

Understanding consumer influences on product lifetimes: the Individual-Practice Framework

Piscicelli L.^(a), Cooper T.^(a) and Fisher T.^(b)

a) School of Architecture, Design and the Built Environment, Nottingham Trent University, Nottingham, UK

b) School of Art and Design, Nottingham Trent University, Nottingham, UK

Keywords: collaborative consumption; social practice theory; social psychology; values.

Abstract: In the field of sustainability, understanding consumer influences on product lifetimes is deemed essential to reduce the environmental impact of consumption. The aim of the research project which informs this paper was to investigate different ways of thinking about how consumers' values may contribute to the acceptance, adoption and diffusion of collaborative consumption – an economic model based on sharing, lending, swapping, gifting, bartering, or renting products and services enabled by network technologies and peer communities (*cf.* Botsman and Rogers, 2011). By making it possible to obtain use of goods without owning them, these alternative patterns of consumption have some potential to prevent new purchases, intensify product usage and promote reuse of possessions that are no longer wanted, thus contributing to longer product lifetimes.

The relationship between values and the participation in collaborative consumption was explored through mixed methods research drawing from two different, if not contrasting, theoretical perspectives to understand consumer behaviour: social psychology and social practice theory. Drawing on their possible complementarity, the investigation was structured in two subsequent and interactive phases: a quantitative data collection and analysis, followed by a qualitative strand of research. The initial quantitative study measured individual values through use of Schwartz's PVQ-R3 tool. Results were followed up through semi-structured interviews facilitated by a series of visual prompts. This paper presents the resulting Individual-Practice Framework, which uniquely combines insights from social psychology and social practice theory to examine and explain the interrelation between the individual, his/her personal values, and specific combinations of the 'material', 'meaning' and 'competence' elements that sustain social practices.

Introduction

Current patterns of production and consumption are widely recognised as unsustainable (*cf.* Cooper, 2005; Tukker et al., 2006). In the last two decades the idea of decoupling economic growth from environmental pressure has received growing attention from scholars, businesses and governments (von Weizsäcker et al., 1998; Jackson, 2009). Different initiatives, strategies and approaches have been elaborated in the effort to support the shift toward a resource-efficient, low-carbon economy to achieve sustainable development (European Commission, 2011). Product longevity (through longer lasting products, product life-extension, lifetime optimisation, more intensive use of goods and systems) and moving from products to services have been considered viable

(design) solutions to reduce the impact of consumption (*cf.* Cooper, 2010; Stahel, 1994; Tukker and Tischner, 2006).

The rise of collaborative consumption (also referred to as the 'collaborative economy', or the 'sharing economy') – traditional sharing, bartering, lending, trading, renting, gifting and swapping, redefined through technology and peer communities (Botsman and Rogers, 2011, p. xv) – has recently attracted interest for its potential to resource-saving and waste minimisation. By making it possible to obtain use of goods without owning them, these alternative patterns of consumption can contribute to avoid new purchases, increase or extend the usable life of products, intensify product usage and promote reuse of possessions that are no longer wanted

(Leissman et al., 2013). Examples of services that foster access rather than private ownership are car and bike sharing schemes, peer-to-peer (P2P) ridesharing (e.g. Uber), P2P lodging (e.g. Airbnb) and goods/skills exchange or transaction sites (e.g. Freecycle).

Collaborative consumption, named one of Time Magazine's 10 ideas that will change the world (2011), could reframe the unsustainable nature of the present economic development path if brought into the mainstream. However, the success of this emerging socio-economic paradigm largely depends on consumers' response to the introduction of innovative, share-based (business) models in the market. Therefore, understanding (and changing) consumer behaviour is key to support the thriving of collaborative consumption.

Understanding consumer behaviour

Theories and models of behaviour and behaviour change originate from all disciplines of the social sciences, particularly social psychology and sociology (for an overview see Darnton, 2008; Jackson, 2005; Morris et al., 2012). These two conceptualise and define behaviour differently. Social psychology focuses on the individual and hold behaviour to be an outcome of a number of antecedents and determinants including personal beliefs, values and attitudes. On the contrary, sociology (mostly social practice theory) tends to aim attention at the relationships between behaviour, people and the social and physical environments in which they take place (Morris et al., 2012).

Values in social psychology

In identifying the drivers of pro-environmental and/or pro-social consumer behaviour, moral and normative considerations are often taken into account (Jackson, 2005). Some examples are Schwartz's 'Norm-Activation Theory' (1977) and Stern et al.'s 'Value-Belief-Norm Theory' (1999). The former describes moral behaviours as the result of a personal norm to act in a particular way activated by the awareness of the consequences of one's actions and the ascription of personal responsibility for them. The latter models the causal chain of influence from certain people's values and beliefs to the emergence of a personal norm to act in a given way, thus providing insights into the value basis of pro-environmental behaviour.

In social psychological accounts, values are generally defined as "trans-situational goals, varying in importance, that serve as guiding principles in the life of a person or group" (Schwartz et al., 2012, p. 664). In a major program of theoretical and empirical research, Schwartz and his colleagues have identified 19 basic individual values, organised in a circular motivational continuum according to their compatibility or conflict. These are further divided into four distinct clusters: 'openness to change' vs. 'conservation', and 'self-enhancement' vs. 'self-transcendence' values (Figure 1).

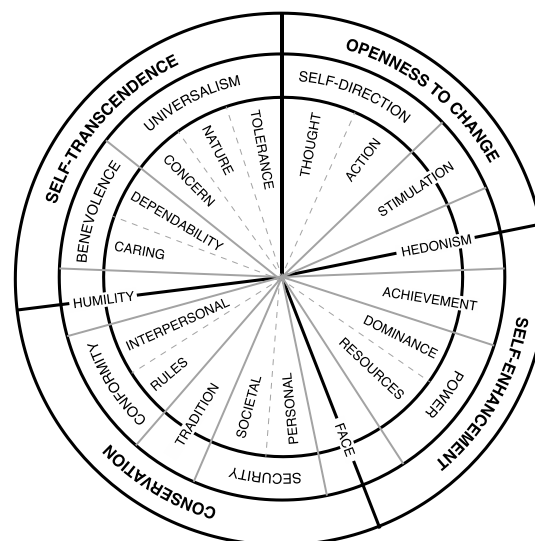


Figure 1. Circular motivational continuum of 19 basic individual values. Adapted from Schwartz et al., 2012, p. 669.

Studies suggest that self-transcendence values (in particular 'universalism') are generally predictive of positive engagement with social and environmental issues (cf. Gutierrez Karp, 1996; Stern and Dietz, 1994). However, their predictive power is generally low (Pepper et al., 2009). Often values do not translate linearly into action (i.e. the so-called 'value-action gap') (cf. Blake, 1999) and have only a weak influence upon behaviour, usually mediated through other variables.

'Meaning', 'Competence' and 'Material' elements in social practice theory

In recent years social practice theory has attracted growing attention as an alternative approach to understanding consumer

behaviour, which places social practices rather than individuals at the centre stage of analysis. 'Practices' that make up everyday life – showering, cooking, driving, doing the laundry – are understood as social phenomena whose 'performance' entails the reproduction of cultural meanings and tastes, socially shared knowledge and skills, and material artefacts (Spurling et al., 2013). These elements were grouped by Shove et al. (2012) under the three categories of 'Meaning', 'Competence' and 'Material' (Figure 2).

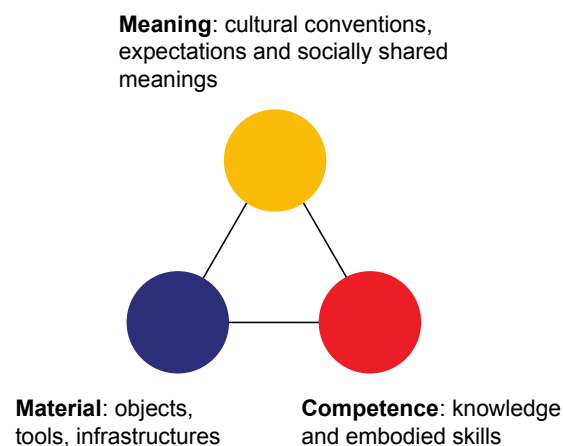


Figure 2. Elements of practice. Adapted from Shove et al., 2012.

Resources are consumed in the reproduction of social practices and what people take to be 'normal' and ordinary ways of doing and living (Shove, 2003). Therefore, the focus moves from determining the antecedents of individual behaviour (e.g. values, beliefs and attitudes) to appreciating the collective dynamics of the routinisation of practices and their underlying shared notions of normality.

However, it is possible to question the degree to which culturally and socially constructed conceptions of normality play out through personal actions in practices. The extent to which common understandings, norms, social expectations and conventions (i.e. the 'meaning' element of practice) may be mediated by and through personal traits and characteristics, including individual values, is under investigated (Piscicelli et al., 2015).

Methodology

Drawing on the possible complementarity between social psychology and social practice theory (cf. Darnton et al., 2011; Whitmarsh et

al., 2011; Wilson and Chatterton, 2011; Boldero and Binder, 2013), the research project which informs this paper examined the role of values in the context of collaborative consumption. Ecomodo, a UK-based P2P online marketplace for lending and borrowing, was used as a case study.

Mixed methods research was conducted in two subsequent phases. Initial quantitative data collection and analysis measured the value priority of 63 Ecomodo users through Schwartz's PVQ-R3 tool (cf. Piscicelli et al., 2015). In the qualitative strand of research, results were followed up through 10 semi-structured interviews which explored whether and how individual values may act upon the 'meaning' element of practices contributing to (or hindering) the acceptance, adoption and diffusion of collaborative consumption.

Results and discussion

As part of the interview, a series of prompts and scenarios were used to uncover values associated with alternative ways of consuming in the context of transportation, holiday accommodation, clothing and consumer goods. In this paper, the relationship between individual values and meanings is discussed using results from the area of clothing.

Interviewees were invited to associate relevant Schwartz's values (Figure 1) to buying a new item of clothing in a shop; looking online and hiring a designer brand garment for few days through Girlmeetsdress.com; swapping an item of clothing they own for another one with somebody online or at a swapping party. Values most directly associated to these alternatives were: 'Hedonism', 'Face', 'Achievement', 'Universalism-nature', 'Stimulation' and 'Self-direction-action'. Associations made proved to be either positive or negative, in the light of the meanings taken into consideration for each option.

(Socially shared) meanings

Clothing was generally related to ideas of wastefulness and inefficiency. Accordingly, buying new clothes was negatively associated with 'Universalism-nature', which was positively linked to hiring and swapping solutions. This seems to suggest that meanings underlying practices are not necessarily socially shared. Whereas interviewees primarily viewed clothing as environmentally unsustainable, mainstream

understandings may differ. Personal endorsement of a certain set of values is likely to affect what meanings are seen as relevant in each practice.

Furthermore, individual value priorities may influence the direction of the association (i.e. positive or negative). Clothing was related to ideas of self-gratification. However, 'Hedonism' and 'Stimulation' were associated negatively with buying new clothes and positively with hiring and swapping solutions where the pleasure and "thrill" of getting something new occur "without the guilt". This could be explained by interviewees' view of fashion as unsustainable and the higher importance they attribute to 'Universalism-nature' compared to 'Hedonism' and 'Stimulation' (cf. Piscicelli et al., 2015).

Misaligned meanings

Values can also bring people to reject meanings that are recognised as mainstream and largely socially shared. For example, interviewees criticised the common understanding of clothing as a way to show personal success and its use as a criterion to judge others. Therefore, buying new clothes was negatively associated with 'Face' and 'Achievement', values that they hold of low importance.

A misalignment between endorsed values and meanings can lead people to either engage in alternative practices (e.g. buying second hand clothes rather than new), or find ways to deal with the perceived inconsistency (e.g. buying new, but organic clothes).

Conclusion

The analysis uncovered the values that Ecomodo users associated with different alternatives (i.e. buying new, hiring, and swapping) in the area of clothing. Findings revealed the existing relationship between individual values and social meanings. In particular, they demonstrate how meanings are culturally constructed and socially shared, but individually renegotiated.

This explains the possible difference in the meanings that people associate to a certain practice (e.g. someone may see buying new clothes as unnecessary and wasteful, whereas others may find it an enjoyable activity and a way to keep up with fashion). Furthermore, this suggests a potential link between meanings

and motivations for action, thus demonstrating the need to address more explicitly the role of individual agency in the context of practices and social practice theory.

Departing from Shove et al.'s model (2012) (Figure 2), the resulting Individual-Practice Framework (Figure 3) positions the individual at the centre of the practice itself. In doing so, it overcomes the 'agency-structure' divide by acknowledging the existing interaction between the individual and a particular configuration of 'material', 'competence' and 'meaning' elements.

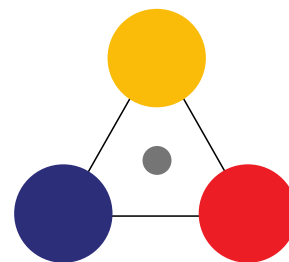


Figure 3. The individual-practice framework. Piscicelli et al., 2015.

Besides connecting the elements together through the reproduction of a practice, the individual interacts with, and renegotiates, each element. This relationship is mediated by personal preferences and characteristics, such as individual values.

To conclude, the Individual-Practice Framework uses and extends approaches from social practice theory by complementing them with insights from social psychology. In doing so, it offers an alternative perspective to understand behaviour and practices which is particularly well-suited to explain consumer influences on the acceptance, adoption and diffusion of more sustainable patterns of consumption.

Acknowledgments

The research for this paper was undertaken with financial support from a Nottingham Trent University Vice Chancellor's PhD Scholarship.

References

- Blake, J. (1999). Overcoming the "value-action gap" in environmental policy: tensions between national policy and local experience. *Local Environment*, 4, 257–278.
- Boldero, J. M., and Binder, G. (2013). Can psychological and practice theory approaches to

- environmental sustainability be integrated? *Environment and Planning A*, 45(11), 2535–2538.
- Botsman, R., and Rogers R. (2011). *What's mine is yours. How collaborative consumption is changing the way we live*. London: HarperCollins.
- Cooper, T. (Ed.). (2010). *Longer lasting products: alternatives to the throwaway society*. Gower Publishing, Ltd.
- Cooper, T. (2005). Slower consumption: Reflections on product life spans and the “throwaway society.” *Journal of Industrial Ecology*, 9(12), 51–67.
- Darnton, A. (2008). *GSR behaviour change knowledge review*. Government Social Research: London. Retrieved from http://www.civilservice.gov.uk/wp-content/uploads/2011/09/Behaviour_change_reference_report_tcm6-9697.pdf
- Darnton, A, Verplanken, B, White, P. and Whitmarsh, L. (2011). *Habits, routines and sustainable lifestyles: A summary report to the Department for Environment, Food and Rural Affairs*. AD Research & Analysis for Defra, London. Retrieved from <http://scienceresearch.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=16189>
- European Commission (2011). *A resource-efficient Europe*. Retrieved from <http://ec.europa.eu/resource-efficient-europe/>
- Gutierrez Karp, D. (1996). Values and their effect on pro-environmental behaviour. *Environment and Behavior*, 28(1), 111–133.
- Jackson, T. (2009). *Prosperity without Growth: Economics for a Finite Planet*. London: Earthscan.
- Jackson, T. (2005). *Motivating sustainable consumption: A review of evidence on consumer behaviour and behavioural change*. Report to the ‘Sustainable Development Research Network’, London. Retrieved from http://www.c2p2online.com/documents/Motivating_SC.pdf
- Leissman, K., Schmitt, M., Rohn, H. and Baedeker, C. (2013). Collaborative consumption: Towards a resource-saving consumption culture. *Resources*, 2, 184–203.
- Morris, J., Marzano, M., Dandy, N. and O’Brien, L. (2012). *Forestry, sustainable behaviours and behaviour change: setting the scene*. The Research Agency of the Forestry Commission. Retrieved from <http://www.forestry.gov.uk/fr/INFD-923FBR>
- Pepper, M., Jackson, T. and Uzzell, D. (2009). An examination of the values that motivate socially conscious and frugal consumer behaviours. *International Journal of Consumer Studies*, 33, 126–136.
- Piscicelli, L., Cooper, T. and Fisher, T. (2015). The role of values in collaborative consumption: Insights from a Product-Service System for lending and borrowing in the UK. *Journal of Cleaner Production*, 97, 21–29.
- Schwartz, S. H. (1977). Normative influences on altruism. *Advances in Experimental Social Psychology*, 10, 221–279.
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fisher, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J., Demirutku, K., Dirilen-Gumus, O. and Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4), 663–688.
- Shove, E. (2003). *Changing human behaviour and lifestyle: A challenge for sustainable consumption?* Retrieved from <http://www.psi.org.uk/ehb/docs/shove-changinghumanbehaviourandlifestyle-200308.pdf>
- Shove, E., Pantzar, M. and Watson, M. (2012). *The dynamics of social practice. Everyday life and how it changes*. London: Sage.
- Spurling, N., McMeekin, A., Shove, E., Southerton, D. and Welch, D. (2013). *Interventions in practice: Re-framing policy approaches to consumer behaviour*. Retrieved from <http://www.sprg.ac.uk/uploads/sprg-report-sept-2013.pdf>
- Stahel, W. (1994). The utilization-focused service economy: Resource efficiency and product-life extension. In B. R. Allenby and D. J. Richards (Eds.), *The greening of industrial ecosystems*, (178-190). Washington, DC: National Academy Press.
- Stern, P. and Dietz, T. (1994). The value basis of environmental concern. *Journal of Social Issues*, 50(3), 65–84.
- Stern, P., Dietz, T., Abel, T., Guagnano, G. A. and Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Human Ecology Review*, 6(2), 81-98.
- Time (2011). *10 ideas that will change the world*. Retrieved from http://content.time.com/time/specials/packages/article/0,28804,2059521_2059717_2059710,00.html
- Tukker, A. and Tischner, U. (2006). Product-services as a research field: past, present and future. Reflections from a decade of research. *Journal of Cleaner Production*, 14(17), 1552–1556.
- Tukker, A., Cohen, M.J., Hertwich, E., et al. (2006). The Oslo Declaration on Sustainable Consumption. *Journal of Industrial Ecology*, 10(1/2), 9–14.
- von Weizsäcker, E., Lovins, A. B. and Lovins, L. H. (1998). *Factor Four: doubling wealth, halving*

resource use - The new report to the Club of Rome.
London: Routledge.

Whitmarsh, L. E., O'Neill, S. and Lorenzoni, I. (2011). Climate change or social change? Debate within, amongst, and beyond disciplines. *Environment and Planning A*, 43(2), 258–261.

Wilson, C. and Chatterton, T. (2011). Multiple models to inform climate change policy: A pragmatic response to the 'beyond the ABC' debate. *Environment and Planning A*, 43(12), 2781–2787.