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Co-practicing Sustainable Consumption;

Adapting Social Practice Approach in Service Design for Policy
for behaviour change towards Sustainable Consumption

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Co-practicing Sustainable Consumption: Adapting Social Practice Approach in Service Design for Policy for behaviour change towards Sustainable Consumption

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Social practice theory and behaviour change for sustainable consumption

The actions and choices made by people in consumption of products and services or leading certain lifestyles have significant impacts on the environment (Trudel, 2018). Since the 1990s a prominent policy concept on global sustainability agenda has thus been sustainable consumption and production (Hotta et al, 2021). The conventional approaches towards reducing consumption and its impacts stressed on the behaviour of individuals or independent products, units and facilities. As a result the interventions were directed, on one hand, towards educating or persuading individuals to make different decisions, and on the other designing more efficient technologies and cleaner production systems (Sahakian & Wilhite, 2014). However, it is now widely understood that changing people's behaviour in their consumption patterns is deeply embedded in social and institutional contexts and hence complex.

Recent academia has shown growing links between pro-environmental behaviour and Social Practice Theory (referred to hereafter as SPT) (Hargreaves, 2011; Holtz, 2014; Sahakian & Wilhite, 2013). A social practice approach shifts the focus away from segregated individuals, products and technologies, towards an integrated understanding of everyday practices, like cooking or cleaning, and the way these are routinely and habitually performed in a society (Sahakian & Wilhite, 2014). For example, we do not simply 'consume' resources, such as energy or water, in our homes based on individual rational choices, we use them to conduct everyday practices like home heating, cooking, and personal washing (Holtz, 2014). In short, social practices require consumption as performing the relevant activities includes the usage of material artefacts and resources. Schatzki explains practices as 'a nexus of doings and sayings' dispersed in time and space (1996, p89, as cited by Shove et al, 2012). Furthermore, these nexus of doings and sayings (practices) are entangled in social, technical and infrastructural systems and are dynamic in nature; they evolve over time. For instance, personal washing habits in the western world have evolved over time in relation to extensive development of water mains infrastructure. This enabled daily showering practices and normalised it and, in

tandem, increased the expectations of personal hygiene and normalisation of higher water consumption (Doyle, 2013). SPT hence argues that to bring about a behaviour change for sustainable consumption, there needs to be a transformation in the related practices (Holtz, 2014). In order to identify intervention realms for behaviour transformation, it is first quintessential to understand how practices evolve and how they can be made to change.

Shove et al. (2012) claim that practices are assemblages of three elements; materials, competences and meanings (refer to fig. 1). 'Materials' include technologies, tangible/ physical entities, and substance of which objects are made. 'Competences' encompass skills, knowhow and techniques, and 'Meanings' entail symbolic or shared meanings, social norms, ideas and collective aspirations. These elements, or the 'building blocks of practice', are dynamically integrated by skilled



Fig.1. Shove et al.'s three-element Social Practice Framework (adopted from Spotswood et al., 2015)

practitioners (individuals) when practices are regularly enacted. To demonstrate a simple example of basketball as a practice; it involves specific sets of materials (eg. a ball and a basket), competences (like dribbling and shooting a basket), and meanings (like the rules and aim of the game and the appropriate level of emotional engagement). Practices exist in bundles within a larger system wherein many elements are common or interrelated across practices. Pantzar and Shove (2006) note that practices thus emerge, stabilize and ultimately die out as the links between these elements are made and broken (as cited by Hargreaves, 2011). Implying that in order to create new sustainable practices, the links between the elements of the current un-sustainable practices need to be broken, to be then re-linked and replaced with more sustainable ones (Hargreaves, 2011). Warde (2005) shows that despite their considerable resistance, change in practices emerges both from the inside – as practitioners contest and resist routines and conventions and as they improvise new doings and sayings in new situations – and also from the outside, as different practices come into contact with each other.

The perspective and fragmentation of social practices discussed in this paper (adopted from Shove and Pantzar's work) are not to be considered as an attempt to simplify the notion of behaviour change, but rather to open a structured direction for practical use in transformative interventions. Furthermore, we can see that there are various factors that influence the transformation of the elements within practices. Hargreaves (2011) discusses the role of social and political power in retention of current practices and shift to newer ones. Social capital and power to make rules and policies can therefore propagate or curb transformation. Additionally, policies intervene repeatedly in practices, and hence consumer behaviour, both directly (through regulation and taxes) and also through its extensive influence over the social context (Jackson, 2005). It is also recognised that government interventions at local levels are essential for shaping discourse, norms, incentives and infrastructure for the needed change (Dawkins et al., 2019). Thus, in order to bring about this radical change in consumption behaviour, through change in social practices, there is a need for a holistic approach and engagement of citizens, policy makers and institutions.

Adapting Social Practice Approach in Service design for policy

Service design (referred to as SD hereafter) has been increasingly associated with the fields of policy-making and social innovation as a means for societal transformation. Design for policy and social innovation, subsequently integrate design tools and thinking in policy-making to tackle complex social problems (McGann et al., 2018). It would be beneficial to adopt a Social Practice (referred to as SP hereafter) perspective in SD within this context, aiming for behavioural change, as it brings forth a holistic socio-technical approach for this transition. Additionally, the combination of tools, methods and thinking of SD with SP approach shows a potential for a sustained behaviour change on a larger scale. To understand how we can adopt the SP approach here, it is important to first understand how SD currently functions in the realms of policy-making and Public social innovation; what are its characteristics and in which stage of policy-making should it be implemented?

Social innovation and design for policy, largely undertaken by the emerging Public Sector Innovation labs/ policy labs, offer 'better ways of generating new ideas'; in particular, through an 'experiment-oriented approach to policy design' that draws on methods and skills usually not available in the public sector (McGann et al., 2018). To see where SD fits in, Junginger (2013) identified five stages of policymaking as; 1. Identifying policy needs, 2. Clarifying policy needs,

3. Formulating policy, 4. Implementing policy, 5. Evaluating policy outcomes (as cited by Sangiorgi, 2021). He elaborates that design of services does not commence in the implementation stage but already at the policy making stage. Concurrently, design-led labs emphasise the application of design thinking to policy and prioritises 'user-centred' methods such as ethnography, visualisation techniques and collaboration with citizens and other stakeholders to clarify problem definitions and co-create solutions (McGann et al., 2018). Here, the use of participatory design and co-design methods in conjunction ensures proper citizen and stakeholder participation in both policy making and implementation stages. Therefore, it can be said that there is merit in adopting SP approach along the process of participatory design and co-design in policymaking. The paper explores possibilities for SPT in this context hereafter.

SP approach gives a logical passage of inquiry by holistically looking at the structure of three elements. The objective for the designers and participants then becomes identifying older unsustainable practices related to consumption behaviour and transforming them into newer sustainable ones. As mentioned earlier, the SP lens brings into perspective the influential role of social and political power in sustaining or changing practices. Therefore, it is recommended to recognize and involve appropriate stakeholders (who would be the engaged participants) in the process; which include citizens with representation from different social groups, local decision makers and institutions. This will ensure a common understanding and consensus amidst different social, institutional and political groups, reducing the resistance to change. Additionally, engagement of stakeholders would foster trust and understanding (Kumagi and Lorio, 2020) to then streamline the application and co-ordination of material and social interventions.

Furthermore, based on the theoretical understanding of transformation through breaking and making links in the elements of practices, we can divide the larger design process into 4 distinct phases (As seen in *fig.2*). The first phase here would be identifying ongoing unsustainable practices and their relations. In the second phase the designers and stakeholders can map out the elements of materials, competences and meanings building those practices. The third phase could entail brainstorming interventions to transform or replace these existing elements. Within this phase it would be useful to articulate a goal in transition of the practice clearly (highlighting what the newer elements should achieve, individually and in conjunction with other practices). The fourth stage would then extend to brainstorming possibilities in which the older ties between elements can be broken and replaced with newly conceptualised elements.

These conceptualised stages should not be seen as a linear process but as a guiding framework wherein one should feel free to circle back and draw parallel insights from any phase. As seen in fig. 2 These four stages can be placed in the first half of the design process of the double diamond, followed by systematic development and delivery of collectively ideated interventions. In accordance with Warde (2005), the change in practices here emerge from within, as practitioners (participating stakeholders) contest and transform routines and practices with new designed doings and sayings. This can also transform certain related practices from outside as they come into contact with the newly established elements. Moreover, this approach can be useful in all the five stages of policy making by Junginger.

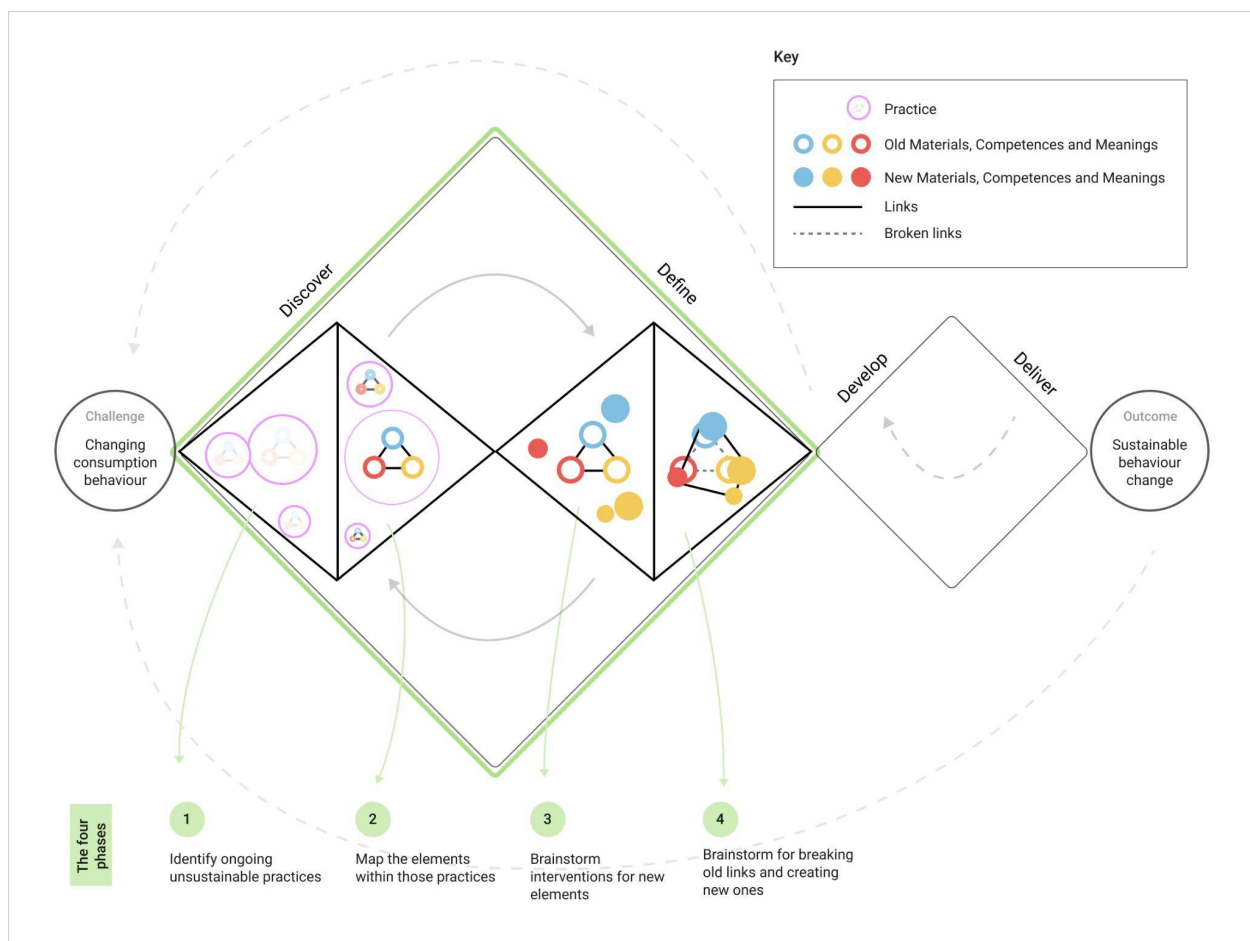


Fig.2. Adapting social practice approach in Service design for policy. (Double diamond adapted from Design Council, 2019)

The following case study demonstrates how policy can influence social practices, and consequently behaviour, by intervening in the three elements of social practices.

Case study: London on Tap

In 2007, the London on Tap campaign (Sahakian & Wilhite, 2014) was launched in partnership between the Mayor of London and Thames Water, to promote the consumption of tap water provided by the local utility company. This initiative sought to reduce the environmental impact of restaurants by normalising the ordering of tap-water. Initially the campaign's focus was on communicating information about price and advantages, aiming at changing individual behaviour through knowledge provision. After the failure in encouraging change in water consumption, the London on tap initiative sought to shift the focus to the practice of consuming water alongside an expensive meal.

They did so by addressing its multiple elements simultaneously. First, the campaign made it permissible to order tap water in restaurants by discussing this social taboo publicly and by creating favorable conditions for it (working on shared meanings and social norms). Second, a competition was launched for the design of a carafe, won by London-based industrial designer Neil Barron and made of recycled glass (working on material). Third, for every 'Tap Top' carafe purchased by a restaurant, a donation of £1 was made to Water Aid, a charity that helps to provide clean water to those in need (changing social norms and collective aspirations). It highlighted how the materials (water, glass packaging), meanings (conventions around proper behaviour in restaurants), and competences (the performance of fine dining) were all affected by the multi-dimensional campaign. The campaign succeeded in reducing bottled water consumption by 8% in the summer of 2008.

This case study makes it apparent that there is potential for practice based policy initiatives to influence more sustainable forms of consumption. Thus making it valuable to adopt this approach in SD for policy, which when combined would also benefit with the available toolkits and methods of design.

Conclusion

It is evident that to address complex social problems of consumption behaviour it is valuable to look at the social practice theory. By explaining consumption as a by-product of routinized practices, SP approach showcases that transformation in behaviour would occur through change in current practices. Furthermore, the deconstruction of practices as the 3 elements of

competences, materials and meanings helps in adopting a structured SP approach to service design.

Based on this and supported by the case study, adapting SP approach in service design for policy and social innovation will enable change towards more sustainable consumption behaviour. SP lens focuses the attention of service design towards elements that construct practices and the process of breaking and making newer, sustainable links. The 4 phase framework presented adopts social practice in the first half of the design process. Wherein, the stakeholders collectively deconstruct un-sustainable practices, their elements and brainstorm interventions for replacing them with sustainable ones. The proposed phases at present are only a guiding framework that can be altered based on context at hand. Within this the methods of participatory design and co-design enables citizen participation. The involvement of varied stakeholders in the process will enable 'more nuanced solutions' (McGann et al., 2018) through better understanding gained in reframing problems and in ideating solutions. The holistic approach provided by the amalgamation of SP approach and design for policy will ensure an all-rounded transformation in daily practices. This will ultimately lead to sustained behaviour change towards sustainable consumption.

Bibliography

Dawkins, E., André, K., Axelsson, K., Benoist, L., Swartling, Å G., & Persson, Å. (2019). Advancing sustainable consumption at the local government level: A literature review. *Journal of Cleaner Production*, 231, 1450-1462. doi:10.1016/j.jclepro.2019.05.176

Design Council. (2019). What is the framework for innovation? Design Council's evolved Double Diamond. Retrieved April 8, 2021, from <https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond>

Doyle, R. (2013, December 11). Why understanding the forces behind social practices could change behaviour. Retrieved August 18, 2021, from <https://www.theguardian.com/sustainable-business/behavioural-insights/understanding-social-practices-change-behaviour>

Hargreaves, T. (2011, January 01). Practice-ing behaviour change: Applying social practice theory to pro-environmental behaviour change - Tom Hargreaves, 2011. Retrieved August 18, 2021, from https://journals.sagepub.com/doi/abs/10.1177/1469540510390500?casa_token=EmM-Pr6x0QcAAAAA:D7rsLBUN8JIPzz54iMa12empwWxotwP-GojCY-licvTNqpcBsSGJFYlAfFHUK7nCutRxAfSjN8KT6Q

Holtz, G. (2014). Generating Social Practices. Retrieved August 18, 2021, from <https://www.jasss.org/17/1/17.html>

Hotta, Y., Tasaki, T., & Koide, R. (2021). Expansion of Policy Domain of Sustainable Consumption and Production (SCP): Challenges and Opportunities for Policy Design. *Sustainability*, 13(12), 6763. doi: 10.3390/su13126763

Jackson, T. (2005). Motivating sustainable consumption: A review of evidence on consumer behaviour and behavioural change. *Sustainable development research network*, 29, 30.

Kumagai, S., & Iorio, F. (2020). Building trust in government Through citizen engagement. doi:10.1596/33346

Marlyne Sahakian, H. W. (n.d.). Making practice theory practicable: Towards more sustainable forms of consumption - Marlyne Sahakian, Harold Wilhite, 2014. Retrieved August 18, 2021, from https://journals.sagepub.com/doi/abs/10.1177/1469540513505607?casa_token=O_qbxSDcltEAAAAA:tdtal17lkdvCSTqJxvhubFYI_h2yVYmbaleV5aoUNEDcbUB1K2gtS86-o78qBVOfl7cxcYziGpy9ew&journalCode=joca

McGann, M., Blomkamp, E., & Lewis, J. M. (2018). The rise of public sector innovation labs: Experiments in design thinking for policy. *Policy Sciences*, 51(3), 249-267. doi:10.1007/s11077-018-9315-7

Sangiorgi, D. 2021, March, 9. Class05_Service Design and Policy [Lecture recording], WebEx Politecnico di Milano.
<https://politecnicomilano.webex.com/politecnicomilano/ldr.php?RCID=57599c7e37c84a1c8e40e6a8acbb9b31>

Shove, E., Pantzar, M., & Watson, M. (2012). The Dynamics of Social Practice. Retrieved August 18, 2021, from <https://books.google.it/books>

Spotswood, F., Chatterton, T., Tapp, A., & Williams, D. (2015). Analysing cycling as a social practice: An empirical grounding for behaviour change. *Transportation Research Part F: Traffic Psychology and Behaviour*, 29, 22-33. doi:10.1016/j.trf.2014.12.001

Trudel, R. (2018). Sustainable consumer behavior. *Consumer Psychology Review*. doi:10.1002/arcp.1045