55 out of 895 entries in the aforementioned CSDII include the word 'growth' in their title or indicator description.[3] Similarly, per capita GDP continues to be used as a key indicator of human progress and wellbeing across many SA tools such as the UN's HDI or the EU's Sustainable Development Indicators (SDI). This is problematic for at least three reasons. First, GDP was initially conceptualized as a measure of economic activity—not an indicator of human wellbeing (O'Neill 2014). Secondly, according to Costanza et al. (2009), 'GDP measurement encourages the depletion of natural resources faster than they can renew themselves' (p. 9), thereby undermining a core aim of sustainable development. Perhaps most importantly, the current use of GDP as a linear measure of progress completely ignores the existence of thresholds whereby quality of life and wellbeing only increase up to a point as GDP increases (Costanza et al. 2009; Wilkinson and Picket 2009).

Last in the list, the increasing 'scientisation' of SA appears to curb the involvement of ordinary citizens in these measurement efforts. Significant gaps have emerged between the academic community, on the one hand, and sustainable development advocates, practitioners and communities on the other (cf. Pahl-Wostl et al. 2013; Fahy and Rau 2013; Lidskog and Sundqvist in this volume). In fact, the application of many conventional sustainability indicators such as the EU's SDI requires extensive scientific knowledge that only a small part of the population in most countries possesses. Some have gone so far to suggest that SA has developed into an activity that is reserved exclusively for those who have sufficient political and cultural capital and educational credentials to secure funding and access to necessary data (e.g. McCool and Stankey 2004). Moreover, the proliferation of sustainability indexes that require extensive data input and expertise in handling and analyzing large-scale data makes it difficult

for non-specialists to understand and interpret their results (e.g. Ness et al. 2007; Ruddy and Hilty 2008; Fredericks 2014). This further reduces opportunities for active participation by citizens, communities and many smaller NGOs in the development and independent use of SA tools.

A related topic is the need for balancing complexity and simplification. According to Fredericks (2014: 64),

> […] technical experts [*in sustainability assessment*] hesitate to endorse the most manageable indexes because they know that many nuances of the data and their relationships are lost in such simplifications. On the other hand, policy-makers often know that they need technical guidance and would prefer clear, definitive answers: the overall air quality is getting better (or worse) (Ott 1978: 6). Consequently, indicator theorists will need to balance the competing impulses for manageability and comprehensiveness […].

A growing emphasis since the 1990s on 'evidence-based policy', which emerged as part of the shift from top-down, state-led government to multi-level governance systems that involve diverse actors, revealed these tensions between complexity and simplification. Overall, balancing technically sophisticated SA processes favored by scientific experts with policy-makers', NGOs' and individual sustainability advocates' desire for comprehensible and easily communicable results remains a key challenge.

This said, commendable efforts have been made to close this gap, with academic and non-academic sustainability advocates trying to link their assessment work to the concerns of communities affected by serious threats to their livelihoods and environments (see also Fischer's chapter in this volume). For example, citizen science initiatives (CSI) have emerged worldwide that create awareness of key sustainability issues such as biodiversity loss by involving the public in the collection and analysis of environmental data. Long-standing ornithological CSI such as the annual Christmas Bird Count organised by the National Audubon Society in the US since 1899 exemplify this.

What can be learned from the observations presented in this section? It seems plausible to argue that a practice-centred view of developmental processes, especially those that happen locally and that directly affect people's daily life, could potentially reinvigorate efforts towards sustain-

ability. A focus on everyday practices might also go some way towards addressing the phenomenon of 'socially organised denial' (Norgaard 2011) that prevents collective action towards sustainability. Furthermore, qualitative and quantitative assessment tools that explicitly focus on everyday practices could provide a real alternative to current forms of SA. Here, participatory, inclusive and accessible ways of measuring the presence or otherwise of particular sustainability practices might offer a new direction for SA.

Minding the Mundane: Arguments for a Practice-Centred View of Sustainability

A growing emphasis in social-scientific sustainability research on understanding practices has brought into sharp focus people's day-to-day efforts to establish and maintain shared routines as a way of creating trusted pathways through everyday life and sustaining communities into the future (Shove et al. 2012; Huddart Kennedy and Hauslik in this volume). The implications of this 'practice turn' for social-scientific sustainability research are manifold. Conceptually, an explicit emphasis on everyday practices can help to reinvigorate debates within both academia and civil society about what a more sustainable society might look like and how to achieve it. By acknowledging people's capacities to creatively solve problems in everyday life, for example by combining established routine practices to form new ones, a practice-centred perspective is uniquely suited to advance a view of human agency as socio-materially embedded. This might encourage those engaged in these practices to reconnect with the physical environment that they inhabit and use, at least to some degree, thereby reversing a long-standing trend in most modern societies of people disconnecting from the environment (Shove et al. 2012; Huddart Kennedy and Hauslik in this volume). Moreover, choosing practices as socio-material units of analysis promotes forms of inquiry that challenge the dominance of conceptual and methodological individualism in research on environmental attitudes and behavior (Shove 2010; Shove et al. 2012; Davies et al. 2014).

A firm focus on everyday practices may also reignite public debate about what it means to live well. In fact, treating opportunities for people to adopt, change, or abandon particular practices as essential to human flourishing in an open society could present a strong counter-narrative to prevailing discourses of material wealth and consumption as a sign of human progress. In other words, a sustainable society could be reimagined as one that provides the social and material foundation for all its members to collectively engage in practices that foster social interaction, promote the frugal use of natural resources and (re)connect people to the physical environment they inhabit. This, in turn, could fundamentally reshape sustainability thinking and practice, for example by encouraging people to either take up particular practices or drop their resource-intensive habits.

Finally, a renewed interest in practices might also help to rectify the observable lack of attention to people's everyday experiences that is evident in much (green) politics today and that is partly to blame for the patchy implementation of many sustainability policies. For example, Doughty and Murray (2016) detect considerable tensions between the institutional discourse of sustainable mobility in UK transport policy and observable everyday mobility practices among families in the Brighton area. Here, 'the policy drive towards sustainable mobilities is resisted at the micro level of everyday embodied engagement because it is easily overshadowed by mundane social and material constraints and affordances' (p. 17). Their data reveal their interviewees' strong desire to manage the mundane and to solve everyday problems related to childcare, work, or provisioning, as opposed to pursuing abstract sustainable mobility goals. These insights confirm earlier pioneering work by Freudendal-Pedersen (2009) on this subject, further strengthening the case for a practice-centred approach to sustainability.

Towards Practice-Oriented Sustainability Assessment (PROSA)

A commitment to practice-oriented sustainability thinking also requires a radical change in how sustainability efforts are assessed, with tools for practice-oriented sustainability assessment (PROSA) emerging and evolving all

the time. Recent use of participatory scenario-building, visioning and backcasting techniques that involve both social scientists and non-academic actors (e.g. community groups, NGOs, 'green' start-ups) in the collective identification of long-term sustainability goals, practical steps to reach these goals, and related efforts to assess the sustainability potential of these goals exemplifies this. For example, extensive visioning and backcasting work with key actors carried out as part of CONSENSUS, a seven-year research collaboration on consumption, environment and sustainability (2009–2015), produced a suite of qualitative scenarios and 'promising practices' concerning home heating, washing and eating (Doyle and Davies 2013; Davies and Doyle 2015). This was coupled with qualitative ratings carried out by the researchers to assess the (un)sustainability of these scenarios using six new economics criteria for sustainable consumption: (1) localization, (2) reduced environmental impact, (3) community building and collective action, (4) individual wellbeing, (5) economic sustainability and (6) new infrastructures of provision. This revealed huge variations in the sustainability gains that could be made through the various heating, washing and eating scenarios identified by key actors.

It is also worth considering what some existing and widely-used sustainability indexes would look like if they were to be adjusted to focus on everyday practices. For example, the EU's SDI incorporates more than 130 indicators, including ten headline indicators: (1) real GDP per capita, (2) resource productivity, (3) persons-at-risk-of-poverty or social exclusion, (4) employment rate of older workers, (5) healthy life years and life expectancy at birth, by sex, (6) greenhouse gas emissions, (7) energy consumption, (8) energy consumption of transport relative to GDP, (9) common bird index and (10) official development assistance as share of gross national income.[4] Many of these reflect the previously critiqued preoccupation with growth-based forms of development (e.g. real GDP per capita) while others appear to lend themselves to the kind of practice-oriented restructuring of sustainability assessment advocated in this chapter (e.g. energy consumption reflecting people's routine practices). Strengthening the latter category within the remit of this widely used SA tool could substantially advance efforts to move beyond GDP. For example, SDI headline indicator 7 (energy consumption) could be fruitfully extended to incorporate information about the prevalence and sig-

nificance in society of more or less energy-intensive practices (e.g. long-distance commuting by car versus walking or cycling to work).

Wilkinson and Pickett's (2009) work offers another starting point for the development of PROSA. Through a meta-analysis of large-scale quantitative data provided by the UN, World Bank and other international institutions, these authors convincingly demonstrate the growing income gap in developed societies and define societal progress as the closing of this gap. To compare the societal impacts of per capita income and income inequality, they use an index of ten social and health problems, including life expectancy, teenage births, obesity, mental illness, homicides, imprisonment rates, mistrust, social immobility, lack of education and infant mortality. It is suggested here that Wilkinson and Pickett's index could be fruitfully extended to 'match' each of the ten health and social problems to particular everyday practices (e.g. linking obesity to the regularly consumption of highly processed food). This would also enable those who engage in these practices to relate to and actively participate in SA efforts.

Calls also abound for the development of SA tools that are easily accessible to non-academic users such as local communities. For example, Caeiro et al. (2012) observe that 'despite the diversity of tools to measure household consumption, clearer indicators are needed to more effectively communicate with the general public' (p. 72). Here, the rapidly expanding pool of online tools for recording everyday practices and resource use (e.g. apps collecting travel data, web-based ecological footprint calculators) and the availability of affordable software for data visualization provide exciting opportunities. For example, the public art element of the Tidy Street project in Brighton (UK), a local initiative to reduce domestic electricity use by transforming everyday practices, shows the communicative power of accessible and easy-to-read displays and infographics that are placed in the public realm.[5]

What does the design and application of PROSA tools mean for the scope and scale of measurement? Valid arguments exist for increasing the use of qualitative methodologies that focus on the in-depth investigation of everyday practices. For example, Gill Valentine's (1999) highly insightful study of the relationship between food preparation and consumption and the (re)production of family relations aptly demonstrates how thorough

qualitative work can reveal variations in meaning people attach to everyday socio-environmental practices. Moreover, large-scale quantitative data can reveal the spread and popularity of particular (un)sustainable practices within society, thus fruitfully complementing meaning-centred qualitative inquiry and strengthening the case for mixed-methods approaches. Overall, a strong focus on everyday practices as a central pillar of sustainability thinking and research requires a radical shift in how (a lack of) success is conceptualized, measured, and communicated. This presents many opportunities but also considerable challenges that warrant further examination.

Sustainability as Suite of Everyday Practices? Some Critical Reflections

A practice-centred approach to sustainability reclaims everyday life and people's lived experiences as central subjects of social inquiry. It also redefines what it means to live well and encourages a view of human flourishing as an existence free from impediments to well-being rather than an accumulation of (material) wealth, challenging conventional growth-based notions of societal progress in the process. This shifts attention towards existing practices and resources and the removal of obstacles to their careful and beneficial use and encourages a 'reconcretization' of the public imagination towards an experience-near view of sustainability. The question which concrete practices people would prefer (not) to engage in either individually or in their community differs fundamentally from inquiries into their own and future generations' needs and wants and their willingness to pursue more abstract sustainability goals such as intergenerational justice. Most people are well able to name concrete activities that they either support or reject (e.g. separating household waste, littering), a fact that frequently finds expression in campaigns that target specific local issues (e.g. anti-litter campaigns). However, to articulate what it is exactly that people want both now and in the future may prove much more difficult. This appears to apply to both concrete issues (e.g. what type of house people would like to buy and in which location) and more abstract ideas (e.g. what an

alternative to growth-based capitalism might look like). This apparent preference for 'the local' and 'the concrete' has considerable implications for political and practical sustainability efforts.

Naturally, calls for a 'practice turn' in sustainability thinking and research may be met with skepticism by those who (perhaps correctly) view routine practices as a root cause of actually existing unsustainability and who attribute the lack of success of sustainability initiatives to people uncritically clinging to old habits. Yet others see many established practices as deeply rooted in local cultural traditions that promote the long-term survival (or sustainability) of a community or place (Edmondson 2000), including through the frugal use of resources. Here, an altogether more positive vision emerges that connects the creative (re)configuration of locally embedded practices to broader aspirations for a sustainable society and human flourishing. Successful local sustainability initiatives such as the aforementioned Tidy Street project demonstrate the potential of such an approach. At the same time, conflicts concerning sustainability initiatives continue to revolve around people's close connection to their local area. For example, anti-windfarm campaigners in Germany and elsewhere in Europe are often accused of NIMBY (Not-in-my-backyard) thinking by those who back renewable energy generation. These accusations are deeply problematic given that 'the backyard' might be the most suitable site for individual- and community-level sustainability action. Referring back to Sachs' typology outlined in second section, it could be argued that a *practice-centred* home perspective could help avoid at least some of the limitations of localism that he critiques.

Efforts to redirect scientific and public attention towards the resource implications and sustainability potential of everyday practices and lived experiences could also halt or even reverse the growing disconnect between people and the physical environment that sustains them. Here, attempts to drastically reduce the resource requirements of everyday practices such as those pursued by voluntary simplicity, minimalist and degrowth movements in Europe and North America spring to mind. These often advocate wide-ranging transformations of human-environment relations as a solution to growth-related social and environmental problems (e.g. Schor 2010; Hopkins 2013; Lorek and Spangenberg 2017), including a radical reorganization of the economy that reduces

paid work and consumption, promotes unpaid work, self-sufficiency and voluntarism and enhances quality of life. For example, the rise in urban gardening in both growing and shrinking cities around the world (e.g. Munich, Detroit) has increased urban dwellers' awareness of manual labour and natural resource requirements associated with small-scale food production. Importantly, urban gardeners and those who acquire their produce may learn more about previously unfamiliar sustainability problems, including food security and waste, the fair distribution of food, or the resource intensity of different diets. This said, some local projects may perpetuate a rather narrow view of sustainability that largely ignores national and global issues, even though these are equally important to understanding (un)sustainability in the food sector.

Despite many promising projects and initiatives, sustainability remains a distant goal, with at least three practice-related reasons deserving closer scrutiny. First, citizens in modern societies are often discouraged from reflecting on bigger sustainability challenges that arise from their consumption of 'solutions' to both real and imagined everyday problems (e.g. disinfectants to kill kitchen germs, water filters to further clean drinking water). Here, many forms of 'green' consumption foster a rather uncritical pragmatism that leaves limited room for questioning the significance of these problems. But perhaps this problem-focused pragmatism could be utilized to promote sustainability. For example, efforts to minimize food waste in canteens and restaurants can yield significant improvements whenever they focus on solving a concrete problem or task (e.g. using a clearly marked system of bins to separate waste). In contrast, more general appeals to think and act sustainably when purchasing food are often less effective (cf. Papargyropoulou et al. 2014).

Second, a strong 'culture of problematisation' exists in public and political debate which is partly fueled by the media and which regularly draws citizens' attention to a particular 'problem' (e.g. crime, gridlock). As a result, citizens increasingly expect politicians to solve these concrete problems (rather than provide a more holistic vision for society coupled with a wide-ranging suite of policies). The resulting expansion of 'ideology-free' politics has been heavily criticized for replacing democratic principles and practices with new forms of neoliberal managerialism, including in the area of sustainability (e.g. Krueger and Gibbs 2007;

Swyngedouw 2011). This said, this preoccupation with solving everyday problems might also hold opportunities for advancing sustainability. Perhaps a reframing of global sustainability challenges such as climate change as an extensive network of smaller, interconnected problems could open up promising new solution spaces. For instance, the problem-and-solution-focused approach to sustainable development adopted by the Transition Towns movement and many *Local Agenda 21* initiatives has generated impressive levels of citizen engagement and bottom-up, collective action worldwide (Hopkins 2013).

Finally, a focus on solving concrete problems implicitly speaks to people's capacity for ingenuity, creativity and craftsmanship, much of which currently remains dormant or under-utilised because of rampant consumerism in many developed countries—aptly described by Jon Alexander (2013) as the 'great hushing of human potential'—or struggles for survival in the global South. Reframing sustainable development as a 'problem-solving project' that uses and potentially reconfigures existing practices could perhaps help to (re-)activate these capacities. The recent emergence of grassroots sustainability enterprises, sharing initiatives, makerspaces, FabLabs and repair cafes in many Western societies suggests a new wave in a long-established 'materialist' movement that emphasises *doing* as a way of both solving everyday problems and increasing local self-reliance (e.g. Schor 2014; Schlosberg and Coles 2016).

Conclusions

Much sustainability thinking to date has rested upon a consensus view of development that treats economic, social and environmental interests as compatible and reconcilable. This sharply contrasts with evidence of the often conflict-laden relationship between the desire for economic growth and societal advancement, and the need for environmental protection and frugal resource use. Moreover, many important conceptual and methodological challenges have hitherto remained unaddressed in sustainability research and assessment, with political institutions such as the UN or the EU, national and regional

governments and local communities deploying forms of SA that uncritically perpetuate the growth-dependent and 'consensus model' of sustainability. Although criticism of this model has produced alternatives such as conflict, degrowth and sufficiency perspectives and related attempts to develop new SA tools beyond GDP, many of these have yet to achieve broader recognition in sustainability research, politics and practice. Consequently, important societal processes that create, shape and lock into place (un)sustainable environment-society relations continue to be poorly understood and largely absent from public debate and policy.

This chapter put forward arguments for an alternative approach to sustainability and development that views the accumulation within society of less resource-intensive socio-material practices as integral to human flourishing. It revealed that practice-oriented sustainability thinking and assessment could provide fresh impetus for the development of more accessible and inclusive sustainability initiatives and assessment tools that are co-designed by citizens, communities, scientists and policy-makers. A critical light was also cast on current trends in sustainability research towards quantifying economic benefits and losses and environmental degradation, at the expense of meaningful measurement of key sustainability challenges such as the unequal distribution of environmental resources and threats within and across societies. Undoubtedly, exciting proposals exist for alternative SA processes and tools. However, further conceptual work is urgently needed to identify, compare, and potentially challenge the theoretical and conceptual underpinnings of existing and emerging SA tools. Overall, strong arguments exist for a radical 'broadening of the present' whereby creative solutions to sustainability challenges speak to and work with people's everyday practices, and complement rather than replace a long-term, future-oriented vision for sustainability. Removing barriers people face when trying to adopt less resource-intensive practices could support their efforts to 'manage the mundane' more sustainably. A practice-oriented approach to sustainability and the careful application of PROSA could help to identify such barriers and promising pathways, significantly advancing sustainability research, policy and practice in the process.

Notes

1. Shove (2010) offers a detailed critique of what she labels the Attitudes-Behaviour-Choice (ABC) model of human behavior. Similarly, Edmondson and Hülser (2012) offer a multi-facetted critique of excessively cognitivised ways of conceptualizing reasoning itself.
2. https://www.iisd.org/measure/compendium/searchinitiatives.aspx, accessed 14 August 2015.
3. https://www.iisd.org/measure/compendium/searchinitiatives.aspx, accessed 14 August 2015.
4. http://ec.europa.eu/eurostat/web/sdi/indicators/ (last accessed 15 April 2017).
5. https://collabcubed.com/2011/11/01/the-tidy-street-project/ (accessed 14th April 2017).

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