

2018

Developing a Unified Approach to Sustainable Consumption Behaviour: Opportunities for a New Environmental Paradigm

Vivienne Byers

Technological University Dublin, vivienne.byers@tudublin.ie

Alan Gilmer

Technological University Dublin, alan.gilmer@tudublin.ie

Follow this and additional works at: <https://arrow.tudublin.ie/buschmanart>



Part of the [Business Commons](#), and the [Environmental Health and Protection Commons](#)

Recommended Citation

Byers, V. & Gilmer, A. (2018). Developing a Unified Approach to Sustainable Consumption Behaviour: Opportunities for a New Environmental Paradigm. *European Journal of Sustainable Development*, vol. 7, no. 1, pp. 1-10. doi:10.14207/ejsd.2018.v7n1p1.

This Article is brought to you for free and open access by the School of Management at ARROW@TU Dublin. It has been accepted for inclusion in Articles by an authorized administrator of ARROW@TU Dublin. For more information, please contact arrow.admin@tudublin.ie, aisling.coyne@tudublin.ie.



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](#)

Developing a Unified Approach to Sustainable Consumption Behaviour: Opportunities for a New Environmental Paradigm

Vivienne Byers¹ and Alan Gilmer¹

Abstract

Politicians and national policy makers seek to encourage individuals to engage in a wide range of pro-environmental practices to address both discrete environmental problems and major global challenges such as climate change. Theoretically, the field of behavioural management in environmental consumption which seeks to change holarchic open human systems, is much contested. This paper proposes to develop a synthesized conceptual framework embracing a unified approach that addresses the systematic, structural, and institutional perspectives on how consumption, through public policy initiatives, can be developed and changed to reflect a deeper ecological foundation. This approach considers the debate regarding policy and behavioural change; as policies needed to enact large-scale change can often be seen as politically charged. The paper, in exploring the literature regarding the values that influence sustainable consumption behaviour in society, seeks to define the interplay of societal paradigms with regard to their influence on an individual's motivations. The aim of this paper is to add to the debate on political governance in the context of enhancing sustainability in complex adaptive social systems, and guiding the development of sustainable consumption policy towards a new environmental paradigm.

Keyword Set: Environmental Policy, Consumption, Sustainability, Society, Politics, Behaviour.

1. Introduction

Recent moves by national and local policy makers have sought to encourage individuals to engage in a wide range of pro-environmental practices to address both discrete environmental problems and major global challenges such as climate change (Barr et al. 2011). Theoretically, the field of behavioural management in environmental consumption is much contested (Hall 2013; Shove 2014). Considerable debate continues regarding behavioural change and policy learning at both an individual and societal level and the balance of responsibility between these two levels. According to Spaargaren (2011), the ways in which ordinary people deal with environmental matters requires detailed examination; in how they perceive, understand, evaluate and manage the connections between their personal lifestyles and routine consumption practices and global environmental change. Policy makers seek to gain a better understanding of these everyday consumption practices of consumers or citizens in order to reduce overall environmental impact in areas such as CO₂ transport emissions and in managing dwelling places (Dietz et al., 2009).

¹Environmental Sustainability and Health Institute, Dublin Institute of Technology, Dublin, Ireland.

The modern industry discourse in sustainability is the idea of ‘green growth’ which can be described as the paradox of a continuation of increased economic growth, at the same time as increasing sustainability (Hall 2013). For policy makers the challenge is how to encourage and sustain appropriate levels of individual behavioural change to manage consumption in a changing environment (DEFRA, 2005; 2008; Rutherford and Coutard 2014). Hoffmann (2011) questions the ‘green economy’ and posits that large-scale decarbonisation of the economy and society will only be achieved if current consumption patterns, methods and lifestyles are subject to change. However, sustainable consumption contains underlying assumptions about an individual’s capacity to act or to change their consumption patterns. These assumptions relate to both behaviour and governance, as the state utilises a range of policy measures to achieve its policy goals which are based on its beliefs regarding individual and collective behaviour (Hall, 2011). There has been a shift over time in the relationship between governments and individuals with an over-arching societal paradigm of the role of individuals as agents of change (Seyfang, 2005). Barr, et al., (2011) note that attention (policy and otherwise) in Western democracies on individuals as a means or focus to tackle environmental problems has grown. The citizen–consumer perspective has been operationalized in a number of ways to explore how individuals can be encouraged to act as agents for positive environmental change (Spaargaren and Mol, 2008). Both intrinsic and extrinsic values motivate behavioural change in individuals. Psychological theory has traditionally been more concerned with intrinsic motivation to explain self-driven behaviour such as exploration and seeking challenges, where there are no obvious external reinforcements (Amabile et al. 1994). However, it is the extrinsic values, those that include an individual’s cognitive assessment of effort as a means to some extrinsic end, that have been to the fore in managing consumption in society (Hall 2013).

This paper has two objectives, the first, is to explore the literature regarding the values that influence sustainable consumption behaviour in society and to identify core societal paradigms with regard to their influence on an individual’s motivations. The second objective is to posit a synthesized conceptual framework, embracing a unified approach to address systematic, structural, and institutional perspectives on how consumption, through public policy initiatives can be developed to reflect a deeper ecological foundation. In addressing the first objective, Hall’s (2013) framework of behavioural approaches to governance of sustainable consumption will be used to explore the literature: the utilitarian; the social/psychological; and the systems of provision/institutional approach. These inform the selection of policy tools to change behaviours, different modes of governance and act as policy paradigms or belief systems (see also Seyfang, 2011). The first, the utilitarian approach underlies much contemporary neo-liberal economic policy (Bone 2010). It is based on the belief that individuals consume goods and services in free markets with perfect competition and information to decide a course of action that delivers the greatest personal utility. This affords an opportunity to micro-focus on the inconsistency of consumer attitudes and behaviours. The second approach, the social/psychological model includes both behavioural economics and social marketing and has emerged as a critique of the first approach. This approach considers the role of the individual within society as a citizen-consumer.

Behavioural economics stems from the belief that individuals ‘satisfice’ by choosing options that satisfy most needs but are not individually optimal (Simon 1965). This has resulted in the growth of ‘nudging’ which seeks to configure a choice array in a policy instrument for citizens so that they are steered towards making positive decisions for society while preserving individual choice (Alemanno 2012; Hall 2013). The main focus of behavioural change from a consumption studies perspective is via the tool of social marketing which utilizes softer powers to build public awareness and change behaviour through the gradual establishment of new, and collectively held, behavioural norms (Jones et al 2011). Again this approach is not without its critics as being paternalistic and without regard to the individual’s context (Shove 2010, 2014). The third approach is the systems of provision/institutional approach (socio-technical) which considers individual psychological factors and values within the context of the systems, standards and norms under which individuals operate (Prothero, 2011, Hall 2013, Higham et al 2013). According to Moloney et al. (2010) this is fundamental to the development of successful strategies and policies to shift towards sustainable consumption. This approach addresses the systematic, structural, and institutional perspectives on how institutions, through public policy initiatives, can begin and sustain change towards sustainability in the future. It considers the values both intrinsic and extrinsic of the individual within a context of the constraints and norms of institutions and wider society.

This paper will function as an overview of these current approaches in the field of environmental consumption and behavioural management, and summarise some of the key arguments and developments. These will be framed under the headings of the three approaches outlined: the utilitarian; the social/psychological; and the systems of provision/institutional approach. The paper will conclude with a synthesized conceptual framework embracing a unified approach that addresses the differing perspectives on sustainable consumption through public policy.

2. The utilitarian approach (Neoliberal discourse)

The utilitarian approach to behavioural change utilizes a conventional neo-classical microeconomic view of consumption by individuals as rational utility-maximizers (Hall 2013). Varman and Vikas (2007) describe the neoliberal belief that markets, without institutional intervention in the main, and operating in an unfettered global order, are theorized to lead to the most efficient distribution of resources and to optimize societal welfare. However, several macro-marketing scholars have questioned the efficacy of markets controlled by private enterprise, in ensuring consumer well-being (Varman and Vikas 2007; Prothero et al 2011; McDonagh and Prothero, 2014). According to Hall (2013) the neoliberal belief is that promotion of sustainable consumption relies on the intervention of government to correct ‘market failure’ and to ensure that individuals both private citizens and corporate entities have access to greater information to inform their decisions. Thus, the argument is that educating and equipping consumers with information to overcome information deficits will ensure that actors will behave in a rational way. However, the evidence is to the contrary, as access to information and education regarding climate change and sustainable consumption has

not led to significant changes in sustainable consumption behaviour (Gadenne, Sharma, Kerr and Smith, 2011).

Bone (2010) eloquently describes how long-term rational planning and organization at national and global level has receded in favour of a 'fatalistic reliance' upon market mechanisms to control economic and wider public affairs in a manner which exposes everyday lives to the unpredictability of unfettered market fundamentalism. Globally, at national government level, strategic planning practices are increasingly guided by neoliberal political agendas (Gadenne, et al., 2011). This has been marked by an extension of managerialist control within both the private and public sphere, which has intensified systems of bureaucratic organization, particularly focused on achieving narrowly defined goals over short time scales (Oleson, 2014). Many neoliberal reforms in the public sector have been driven by a New Public Management (NPM) ideology and as such, their implementation has often been problematic, as the ambiguity of the ends they seek are often problematic in themselves (Rein 2006). These NPM driven reforms often function as legitimating devices, thus appearing egalitarian and in the best public interest (Lapsley 2001).

However, recent global crises (e.g. banking, austerity, economic and health inequality, climate/environmental change, and immigration flows) have led to questioning of the neoliberal agenda, as belief in the markets has led to outcomes such as growing political unrest and reduced trust in government. Despite these developments, there has been an 'increasing normalisation of neoliberal practices and concepts' in political economy that continues to hold sway (Olesen, 2014, see also Harvey 2005). Bone (2010) avers that this 'anti-human' neoliberal hegemony must be vigorously challenged in favour of something better.

Khan (2015: 59) quotes a speech by the Irish President Michael Higgins in 2013, reflecting on the devastating effects of neoliberalism on Europe, in which he observes that:

'The current state of the European economy, with .. increasing inequality, is a source of concern, ... and that the problem might not lie so much in a lack of the right answers to this most recent crisis of capitalism, as in an absence of the right questions?'

He notes that it is important that we recalibrate our focus from that of the economy to that of society, and ensure that neither growth nor 'development', but rather formation of what can be termed as 'good societies', as in entities that nurture and thrive on values of equity, empathy, social justice and environmental sustainability constitute the end goal of all public action (Khan 2015: 55). To that end the neoliberal agenda casts a very long shadow on 'green growth' based on enhanced material/resource/energy consumption efficiency and drastic changes in the energy mix, as the transformation required goes beyond innovation and structural changes to include the need for democratization of the economy and cultural change. Hoffman (2011) calls into question market structures which are actually complicating the 'green' transformation of economies.

3. Social/psychological approaches: nudging and social marketing

In response to the failure of neo-classical economic models to significantly influence sustainable consumption behaviour, there has also been recognition that availability of better quality information does not change behaviour (Whitmarsh, 2009). This critique has come from two social/psychological sources; behavioural economics and consumption studies (Hall 2013).

The basis of rational decision making is that when an individual is faced with a decision, they seek complete knowledge of the situation, identify all relevant options in an unbiased manner and then seek the highest utility for their choice. Behavioural economics and the influence of behavioural science recognizes that individuals do not act in this manner; instead they revert to familiar heuristics to process information more easily in decision making. This can be due to limited attention, in that they don't always read the relevant details. The process can be affected by an individual's inertia and a 'present' bias; in that the consequences of a decision for their future state is not considered, such as chronic illness if exercise isn't taken, or a reduced pension if payments to a plan are deferred. Behavioural economics also recognizes that decision making is influenced or constrained by the role of social norms and routines including notions of community and fairness in economic outcomes (Folmer and Johansson-Stenman, 2011). Thus, individuals limit their information search, as information overload can lead to subsequent difficulties in decision making, although they recognize the importance of their decisions or actions for wider society (Seyfang 2011). As a result the concept of bounded rationality underpins behavioural economics, in that individuals engage in satisficing behaviour where they choose an option that satisfies most needs with a limited information search, but it is not the optimal solution (Simon, 1965). This research focus is nothing new and satisficing has long had explanatory influence in the areas of public administration and public policy. However, it has now assumed renewed significance with respect to sustainability and the challenges of climate change (Thynne, 2008). It has also become an underlying dimension of the increasing interest of behavioural economics in "nudging" (Thaler and Sunstein, 2008).

Jones, Pykett and Whitehead (2010) describe nudging as a collection of techniques of government-sponsored behaviour change, which they collectively refer to as soft or libertarian paternalism. These approaches are beginning to be used to replace traditional modes of state action and open up new registers of legitimate governmental activity. The focus of nudging is in reconfiguring the choice architecture of consumers or individuals to encourage beneficial decision-making in areas such as food consumption (obesity), energy conservation or reduction in emissions. The goal is to steer individuals towards making positive decisions for themselves and society whilst still retaining individual or personal choice. Policy makers can thus organize the architecture of choice through managing the context, process and environment for individual consumers to influence their decision making (Alemanno, 2012). A policy qualifies as a nudge if it strategically uses cognitive biases in order to make a change in the choice architecture or environment for individual decision making. However, it must not restrict individual

choice and is used in the interest of the individual (Hall 2013). According to Sunstein (2014, 2017), this can include ten nudge options for action:

- [1] Default rules – e.g. automatic enrolment in programs, including education, health, savings, environment
- [2] Simplification – e.g. reducing complexity to avoid confusion in form filling, website navigation.
- [3] Information/disclosure – e.g. information regarding economic or environmental costs associated with energy use.
- [4] Warnings - e.g. graphic warnings on cigarettes or for dangerous driving
- [5] Reminders – e.g. for delinquent tax payers. Timing is key to this strategy
- [6] Increases in ease and convenience – e.g. shelving healthy foods at eye level
- [7] Use of social norms – emphasizing what most of the population does; e.g. nine out of ten hotel guests reuse their towels.
- [8] Non-monetary rewards - recognition of some kind.
- [9] Active choosing/ prompted choice
- [10] Pre-commitment strategies – e.g. people commit to a certain course of action, such as smoking cessation.

Across the globe, governments are incorporating behavioural economics into the design of more effective policy solutions (Madrian 2014). In the UK nudging has become core to the policy work of the Conservative government. David Cameron was an advocate of Thaler and Sunstein's (2008) book; *Nudge*. Cass Sunstein himself was head of the Office of Regulatory Affairs in the Obama administration (2009-2012). A well-known UK initiative is the Behavioural Insights Team referred to as the Nudge Unit. They describe their mission as using insights from behavioural science to encourage people to make better choices for themselves and society. Initially set up by the UK government they now describe themselves as a social purpose company partly owned by the Cabinet Office, employees and Nesta (a charity). Their success has been in devising, implementing, and testing or trialling new approaches to achieving policy goals in domains ranging from health behaviours to unemployment to energy conservation (Behavioural Insights Team 2010; Hallsworth and Sanders 2016). Several countries, including Ireland, are using their model to inform their own efforts to implement more behaviourally informed approaches to policy design. More recently, with the support of academics and private consultants the Irish Behavioural Science and Policy Network (IBSPN) has been set up. Its aim is to bring together the thinkers and doers of behavioural science in Ireland, in order to share, discuss and debate how behavioural insights can, and should be applied in the business, academic and public policy arena. Agencies of the state are using 'nudging' to improve use of public services such as the Irish Commission on Taxation which has examined and employed a number of ways to improve the tax system; simplifying tax communication and collection mechanisms.

Sunstein (2014) describes nudges as a form of soft paternalism, as they steer people in a certain direction. However, he argues that they are specifically designed to preserve full freedom of choice. He uses the analogy of a GPS (geographical positioning system) that

guides people in a certain direction, yet they remain free to select or adjust the route. He emphasizes that some kind of social environment (choice architecture) influencing people's choices is always in place. His argument is that libertarian paternalism is paternalistic only to the extent that it tries to 'influence people's behaviour, in order to make their lives longer, healthier, and better' (Thaler and Sunstein 2008: 5). He argues that choices are not limited or blocked, as putting fruit at eye-level is a nudge, but banning junk food is not.

However, there are a number of criticisms of nudging; the first is that it assumes the individual is somewhat incapable or limited in capacity and essentially excluded from the behavioural change process, rather than having the ability to reflect on a wide range of public policy choices (van der Linden 2012). Public activists have seen nudge as being manipulative and a form of mind-control. Also, researchers have argued that the effects of 'nudges' are marginal, relatively short-lived and don't really address core issues such as the complexity of health behaviours, due to their simplicity. These tools of government are now being used by private industry to manipulate consumer behaviour and as such, are not always oriented towards people's well-being and development. A balance between individual responsibility versus the responsibility of government for society needs to be struck.

4. Systems of provision/institutional approach – Socio-technical approach

It is the extrinsic values, those that generally include an individual's cognitive assessment of effort as a means to some extrinsic end, that have been to the fore in managing consumption in society (Hall 2013). McMeekin and Southerton (2012) note that the focus on changing consumer behaviour has offered a much less expensive route for governments to attain sustainable societies, than investment in infrastructural technology development and implementation. However, a sustainable future cannot be achieved by relying solely on initiating 'bottom-up' changes in individual consumer behaviour, as macro-institutional approaches to sustainability in research and policy, are vital (Prothero, et al., 2011). Moloney, et al., (2010) note that appealing to an individual's more 'intrinsic values' such as personal growth and community involvement lead to more successful outcomes. Thus, this introduces social norms into the equation, recognising that behaviour is socially constructed, and therefore needs to be considered at the collective or societal level. This perspective is identified in the work of the new institutional theorists who link the macro environment and its varying norms or logics, to the micro practices of individuals or groups as they manage conflicting societal logics (Micelotta et al, 2017). It also acknowledges the relevance of social values as a step forward in the behaviour change endeavour

Adding to the debate; Shove (2014) argues that efforts to promote more sustainable patterns of consumer behaviour draw upon a remarkably narrow range of conceptual resources. She proposes the need to examine the potential and relevance of alternative paradigms, especially those in the area of practice theory, that lie outside the dominant discourses and traditions of economics and psychology. She notes that currently social

science that is considered policy relevant is consistent with a dominant paradigm organized around theories of individual attitude, behaviour and choice. In practical terms, the priorities that matter when the aim is to promote pro-environmental behaviour are quite different to those that pertain when the goal is to reconfigure the practices that people reproduce. Both Phipps and Ozanne (2017) and Gram-Hassen (2011) advocate practice theory as a promising approach, in that it shifts focus from the individual consumer towards the collective aspects of consumption, and from conspicuous dimensions of consumption, towards routine taken-for-granted practices and mundane aspects of consumption, that form part of everyday life making people feel secure. Phipps et al. (2013) advocate the perspective of social-cognitive theory to examine how behaviour can influence both personal and environmental factors and, in turn, affect future behaviours and optimise environmental sustainability.

In examining the influence of the macro-environment, socio-technical theory takes into account the interaction and intertwining between systems and individual practice (Geels, et al., 2015). A significant amount of research has accumulated over the last decade, indicating the importance of understanding the role of context and technology in shaping behaviour relating to energy consumption and, vice versa, the role of behaviour and routine in shaping the use of energy-related technologies (Shove, 2010; Moloney, et al., 2010, Phipps et al, 2013). A socio-technical framework situates technology and technological innovation in the social contexts in which they emerge. It explores how and why a particular society or context shapes or generates the technologies that are produced. In this framework, the analysis is not on the rational consumer, and it does not take social standards and expectations as a given, rather, it is iterative in that it seeks to interrogate the construction of the interaction of technology and the consumer, and its ongoing reconstruction. Thus, it seeks to examine the implications for the social practices of consumption. For example, in the context of energy related consumption; there is a dynamic relationship between agents in the 'utility sectors' who provide energy, water and waste services, and the consumers of those services. Thus, according to Strijbos (2006:367);

“actions and ways of using technology are conditioned by the context and steered by common ‘practices’ that take on a definite form in social interaction”.

The concept of ‘practices’ in socio-technical analysis is used, as opposed to that of behaviours, reflecting a rejection of the focus on individually focused behaviour change but rather on the importance of the collective or social context shaping, framing and often constraining daily actions. Practices are embedded in a range of sociotechnical systems which constitute a diversity of institutions, regulations, infrastructures and technologies (Moloney, et al., 2010). McMeekin and Southerton (2012) stratify the approach in to three levels: the social relations of consumption; co-dependent changes in production and consumption; and, technologies, practices and consumption.

Moloney, et al.,'s (2010: 6-7) review of behaviour or practice change and the socio-technical approach in understanding energy consumption, identified five core themes for mobilisation:

- (i) framing behaviour and social practices: the importance of 'intrinsic' and 'extrinsic' values, in that an activity which upholds intrinsic values such as personal growth or community involvement is more likely to lead to a higher level of engagement than those that appeal to extrinsic values;
- (ii) beyond barriers and constraints: factors identified as barriers and constraints relate to enabling routine and habit formation, which is set in the social contexts in which individuals live and their sense of control or agency;
- (iii) approaches to empowerment: important psychological factors motivating behaviour and are derived from both internal and external variables such as a person's education, income and social status;
- (iv) the need for systemic change: the wider view, individual behaviour change strategies are inappropriate if macro conditions exist which contribute to the problem;
- (v) the path forward through learning and integration: the impact of social learning in communities can be significant in changing people's behaviour and motivating them into action.

According to Geels, et al. (2015), the socio-technical approach recognizes the importance of a multi-level viewpoint; in that consumer practices are part of wider systems. These systems are reproduced by many actors (organisations, policymakers, universities, consumers, wider publics), whose actions and beliefs are shaped by existing institutional regimes (regulative, cognitive, and normative rules). These socio-technical systems can be hard to change because of taken-for-granted rules, policies and institutions, as well as resistance by actors using power and politics to stabilize existing systems. (see also Scott et al, 2000 in health policy). According to Hall (2013), the socio-technical approach compared to the other two approaches outlined in this paper, provides a profound critique for a number of reasons. Firstly, positioning the problem of sustainable consumption as a problem of personal choice fails to appreciate the socially situated and structured nature of consumption. Secondly, a focus on the end consumer obscures important questions about the design of choice options and their relationship to demand and use. Finally, it suggests that socio-technical systems, institutions and structures are not neutral, in that their formation and constitution is likely to influence behaviours and practices in one direction more than others. As Geels et al (2015: 4) note, contemporary environmental problems can be seen as symptoms of deeper (sociocultural and politico-economic) problems in modern capitalist societies, particularly the pre-occupation with economic growth and over-consumption.

5. Pressures and public policy solutions

Pressures

The aim of this paper was to seek an approach and outcome that integrates core societal paradigms in the synthesis of a new framework that can develop and sustain change in consumption behaviour towards future sustainability. The challenges to sustainability and

sustainable development have been amplified by the continued growth of the global economy (McDonagh and Prothero, 2014). Therefore, the problems related to unsustainable consumption are growing, and the approach to addressing them must become more intentional, comprehensive, and systematic (Prothero et al. 2011). According to Dunlap and Van Liere (1978) a key challenge to green governance, sustainability and sustainable consumption has been the dominant social paradigm (DSP), which can be characterized by a belief in unlimited abundance and progress, materialism, faith in the power of technology, minimal government intervention, and unlimited private property rights which greatly defines our neo-liberal discourse (see also; Prothero et al., 2011; Kilbourne, et al., 1997).

In the Irish and wider European context there is a call for improved governance across all sectors in order to manage sustainable consumption (Sustainable Future, 2012; Healthy Ireland (DOH) 2013; OECD 2011; Europe 2020 Strategy 2010). The link between sustainability and health and well-being has been explicitly set out (Haines et al 2012). A clear need has been identified to create an environment where every individual and sector of society can play their part in achieving a 'good society'. This can only be done through society-wide involvement in, and engagement with, cross-sectoral sustainability linking environment, economy and human health.

Public policy solutions

The importance of recognising the interconnected nature of environmental systems and the inevitability of limits to growth is paramount (Prothero et al., 2011). Therefore, it is particularly important to generate evidence, review existing practices, and further inform public policymakers in order to adjust the practices associated with sustainable behaviours, whether at the institutional or individual level. Additional research has highlighted the importance of information, public participation (Agyeman and Angus, 2003), communications and transparency at state and wider societal level (Peattie & Peattie, 2009; Loer, 2016).

In 1978 Dunlap and Van Liere posited that the solution to recognising the interconnected nature of environmental systems rested with a quantum shift from the dominant social paradigm (DSP) to a new environmental paradigm (NEP) (see also Dunlap, 2002; Dunlap 2008). They argued that the NEP was a response to society's fundamentally anti-ecological DSP which required replacement by a more connected and realistic world view if 'ecological catastrophe' was to be avoided. Over time, according to Thomson (2013), Dunlap and his colleagues have revised the New Environmental Paradigm to form a more comprehensive New *Ecological* Paradigm (NEP) incorporating a greater range of eco-centric views. According to Dunlap (2008), the ecological worldview, the NEP, has diffused more slowly in society than would have been expected. Though paradigm shifts observed in disciplines such as science can be slow, where often researchers and practitioners do not easily abandon their views despite evidence. He observes that defenders of the DSP also bring extensive resources to bear in responding to challenges to their hegemony. This is particularly worrying at present, in the context of what has been described as a 'post-truth' society (Wang, 2016, Suiter

2016), in which the use of ‘alternative facts’ holds sway; described as a willingness to persevere with a particular belief, due to ignorance of, or a total disregard for reality. In this context, Strong (2017) warns that if empirical evidence holds no persuasive value, it renders rational debate difficult. From an ecological point of view, authoritarian populism and its effect on political commitment to the UN Paris Climate Agreement (2015) is of concern.

This paper has presented a summary of a ‘triangulated review’ using Hall’s (2013) framework of the utilitarian, the social/psychological and the systems of provision/institutional approaches to managing consumption behaviour (see also Seyfang, 2011). This is a step towards developing a novel systems based NEP approach. It draws from an understanding of the intrinsic dimensions and motivations of consumer behaviour, as in Kollmus and Agyeman’s (2002) concept of ‘pro-environmental consciousness’ seen as an amalgam of environmental knowledge, values, and attitudes, together with emotional involvement. This is in turn embedded in personal values and personality traits shaped by internal, as well as external factors. This behaviour is also constrained by the DSP, where economic growth and scientific and technological progress are seen as capable of solving all problems. Fuchs (2017) notes that a key requirement for an NEP approach is citizen driven governance where the dimensions of sustainability are understood as nested within wider society; economy culture and nature. To this end, a conceptual model is proposed as a template to advance a NEP, drawing from this review of literature, and in particular, the work of Fuchs (2017), Kollmuss and Agyeman (2002), Phipps et al. (2013), Phipps & Ozanne, (2017) (see below). In a European context this can address national and international policy set out in key documents (Sustainable Future 2012; Towards Green Growth OECD 2011; Europe 2020 Strategy, SOER 2015). It endeavours to foster development of cross-sectoral sustainability policy and address the gap in understanding between current monitoring//indicators and consumption behaviour. In so doing, it aims to provide the consumer-citizen and policy maker with additional mechanisms to take action. Thus, it seeks to establish greater participatory consumer citizenship in the formulation of environmental policy (Menegat, 2002) and to deliver a more tractable process for sustainable policy implementation.

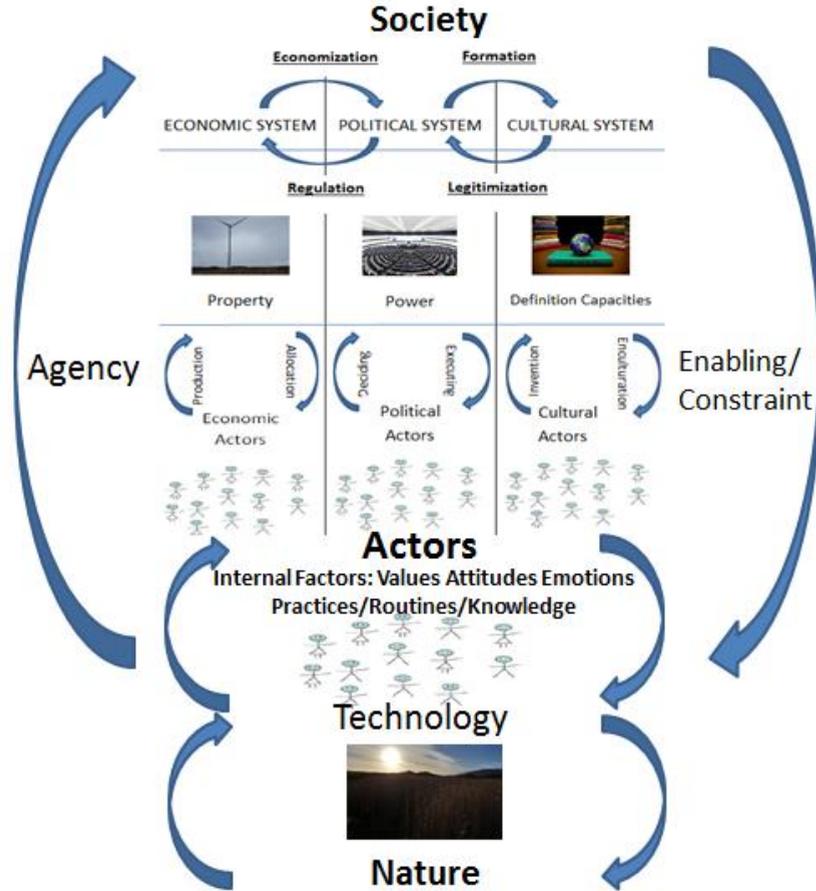


Figure 1: Pro-environmental behaviour nested within societal subsystems (adapted from Kollmuss and Agyeman 2002: p257, Phipps et al 2013, and Fuchs 2017: p11-12).

Conclusion

The aim of this paper was to give a targeted review of the literature in sustainable consumption. The task was to gain further understanding of the values and motivations that influence consumption behaviour and sustainability. These consumer values, both intrinsic and extrinsic are discussed against the backdrop of a society dominated by a neo-liberal philosophy which places greater emphasis on extrinsic values, and by behavioural approaches that expound positive attitudes toward sustainability, but exhibit mostly unsustainable consumption patterns (Prothero et al. 2011). The paper utilized Hall’s (2013) framework of behavioural approaches to assist in understanding the current attitudes to governance of sustainable consumption. These three different approaches inform the selection of policy tools to change behaviours, but are also related to different modes of governance and act as policy paradigms. Hall (2013) reminds us of

the failure to recognise the importance of social structures in affecting behaviour which has created a path dependency in which solutions to consumption are only accepted within the dominant governance and behavioural paradigm. This needs to be challenged.

This review is the beginning of a journey that seeks to resolve and contextualize the dynamics of governance and sustainable policy on the one hand and a systems description of consumption, consumers and consumer-citizen behaviour on the other. It aims to fill an identified policy action gap. The public policy system and much of the research that feeds into it is not necessarily conducive to breakthroughs and rapid paradigm shift (Hall 2013). From a sustainability perspective, consumption patterns need to be studied as they exist within the larger societal and global fabric. The changes required for sustainability in its widest sense may become politically charged, as ‘expand or perish’ is an inexorable force in a capitalist economic system (Hoffman 2011). The contradiction of seeking to influence the consumption patterns of the citizen-consumer whilst capitalist actors seek continued increases in sales and profits, with no interest in societal benefits is clear. Hoffman (2011: 9) cites the chief economist of the International Energy Agency (IEA):

“potentially, we are already with our feet in water, reaching the level of our knees. Yet we make decisions and keep promising that our toes will remain dry”

Thus, there is a recognised need for a new sustainable model and the development of a new global agenda. Indeed, Spaargaren (2011) calls for the development of new forms of environmental authority, beyond nation states, in order to bring about effective forms of global governance for sustainable consumption in a new world order. This study provides a conceptual road map and adds to the momentum that will drive this process forward.

References

- Agyeman, J. and Angus, B. (2003). The Role of Civic Environmentalism in the Pursuit of Sustainable Communities, *Journal of Environmental Planning and Management*, 46(3), 345–363
- Alemanno, A. (2012). Nudging smokers – The behavioural turn of tobacco risk regulation. *European Journal of Risk Regulation*, 3(1), 32–42.
- Amabile, T. M., Hill, K. G., Hennessey, B. A., and Tighe, E. M. (1994) The Work Preference Inventory: assessing intrinsic and extrinsic motivational orientations. *Journal of Personality and Social Psychology*, 66(5), 950.
- Barr, S., Gilg, A., and Shaw, G. (2011) Citizens, consumers and sustainability: (re) framing environmental practice in an age of climate change. *Global Environmental Change*, 21(4), 1224–1233.
- Behavioural Insights Team (2010) "Applying behavioural insight to health." London: Cabinet Office (2010).
- Bone, J.D. (2010). Irrational capitalism: The social map, neoliberalism and the demodernization of the West. *Critical Sociology*, 36, 717–740.
- DEFRA Department for Environment, Food and Rural Affairs (2005) *Changing Behaviour through Policy Making*. London: The Stationery Office,
- DEFRA Department for Environment, Food and Rural Affairs (2008) *A Framework for Pro-Environmental Behaviours*. London: The Stationery Office.
- Department of Environment, Community and Local Government (2012), Our Sustainable Future, Department of Environment, Community and Local Government. Retrieved July 10, 2017

<http://www.environ.ie/en/Environment/SustainableDevelopment/PublicationsDocuments/FileDownload,30452,en.pdf>

- Department of Health (DOH) (2013) *Healthy Ireland: a framework for improved health and wellbeing 2013 – 2025*. Dublin: Stationery Office.
- Dietz, T., Gardner, G.T., Gilligan, J., Stern, P.C. and Vandenberg, M.P., (2009). Household actions can provide a behavioral wedge to rapidly reduce US carbon emissions. *Proceedings of the National Academy of Sciences*, 106(44), 18452-18456.
- Dunlap, R.E. and Van Liere, K.D., (1978). The “new environmental paradigm”. *The Journal of Environmental Education*, 9(4), 10-19.
- Dunlap, R.E. (2002). Paradigms, theories and environmental sociology. In R. E. Dunlap, F. H. Buttel, P. Dickens, and A. Gijswilt (Eds.), *Sociological theory and the environment: Classical foundations, contemporary insight* (pp. 329-350). Boulder: Rowman and Littlefield.
- Dunlap, R. E. (2008). The NEP Scale: From marginality to worldwide use. *Journal of Environmental Education*, 40(1), 3-18.
- European Commission (2010) *Europe 2020: A European strategy for smart, sustainable and inclusive growth*. Brussels: European Commission
- Folmer, H. and Johansson-Stenman, O., (2011). Does environmental economics produce aeroplanes without engines? On the need for an environmental social science. *Environmental and Resource Economics*, 48(3), 337-361.
- Fuchs, C., (2017). Critical Social Theory and Sustainable Development: The Role of Class, Capitalism and Domination in a Dialectical Analysis of Un/Sustainability. *Sustainable Development*. DOI: 10.1002/sd.1673.
- Gadenne, D., Sharma, B., Kerr, D., and Smith, T. (2011). The influence of consumers’ environmental beliefs and attitudes on energy saving behaviours. *Energy Policy*, 39, 7684–7694.
- Geels, F.W., McMeekin, A., Mylan, J. and Southerton, D., (2015). A critical appraisal of Sustainable Consumption and Production research: The reformist, revolutionary and reconfiguration positions. *Global Environmental Change*, 34, 1-12.
- Gram-Hanssen, K., (2011). Understanding change and continuity in residential energy consumption. *Journal of Consumer Culture*, 11(1), 61-78.
- Haines, A. Alleyne, G. Kickbusch, I and Dora, C. (2012) From the Earth Summit to Rio+20: integration of health and sustainable development. *The Lancet* 379, 2189–97.
- Hall, C.M., (2011). Policy learning and policy failure in sustainable tourism governance: from first-and second-order to third-order change? *Journal of Sustainable Tourism*, 19 (4-5), 649-671.
- Hall, C. M. (2013) Framing behavioural approaches to understanding and governing sustainable tourism consumption: beyond neoliberalism, “nudging” and “green growth”? *Journal of Sustainable Tourism*, 21(7), 1091-1109.
- Hallsworth, M. and Sanders, M., (2016). Nudge: Recent developments in behavioural science and public policy. In F. Spotswood (Ed) *Beyond Behaviour Change: Key Issues, Interdisciplinary Approaches and Future Directions*, Bristol: Policy Press.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. Oxford, UK: Oxford University Press.
- Higham, J., Cohen, S. A., Peeters, P., and Gössling, S. (2013). Psychological and behavioural approaches to understanding and governing sustainable mobility. *Journal of Sustainable Tourism*, 21(7), 949-967.
- Hoffmann U. (2011) *Some reflections on climate change, green growth illusions and development space*, UNCTAD Discussion Paper No. 205. Geneva: United Nations Conference on Trade and Development.
- Jones, R., Pykett, J., and Whitehead, M. (2011). Governing temptation: Changing behaviour in an age of libertarian paternalism. *Progress in Human Geography*, 35(4), 483-501.
- Khan, M.A., (2015). Putting ‘good society’ ahead of the economy: overcoming neoliberalism's growth trap and its costly consequences. *Sustainable Development*, 23(1), 55-63.
- Kilbourne, W.E., McDonagh, P. and Prothero, A. (1997), Sustainable Consumption and Quality of Life: A Macromarketing Challenge to the Dominant Social Paradigm. *Journal of Macromarketing*, 17(1), 4-24.
- Kollmus, 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), 240-259.
- Lapsley, I. (2001) Accounting, modernity and health care policy. *Financial Accountability and Management*, 17(4), 331-350.
- Loer, K. (2016). The enzymatic effect of behavioural economics – theoretical and

- empirical findings from regulating life style risks. Paper presented at the *Midwest Political Science Association* (MPSA) Conference, Chicago, USA, April 2016.
- Madrian, B.C., (2014). Applying insights from behavioral economics to policy design. *Annual Review of Economics*, 6(1), 663-688.
- McDonagh, P. and Prothero, A., (2014). Sustainability marketing research: Past, present and future. *Journal of Marketing Management*, 30(11-12), 1186-1219.
- McMeekin, A. and Southerton, D., (2012). Sustainability transitions and final consumption: practices and socio-technical systems. *Technology Analysis & Strategic Management*, 24(4), 345-361.
- Menegat, R. (2002), Participatory Democracy and Sustainable Development: Integrated Urban Environmental Management in Porto Alegre, Brazil. *Environment & Urbanization*, 14(2), 181–206.
- Micelotta, E. Lounsbury, M. and Greenwood, R. (2017) Pathways of institutional change: an integrative review and research agenda. *Journal of Management*. 43,(6), 1885–1910.
- Moloney, S. Horne, R E. and Fien J. (2010) Transitioning to Low Carbon Communities – From Behaviour Change to Systemic Change: Lessons from Australia, *Energy Policy*. 38(12), 7614-7623.
- Organisation for Economic and Cooperative Development (OECD) (2011) *Towards green growth*. Paris: OECD.
- Olesen, K. (2014). The neoliberalisation of strategic spatial planning. *Planning Theory*, 13(3), 288-303.
- Peattie, K., and Peattie, S. (2009). Social marketing: A pathway to consumption reduction? *Journal of Business Research*, 62(2), 260-268.
- Phipps M., Ozanne,L. Luchs, M. Subrahmanyam, S. et al. (2013) Understanding the inherent complexity of sustainable consumption: A social cognitive framework, *Journal of Business Research* 66(3), 1227–1234.
- Phipps, M. and Ozanne, J. (2017 in press) Routines disrupted: reestablishing security through practice alignment, *Journal of Consumer Research*, Retrieved July 16, 2017 <https://minerva-access.unimelb.edu.au/bitstream/handle/11343/140339/Routines%20disrupted.pdf?sequence=3>
- Prothero, A., Dobscha, S., Freund, J., Kilbourne, W. E., Luchs, M. G., Ozanne, L. K., and Thøgersen, J. (2011). Sustainable consumption: Opportunities for consumer research and public policy. *Journal of Public Policy & Marketing*, 30(1), 31-38.
- Rein, M., (2006). Reframing problematic policies. In R.E. Goodin (ed) *The Oxford Handbook of Political Science*. Oxford: Oxford University Press.
- Rutherford, J. and Coutard, O., (2014). Urban energy transitions: Places, processes and politics of socio-technical change. *Urban Studies*, 51(7) 1353–1377.
- Scott, W.R, Ruef, M., Mendel, P. and Caronna, C (2000) *Institutional Change and Health Care Organizations: From Professional Dominance to Managed Care*. Chicago: University of Chicago Press.
- Seyfang, G., (2005). Shopping for sustainability: can sustainable consumption promote ecological citizenship?. *Environmental Politics*, 14(2), 290-306.
- Seyfang, G. (2011). *The New Economics of Sustainable Consumption: Seeds of Change*. Basingstoke: Palgrave Macmillan.
- Shove, E. (2010) Beyond the ABC: climate change policy and theories of social change. *Environment and Planning*. 42(6), 1273 - 1285.
- Shove, E. (2014). Putting practice into policy: reconfiguring questions of consumption and climate change. *Contemporary Social Science*, 9(4), 415-429.
- Simon, H.A. (1965). *Administrative Behavior* (2nd ed.). New York: Free Press.
- Spaargaren, G. and Mol, A.P.J., (2008). Greening global consumption: politics and authority. *Global Environmental Change* 18, 350–359.
- Spaargaren, G., (2011). Theories of practices: Agency, technology, and culture: Exploring the relevance of practice theories for the governance of sustainable consumption practices in the new world-order. *Global Environmental Change*, 21(3), 813-822.
- Strijbos, S. (2006) A Normative Systems Approach for Managing Technology and Collective Human Action, Chapter 34, In P. Verbeek. and A. Slob (eds.) *User Behaviour and Technology Development: Shaping Sustainable Relations Between Consumers and Technologies*. New York: Springer.
- Strong, S.I., (2017). Alternative facts and the post-truth society: meeting the challenge. *University of Pennsylvania. Law Review*. Online, 165, p.137. Retrieved July 16, 2017 http://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1193&context=penn_law_review_online.

- Suiter, J. (2016). Post-truth politics. *Political Insight*, 7(3), 25-27.
- Sunstein, C.R. (2014). Nudging: A very short guide. *Journal of Consumer Policy*, 37(4), 583-588.
- Sunstein, C.R. (2017) New Directions in Behaviourally Informed Policy. Address to UCD School of Public Policy, March 31st 2017.
- Thaler, R.H. and Sunstein, C.R., (2008) *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven: Yale University Press.
- Thaler, R.H., Sunstein, C.R. and Balz, J.P., (2014). Choice architecture (chapter 25). In E. Shafir (ed) *The Behavioral Foundation of Policy*, New Jersey: Princeton University Press.
- Thomson, J. (2013). New Ecological Paradigm Survey 2008: Analysis of NEP results. Waikato Regional Council Technical Report 2013/11, Waikato Regional Council. Retrieved July 16, 2017 <https://www.waikatoregion.govt.nz/services/publications/technical-reports/tr/tr201311>.
- Thynne, I., (2008). Symposium introduction - Climate change, governance and environmental services: Institutional perspectives, issues and challenges. *Public Administration and Development*, 28(5), 327-339.
- United Nations (UN) (2015) Framework Convention on Climate Change: Adoption of the Paris Climate Agreement. Retrieved July 16, 2017 <http://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf>
- van der Linden, S., (2012). Nudge, nudge, think, think: experimenting with ways to change civic behaviour (review). London: LSE Review of Books.
- Varman, R. and Vikas, R.M., 2007. Rising markets and failing health: An inquiry into subaltern health care consumption under neoliberalism. *Journal of Macromarketing*, 27(2), 162-172.
- Wang, A.B. (2016). "Post-Truth" Named 2016 Word of the Year by Oxford Dictionaries, Washington Post (Nov. 16, 2016), Retrieved July 16, 2017 https://www.washingtonpost.com/news/the-fix/wp/2016/11/16/post-truth-named-2016-word-of-the-year-by-oxford-dictionaries/?utm_term=.12aaa7361b38.
- Whitmarsh, L. (2009). Behavioural responses to climate change: Asymmetry of intentions and impacts. *Journal of Environmental Psychology*, 29, 13–23.