

Where theories of practice might go next

A collection of working papers By

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This is a compilation of short working papers presented at a workshop held on 18-20 June 2014 at Windermere, England. The purpose of the event was to identify issues and topics that constitute 'unfinished business' for people interested in social theories of practice and in the relevance of such ideas for the DEMAND centre.

Each short contribution is available as a separate DEMAND working paper and should not be quoted without first asking the author's permission.

The Windermere collection of DEMAND working papers (Nos. 4-15) is grouped together in this one document for convenience.



Demanding Ideas: Where theories of practice might go next

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Working Paper 4: Allison Hui, [≠] Manifesto (a.hui@lancaster.ac.uk)

This 'manifesto', like others, gathers, muddles, and re-presents the past to create a provocation for the present. It arises from my longstanding interest in mobilities of diverse people, things, and elements, and the complex and changing practices in which they come together. My approach to practice has drawn upon a range of theoretical resources from the complementary but not entirely coherent literatures on practice (Bourdieu, 1977, 1990; Hetherington, 1997; Mol and Law, 1994; Reckwitz, 2002; Schatzki, 1996, 2002, 2009; Shove and Pantzar, 2005, 2007; Shove et al., 2012; Warde, 2005). By bringing concepts and principles from theories of practice together with diverse cases and literatures (including tourism, leisure, migration, and now energy) I have pursued an interest in how practices unfold through mobilities, and how following networked elements and patterns of circulation can inform understandings of changing dynamics of practice. Though not always explicit in what follows, this trajectory informs and gains momentum from the thoughts that follow.

[Imagining Futures]

While considering how I got here, I found myself wondering about the extent to which following the logic of previous work offers a compelling frame for imagining the next decade of theories of practice. When (and how) is it useful to build a manifesto based upon a logic of X', X", X"'... Xⁿ? Or upon an imagination of territory-yet-to-be-conquered – those phenomena and disciplines not yet embedded in discussions with practice theory? Or upon a goal of what practice theory should become: perhaps a dominant social scientific paradigm? A set of understandings thoroughly embedded into policy practices? An eclectic and often incoherent set of tools fit for all purposes? Looking back in ten years, will theories of practice still be addressed as one set of similar things, or as many sets of dissimilar ones? Will its internal diversity make it a movement akin to Baroque or Impressionist painting, or to pointillism or cubism? How much does any of this matter for us as we consider the manifestation of manifestos?

[Defending Practices]

In part due to the nature of academic arguments, and the continual need to emphasize a distinct contribution, theories of practice have thus far been well articulated in relation to competing frames for understanding the social world. Reckwitz situates theories of practice as a variant of cultural theory offering a model of the social world distinct from understandings of 'homo economicus' and 'homo sociologicus' (2002). Schatzki, while developing a distinct 'site ontology' in which to situate practices, makes a series of differentiations from individualist and socialist ontologies, as well as the more specific arguments of theories of arrangements (2002). Shove has also articulated how practice theory offers a compelling alternative to behavior change approaches which dominate in many public and policy circles (2010a, 2010b). Though this positioning work has been central to the building of a 'practice turn' in social theory (Schatzki et al., 2001) and will undoubtedly remain important in attempts to shift or steer the public framing of social problems and dynamics, it is important that the differentiation of practice theories from other approaches to the social world (e.g. individualist ones) does not remain too dominant a focus.

This is not to suggest that work thus far has been solely focused upon defending practice theory from the outside – indeed, much has already been done to build up a set of concepts that allow discussions of how practices are composed, reproduced, and related. Dynamics of change have been one major focus for recent work, and consideration has also been given to how theories of practice can work alongside other literatures or concerns (Shove et al., 2012; Shove and Spurling, 2013; Spaargaren, 2011; Watson, 2012). Nonetheless, ample space remains for further investigation and characterization of differences and distinctions within the world of practices.

[Remaking Practices]

I've decided to use the idea of nonequivalence as a loose frame for the rest of my comments. Focusing on $[\neq]$ as a device for thinking highlights how our work is always positioned and justified by boundaries. A particular type of relation, $[\neq]$ suggests the inevitability of difference that arises from repetition [X', X'', X'''...]. But $[\neq]$ can also push out to more unfamiliar territory – questioning what we habitually ignore or fail to incorporate into our considerations. How might making things $[\neq]$ be a creative task that allows us to enroll unfamiliar resources in the project of solving familiar problems? To what extent can thinking about what is $[\neq]$ help to develop richer conceptual vocabularies, more accessible strategies, and more widespread impacts? As an experiment, I start from $[\neq]$ to explore potential forays for future practice theory.

[≠] - Not all practices are equal

This proposition, and the rest that follow, may at first seem irrelevant and unimportant. There will always be more nonequivalences than equivalences, and therefore their worth can seem minimal. Of course, one might reply, not all practices are equal – no one ever said they were. Yet what is the range of our vocabulary for discussing this relationship? How might it be usefully expanded?

One of the corollaries of taking practices of a unit of study has been that the comparability of practices is taken for granted in many basic concepts. All practices have practitioners who are also 'carriers' of the practice (Reckwitz, 2002). Varying definitions of the elements of practices (Gram-Hanssen, 2011; Maller and Strengers, 2013; Reckwitz, 2002; Shove et al., 2012) or the linkages of doings and sayings (Schatzki, 1996, 2002; Warde, 2005) highlight the similar components that make up diverse practices, and how in some cases these components are shared between practices (as shared elements (Shove et al., 2012), dispersed practices (Schatzki, 1996) or taste regimes (Arsel and Bean, 2013)). The spatio-temporal aspects of practices can be articulated through discussions of 'activity-place spaces' (Schatzki, 2002), 'activity timespaces' (Schatzki, 2010b) or circulation (Hui, 2011, 2013; Shove and Pantzar, 2005; Shove et al., 2012). One of the major contributions of theories of practice then has been in developing a set of concepts that allow components or characteristics of practice to be articulated and investigated in specific empirical cases.

Though the differences between practices have also been discussed, particularly when addressing the adoption of new practices over time or considering how practices relate to the consumption of energy and resources (Chappells et al., 2011; Nansen et al., 2011; Shove et al., 2007; Strengers and Maller, 2012; Warde et al., 2007), there is still a limited set of concepts to articulate differences between practice-entities. This may be in part due to the concentration of empirical work upon practices of everyday life, rather than larger and more complex practices related to professions, economies, or governments. It is one thing to look at the bathing practices of migrants and consider how they might differ from those of locals (Maller and Strengers, 2013) and another thing entirely to consider the relationship between migrants' everyday routines and the enactments of 'migration' that occur in immigration departments, visa offices, relocation companies and border crossing points. While Schatzki's discussions of how practices and orders form bundles and nets provides one

set of resources in this ongoing discussion (2002: 154-155), more could be done to develop a set of resources that facilitate empirical investigations in and between varied social contexts. Whether framed as issues of scale (Birtchnell, 2012), of micro/macro, or of power, a series of questions thus deserve further attention.

What are the implications of one practice for another? What are the different types and degrees of influence that one practice might have on another? How do these interactions play out in space and time? How do flows and obstructions in a world of practices enact patterns of power and differentiation?

How is the inequality of practices (and not just people) enacted? How is inequality orchestrated (cf. Schatzki, 2002: 147-)? To what extent are aims or goals of different practices complementary or conflicting, policed or permitted? How do the spatio-temporal demands of practices relate to inequality in the present, or to the probability of flexibility or decline in different future scenarios?

[≠] - Not all elements are equal

[Talking about elements]

H; He; Li; Be; B; C; N; O; F; Ne; Na... In natural science worlds, the nonequivalence of elements is articulated in many ways. Ordering and arranging elements by atomic numbers, groups, periods, blocks, states, prevalence and more provides a context for understanding how any one behaves in specific contexts. Some patterns of elements are more common than others – some reactions and compounds are more likely than others. There are therefore a wealth of ways of talking about and

representing elements. Water = $H_2O = H^{O}H$. Carbon, due to being particularly adept at bonding, is known as the building block of life. Reactions between Na and Cl can be anticipated and represented.

Could we then see the articulation of different elements within theories of practice as the first step towards a more complex discussion of relationships and differentiations? While the properties of elements of practice may be deemed more fluid and even malleable than those of chemical elements, discussing them in a greater number of ways, in relation to a greater number of practices, would help to further characterize the world as made up of practices.

Are there elements of practice that could be seen as basic building blocks, as Carbon, Oxygen, and Hydrogen are? How might these differ in Asia or other parts of the world? What difference would it make to talk about Confucianism or guanxi (relationships/關係/关系) as elements with specified and dynamic interrelations?

How many practices is an element a part of? How can its role in each be differentiated? How can a vocabulary be created to discuss these dynamics?

Are there viral elements – those that both spread quickly and are potentially deadly (for practices, or resources, or other elements)? How might a discussion of viral elements contribute to imaginations of the future – of interdisciplinarity; of digital literacy and the infection of all kinds of practices with digital competences and knowledges? How might such circulating elements be seen as a different kind of infrastructure for social life?

[Not talking about elements]

Though breaking practices down into categories of elements has been helpful for articulating these components in empirical contexts, the inequality of elements can also be seen in the varied attention given to different types. Discussions of materials/things/objects have been helpful in linking practices to socio-technical studies, work on technology and innovation, and discussions of affordances and the way that objects prefigure agency (Hui, 2012; Jalas, 2009; Nansen et al., 2011; Schatzki, 2010a; Shove and Spurling, 2013; Watson and Shove, 2008). Considerations of competences/skills/know-how have drawn upon Giddens' attention to tacit knowledge and Bourdieu's understandings of habitus, supporting the study of embodied practices such as capoeira and tai chi (Brown and Leledaki, 2010; Delamont and Stephens, 2008). The aspects of practice related to meanings/knowledge/rules, however, sometimes seem more precariously placed. In part, this could be due to the fact that they are not always materialized or directly observable, and thus can be difficult to identify or represent (cf. Lloyd, 2010: on the corporeality of information literacy). They are also complicated to discuss because the distinction between addressing them as elements of practice and sliding into ontologically incompatible framings of norms or values can be difficult to negotiate or defend. At times, they are also addressed as part of different frames, as in how Arsel and Bean discuss aesthetics in terms of dispersed practices and 'taste regimes' (2013).

It seems to me, however, that more could be done to develop a vocabulary bringing together less-discussed elements of practice and the linkages named by Schatzki and Warde (Schatzki, 1996, 2002; Warde, 2005). In particular, extending a consideration of the 'procedures' (Warde, 2005) involved in practices offers possibilities for thinking about new dimensions of difference and similarity between performances and practice-entities.

While a practice needs to be performed in order to exist, not all performances are the same. To some extent this is a function of context, and of the basic tenet that repetition ≠ replication. But even performances involving the same elements can differ in terms of how these elements are integrated. That is, elements can take on more or less importance, and sequences can change.

Take for instance the example of making a patchwork quilt. While all patchwork quilts involve cutting up pieces of fabric and then sewing them back together to form a pattern, the process can unfold in different ways. Sometimes quilters start with a pattern found in a magazine, and then purchase fabrics with the aim of replicating the pictured quilt. At other times they start with fabrics they already have lying around, choosing colors and patterns that go well together and then finding a pattern that will complement the fabrics. At yet other times, they start with an idea – such as expressing the cycle of seasons – and then slowly develop a new pattern, and dye new fabrics, until they have expressed the idea in a satisfactory manner. Each of these procedures for quilting arrives at a completed artifact, and involved many of the same skills including cutting and sewing. Yet they also enroll different understandings, aims, and skills – matching complementary colors or expressing a unique artistic idea are necessary elements of some but not all procedures.

This highlights how practices already have methods for enacting varied performances. This is both a strategy that helps ensure extended engagement (by staving off boredom) but also a means of addressing and adapting to the variable accessibility of elements. Since at the moment practice theory is being used to address issues of variability as well as questions linked to consumption and need to curb consumption of particular types, further attention to *procedures* of integration could be helpful.

How many procedures or methods for bringing elements together exist within a practice? How do these facilitate adaptation to scarcities of resources? How do these facilitate adaptation to diverse levels of skill, competence, or knowledge? How does the sequencing of procedures relate to particular aims of a practice? How can procedures from dissimilar practices be used to transform ways of working?

[≠] – Not all interactions with practice theory are equal

A final nonequivalence bearing mention is that not everyone who uses or develops practice theory interacts with it in the same way. Not only are people more or less devoted to building up the conceptual repertoire of practice theory, but also their institutional and career positions shape their trajectories and engagements. This is no different for practice theory than for any other academic specialty or community. Yet if we are interested in thinking about the next decade of work in a collective and not individual manner, then further questions arise.

Given the fact that theories of practice are often difficult to digest upon first encounter, and not always easy to translate into methodological and empirical terms, how will the potentially competing aims of making practice theory and "making practice theory practicable" (Sahakian and Wilhite, 2014) be negotiated and by whom? Can 'making practice theory practicable' simultaneously be 'making practice theory'? How many ways can one take practice as a focus empirically? Analytically? In practice as researchers? How might expanding our means of addressing units other than practices (elements, linkages, careers) help in addressing methodological, theoretical, or societal challenges?

[≠] – Departures

In many ways, these pages \neq a manifesto because the proclamations have been too banal, too bland, to be read as clear and bold provocations for future work. Moreover, the scarcity of examples provides almost too open a space to consider possible directions. Connecting the questions to my own interest in mobilities and materialities would have started to provide more concrete trajectories. Yet to do so would have also been to write a more limited frame for discussion. Therefore this \neq a manifesto in the hope that it might be useful in our shared process of manifesting the future of practice theory.

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Working Paper 5: Theodore Schatzki, Larger Scales (schatzki@uky.edu)

It is sometimes said that practice theory applies best—or only—to local social phenomena. "Local social phenomena" here denotes those social phenomena that characterize or are constituted by small nexuses of action, coordinated activity, and face-to-face interaction in contiguous settings. These phenomena are roughly coextensive with those directly investigated through ethnographic methods. In this vein, studies exist of washing practices, Nordic walking practices, office practices, driving practices, nursing practices, energy consumption practices, ambulance attendance practices, boxing practices, practices of the self, practices of communication, day trading practices, and so on. Such practices are displayed in immediate settings and can be accessed through experience and observation (however these are understood). The spate of such studies helps fuel the above claim about the successes-limits of practice theory.

Of course, practices of the sorts just mentioned are not exhausted by particular episodes in particular settings, but instead extend beyond particular episodes and settings in both space and time. Giddens highlighted this fact in using his conception of practices to theorize social systems. Giddens' account of systems, however, is thin compared to his account of practices. This sort of fact gives credence to the claim that practice theory applies to the "local" or "micro" but neglects or cannot deal with the large or "macro."

It is clear that, whilst practice theories have informed a myriad of fine studies of particular practices or small practice complexes, they have not produced many analyses of larger-scale phenomena. Bourdieu's structure-practice analyses of fields and of the educational, art, scientific, and economic fields in particular constitute the one solid "practice theoretical" paradigm for analyzing large-scale phenomena. Giddens' brief analyses of social systems and space-time distantiation and Shove et al.'s concepts of complexes, circulation, and circuits are suggestive but underdeveloped starts. Hence, one key challenge for practice theory is whether it can develop conceptual schemes adequate to mapping and explaining large social phenomena.

Two clusters of issues arise once this challenge is accepted. The first embraces general ontological issues, perhaps the most central of which is analyzing the general relationship between, on the one hand, all those practices that propagate through and extend beyond particular settings of action in space and time and, on the other, the sorts of large entities analyzed and investigated in social research: institutions, organizations, networks, and systems, as well as markets, economies, governments, religions etc. This issue has been highlighted under such labels as the "micro-macro relationship" and "individualism versus holism." In contemporary practice theory, the concept of practices takes the place of those of the individual and micro in formulations of the issue.

The second cluster of issues concerns explanation. Practice theory holds that social life is made up of, or takes place in or as part of, a plenum, or more neutrally, a big bunch of practices. The most general explanatory issue is accounting for changes in practices and complexes thereof. There are many possible approaches to this issue. One possible general sort of approach is to apply single explanatory schemes or mechanisms to practices and practice complexes. A prominent example of such a scheme or mechanism is the evolutionary team of variation-selection-retention. Applying this scheme to the plenum of practices would imply explaining changes in practices and complexes

thereof through combinations of these three processes. Another possible sort of single scheme approach is that found in the family of systems theories. Here the idea would be that practices forms systems and that changes in practices and complexes thereof are tied to systemic processes and subject to systems theoretical considerations. A third approach would highlight the notion of a field: embedding practices in wider fields, it would argue that competition, power dynamics, and the pursuit of meaning in those fields determine how practices change. Of these three approaches, only the third comes close to having active advocates (Fligstein and McAdam 2012). It is easy, however, to imagine applying any of the three to social life understood as a big bunch of practices.

I believe that none of these approaches is adequate. Anyone who has read the works of Michel Foucault, Gabriel Tarde, or Bruno Latour, let alone those of most historians, knows that social life is simply too intricate and contingent for any such scheme to cover either the phenomena it claims to cover or very many phenomena at all. Contingency and detail are simply too decisive in the advance of social affairs. The detailed descriptions provided by the practice-based analyses of social phenomena mentioned in the opening paragraph reinforce this general claim by showing that social affairs unfold in a myriad of ways. As an alternative to advocating a particular scheme as the explanatory key to social change, the work of the aforementioned thinkers points toward the idea that explanations of social phenomena are historical in character: that is, that explanation is a matter of describing, or following out, what specifically led to the phenomenon to be explained, that is, the series of events that brought it about (on this, see also W.H. Walsh). This idea applies to small and large, and to micro and macro, alike. Both a counterpunch and a revolution are in principle explained by tracing the series of events that led to them. Of course, when the phenomenon to be explained is larger than a small network of actions or interactions, a multitude of event chains lies behind it. As a result, explaining it requires fashioning an overview of this multitude. In all cases, however, giving explanations requires delving into the details of social life.

The idea that explanation Is historical also raises questions about what explanatory work is left for theory. My view is that theory primarily develops concepts that can inform empirical research, description, and explanation. It does this by developing technical accounts of the subject matter of interest. Vis-à-vis explanation, theory can also develop accounts of the event series that lie behind social phenomena. A rather opposed position sometimes found among professional historians is that technical accounts are not needed to understand these series—ordinary concepts suffice—and that technical accounts are of scant intellectual interest anyway.

Practice scholars are more friendly to theory than historians are. Moreover, they embed event series in the plenum of practices. This means that a general understanding of the nature, trajectories, and effects of these series requires grasping (1) the relations of event series to practices, including the bearing of practices on them and their bearing on practices, and (2) how practices compose social phenomena. Discharging the first task requires developing an account of the dynamics of practices, their formation, perpetuation, and dissolution, where "dissolution" includes destruction, disappearance, hybridization, and bifurcation. Central to this account will be the role that event cum action series play in these processes. As discussed, discharging the second task requires addressing questions about the relationship between practices and social entities of types such as organizations, institutions, power, interactions, and field as well as between practices and large phenomena of types such as governments, financial systems, and international telecommunication networks. Analyses that address both areas of investigation yield broad accounts of the connection between chains of events and the coming about of social phenomena of all scales, from those such as face-to-face interactions that are often confined to particular settings to those such as energy provision networks that are often global in reach. Again, explanations of particular phenomena always refer, ultimately, to particular event series. As a result, the provision of explanations is empirical and requires methodic investigation or social experience. Whilst explanation is empirical, practice theory (1) offers accounts of event series and the practice stage on

which they propagate, thereby (2) provides technical concepts with which researchers can provide overviews of event series, analyze explanans and explanandum, and thus be oriented in their empirical investigation, and (3) informs the self-understanding of researchers.

Part of the work of theory in this context is devising technical concepts that name features of or forms of change in the dynamical plenum of practices or the social phenomena that thereby arise, change, and disappear. This includes features and patterns in the myriads of event series that give rise to social affairs. An example of technical concepts that describe patterns in event series is Tarde's (e.g., 1969) triad of imitation, invention, and opposition, which characterize both the events that make up series as well as the series themselves. Another example is William Ogden's (1964) concepts of invention, accumulation, diffusion, and adjustment, each of which names a type of event or event series nexus; the latter sort of concept also applies to the social phenomena resulting from such nexuses. (Social phenomena are a type of pattern.) A recent example of such a typology is Georgina Born's (2008) circulation, contagion, differentiation, resistance, imitation, association, aggregation, sedimentation, and differential curves of change, which like Ogden's concepts name types of event or pattern-result.

Sorting out the roles that humans, nonhumans, and inanimate entities play in event and action series is an issue that has received considerable attention since the mid-1980s. Whether in the belief that these roles can be understood through the notion of action or in the belief that human actions are crucial to most of the event series that bear on social affairs, a practice account of event series propagating through the plenum of practices should work with the notion of series of actions. Different accounts exist of action series, most of which have no direct connection to practice theory. Examples include Tarde's notion of imitations rays and Latour's notion of mediator chains. These conceptions series construe action chains as central to the dynamism of social life. Practice theory adds to these approaches the idea that action chains are inherently embedded in bundles and constellations of practices.

The challenge that large phenomena pose to practice theory is thus one of devising ontological analyses that theorize the relationship between the plenum of practices and social phenomena. To the extent that a practice theory takes on the notion of action-event series, it is incumbent on that theory to analyze the relationship among action series, practices, and large phenomena. An alternative is to defend general explanatory schemes or mechanisms that apply to practices and practice complexes widely. In all instances, practice theories must develop concepts useful to empirical researchers for conceptualizing, describing, and explaining their subject matters and for capturing the dynamic processes pertaining to them.

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Working Paper 6: Matt Watson, Placing power in practice theory (m.watson@sheffield.ac.uk)

Manifesto declaration #1: Practice theory needs to tackle power

If practice theory is to go beyond accounting for past changes and contribute to understanding future change and whether it can be shaped for better or worse, and if it is tackle the uneven and often unjust distributions of goods and bads (including the means for people to perform practices) then it needs to tackle power. Of course there is far from a consensus that practice theory should, or indeed could, aspire to do that sort of thing. But this is declarative manifesto so let us believe that it could and should.

I am phrasing the need to tackle power in practice theory in these problematically normative programmatic terms because if practice theory is only for analysis and re-description of change (and stability) in the social, then it arguably has enough tacit consideration of power already.

How far that is true depends on your definition of power, of course. For the purposes of this manifesto, I take power to have two distinguishable but closely related meanings. First, power is to act and have effect. Second, power is influencing the actions of others. Over the next few pages and manifesto declarations/contentions, I am first going to suggest that, with that first meaning of power, applications of practice theory are replete with understandings of power, even if they are not commonly articulated as such. But then I go on to consider why it is hard for practice theory to take on power as the capacity to influence the actions of others, before thinking about ways in which, through reframing that definition of power in a way consistent with practice theory, practice theory could begin to tackle the sorts of power that can appear to exist distinct from the churn of mundane activity to be bound up with relations and processes that seem structural.

#2: Practice theory already deals with power (as action with effect) (just not very simply or explicitly)

If power can be understood, at the most basic level at least, as acting with effect, then practice theory can be understood as essentially being all about power. First, practice theory is a theory of action. Practices are constituted and reproduced by the flow of human action and in turn they shape that flow. Second, in its repeated application to account for change in the social, practice theory is inevitably tackling processes that are shot through with power – as social change is always a matter of action having effect. Third, and closely associated with the last, in practice theory's equally compelling accounts of the remarkable stability of the social, it is clear that stability is reproduced actively, that is, through actions having effect (just mostly that effect being mostly to maintain the status quo).

The difficulty of making power explicit in accounts such as these is that they tend to reveal the power to act as something profoundly distributed. Even if we follow an account of practice which allows for the relational agency even of inert material things (eg Shove, Pantzar, & Watson, 2012)

¹ So more or less synonymous with agency, but I think for where this is going it's useful to understand it as power.

the distribution of the agency does not require that we lose the distinctive capacities of the human subject to do the work of integration of the many elements of practice to effect performance: and it is those capacities that enable the innovations in integration and performance that underlies the changes in practices and so in social order. Nevertheless, accounts of practice are in many ways accounts of the ways in which action is constituted in ways additional to the volition, conscious or otherwise, of individual practitioners. If power is seen as the property of human subjects, then practice theory is substantially a means of accounting for the limits or power, for people to be sovereign over their actions.

#3: Practice theory also speaks to power (as influencing the actions of others)

The same account for the limits of individual sovereignty also play out in relation to the sort of processes which are more commonly associated with power than quotidian actions. This is seen in the compelling and (in these circles at least) well renowned critiques of established modes of governing that seek to do what that second sense of power is all about: influencing the actions of others (eg Shove 2010). Governing tends to influence the actions of others through a limited range of interventions reflecting a model of human action at odds with that upon which practice theory is founded. Practice theory offers an account that illuminates both the passive resistance of practices to governing interventions; and which can enable appreciation of the invariably unpredictable consequences of such interventions.

#4: Practice theory has so far not been used to say a lot about power as influence over the action of others

In criticising particular means of intervention and modes of governing, practice theory is pushed towards dealing with difficult ground. The processes at stake in governing interventions - are difficult to separate from attributes of the social that do not map easily to a horizontal account, such as hierarchy and scale.

In theory, this is not the issue that it might initially appear. From foundational statements of contemporary practice theory, the scale of ambition of its analytical potential is clear: "both social order and individuality ... result from practices" (Schatzki, 1996: 13); practices the very location of the social (Reckwitz 2002). In principle, then, practice theory should be able to account for all realms of the social. Indeed, in more recent articulations of practice theory, its applicability to the situations and institutions typically seen to be the locales of power – including in the more specific sense of the capacity to influence the conduct of others – are conventionally seen to reside, such as the situations and institutions of governing. As Schatzki has it in a forthcoming chapter:

"...all social phenomena – large or small, fleeting or persistent, micro or macro – have the same basic ingredients and constitution." (Schatzki, forthcoming)

#5: Practice theory is demonstrably applicable to practices governing

The observation that phenomena have the same basic ingredients and constitution, in whatever realm of the social or whatever apparent scale of social phenomena means that the practices of ministerial offices, cabinet rooms and corporate board rooms mostly have the same characteristics as the practices of domestic life or leisure pursuits. They too are comprised of meanings, rules, competences, embodied knowledges, materials, spaces, etc, brought together through largely routinised and mundane patterns of action. The possibilities of empirically exploring practices in such situations through these lenses are increasingly becoming visible, including using practice theory as a means to account for the obduracy of governing practices (eg Berthou, n.d.).

However, stressing the sameness of the practices in these situations, while demonstrably useful for starting to account for the conservatism of institutions, so far fails to account for how power is done in practices. For a critic, practice theory could look to be disabling of critique, practice theorists as apologists for conservatism. This is not a problem within practice theory, which is more or less void of normative content. But could it be that practice theory could account for how it is that practices in some locales have disproportionate capacity for influence over the conduct of others?

#6: Practice theory should address how the conduct of conduct is conducted

Foucault is famously said to have defined government as the conduct of conduct. His work and the ever growing field of studies defined around governmentality have done so much to unpick the means – the techniques and apparatuses – through which conduct is conducted. But how is the conduct of conduct conducted? That is, what is *distinctive* (rather than the same) about the practices of governing, or of corporate influence? Through what practices, with what characteristics, do some individuals, institutions, locales, achieve influence over the performance of other practices (conduct conduct). If we take this agenda seriously, then a couple of the questions we might pursue are:

How is it that some practices accumulate resources from others?

Governing or managing enterprise at scale is only possible through the marshalling, coordination and harnessing of countless other practices, whether providing the financial resources (eg through the multitude of practices that generate and gather taxes or profits), the information (eg through census) or the influence (eg through the armed forces and police). The mundane, habitual practices that comprise the everyday life of the offices of state are the practices which hold together the complexes of practice which gather and accumulate what make governing possible. As such the practices at stake here both enable and enact the uneven landscape of power as influence that characterises centralised states and large corporations.

How is it that some practices orchestrate others over time and space?

More fundamental than the coordination necessary to generate and accumulate resources is the more general influencing of action, that is the purpose of governing. Through what practices, comprised with what elements, do practitioners act in ways that have effect at far remove, potentially in millions of performances of other practices? Embodied action can only be spatially and temporally immediate, the extension and amplification of action can only happen through intermediation. Such intermediation in these processes can rarely if ever accomplished without dependency on other practices as well as technologies, institutions etc It is the ability of some practices to orchestrate others, only to themselves be orchestrated by others again, that offers the means for accounting for the appearance of hierarchy and scale while retaining a flat ontology.

How do practices and the institutions the comprise reproduce dominant ideologies?

To enable to processes of orchestration described in the last point, the practices of governing are profoundly institutionalised, with buildings, legislations, professional codes and systems of career progression, embedded in and embedding practices. Institutions provide the ordering and stability necessary for the complex orchestration of practice that provides both the means and purpose of governing. Part of that institutionalisation is the alignment and co-dependence of practices within governing. These features, then, might underlie the obduracy of the practices of governing, and the way in which those practices share elements with other practices of governing (through parallel materials, competences and meanings framed within institutions and professions). In understanding power in this way, might practice theory offer insights into the operation and reproduction not only of social phenomena like bureaucracy or managerialism, but also of ideologies like neo-liberalism or the of economic growth being a core social good and proper purpose of government.

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Working Paper 7: Hilmar Schäfer, Current issues in practice theory (hschaefer@europa-uni.de)

In order to generate ideas for future developments in practice theory, I would like to start by identifying some of its strengths and weaknesses at the outset. Practice theory's most important value lies in the decentring of common sociological approaches towards the social. It is concerned with overcoming traditional dichotomies like the separation between society and the individual, culture and the material or thinking and acting. In line with that, it rejects essentialist beliefs and instead advocates a view according to which contextual relations determine identity. By focusing on practices instead of individuals or structure, practice theory offers a relational perspective on the social which parts with monocausal explanations of action. Similar to interpretive approaches, practice theory emphasizes the local production of the social, but it asserts that no situation can exist for itself and that the analysis thus cannot be centred around situational interaction alone. In this regard, it distinguishes itself from the interactionist stance. Rather, the identity of practices, subjects or material things is determined in contexts, which transcend any given situation and which constitute identity in relation to other occurring practices, in relation to the past as well as to different sites. This perspective, which underlines the relationality of the social, offers an alternative to other approaches in social theory and has already produced a lot of valuable research.

However, there have been and still are a couple of crucial weaknesses. According to practice theory, a lot of human action can be understood as non-reflective repetition guided and upheld by the stability of bodily acquired dispositions, which are formed in the course of socialization. In this perspective, the general attitude towards situations is characterized by familiarity and the social appears as self-evident. This is the reason why many authors from Anthony Giddens (1984: 19ff., 50, 60ff.) to Andreas Reckwitz (2002: 255) have centred their conception of practice around the notion of routine. This focus on routine and stability has been criticized (Bongaerts 2007).

Only recently there has been thorough reflection on the crucial issue of the relation between stability and dynamics in practice theory (Shove/Pantzar/Watson 2012). This approach proposes to understand practices as performances and entities at the same time. Focusing on practices as entities, following practices around the realm of the social, so to speak, this perspective emphasizes the movement of practices in time and space and offers a valuable shift of sociological theory, which is aided by the usage of a very compelling rhetoric with vocabulary like "careers of practices", "trajectories", "rhythm of daily life" or "patterns of practices".

Parallel to the publication by Shove, Pantzar and Watson, I have worked on the same issue in my Ph.D. thesis *The Instability of Practice*, in which I compare and assess the approaches of Bourdieu, Foucault, Butler and Latour and propose to focus practice theory on the notion of repetition instead of routine (Schäfer 2013). Here, repetition is understood in a poststructural sense, inspired by Derrida's reflections on "iterability": A repetition is that which is linked by its reappearance, but which can never be exactly the same. This simple yet consequential insight is true for every kind of social practice. If we conceive of the social as repetitions in time and space, we are also reminded that at the heart of every repetition of a practice there is difference, because every repetition occurs under already altered circumstances. In an anti-essentialist approach, this means that any contextual difference also has an impact on the identity of a practice thus stressing the dynamics of repetition and the possibility of change.

It is from this position and based on these reflections, that I can identify trajectories of further developments in the field of practice theory and empirical research. By thinking of practices in terms of repetitions which link different sites and instances, practice theory is able to follow the fragile relations which make up the stability of the social, enabling it to grasp the specific contributions of bodies and material artefacts in the process its stabilization. This is a prerequisite for a methodology which opens up sociological theory for analyses into the relationality and heterogeneity of the social.

In terms of methodology, the theoretical perspective requires the analysis to move in time and space, following the links which exist between the heterogeneous elements involved in a network and trying to connect the dots, so to speak. Practically, this means the combination of different research methods and the necessity to visit different locations as Latour (2005) proposes in his methodological call to localize the global, to redistribute the local and to connect sites.² I find a lot of stimulating methodological proposals in the concepts, research designs and actual studies of actornetwork-theory (ANT). Practice theory and ANT both share a theoretical decentring of the subject and its intentions as well as a corresponding inclination not to reify structures. Neither subjectivity nor social structure should form the basis of explanation but rather the processes in which these are made and constantly need to be maintained. This analytical perspective does not locate subjectivity and agency at a single spot. Instead, it situates them in a distributed network of practices and materialities, taking artefacts as well as the human body into account. It also considers the fundamentally temporal and spatial dimension of the social. In contrast to ANT, the strength of practice theory lies in its consideration of embodied dispositions and its focus on the processes in which tacit knowledge is formed and transmitted. In turn, ANT can help practice theory to understand practices as elements in a relational network of heterogeneous entities and can sensitize praxeological analyses for gradual differences. Thus, a dialogue between practice theory and ANT might prove fruitful for future developments.

A general field for new directions of research would be to look into the mechanisms how practices travel in *time*, *space* and across *social fields* and to find methods for mapping trajectories of practices. First, how do practices **move in space**? Which prerequisites – material, bodily, immaterial – does the translocal, the global travel of practices entail? What kind of support structures and media does it involve? How can we follow practices across the realm of the social? Do we need to stay with the subjects as "carriers" of practices or are there other relationships to be explored? Here, one option in order to grasp the movement of practices in space could be to cooperate with research groups on translocal projects, each pursuing practices locally and contributing to an overall research topic.

Second, how do practices **move in time**? A key entity is the human body. We need to look closer into practices of education which are directed towards the bodily stabilization of practices. Books, manuals, and material infrastructures are also "anchors" for practices in the course of time. In terms of material infrastructures, the idea of "layering" proposed in the invitation and integrated in the DEMAND programme seems very compelling. How can we include a perspective on the **built environment** into our research? Architecture is a crucial entity and force which stabilizes practices in terms of spatial structures and atmospheres. This is a direction of research I would like to pursue in the future. In my own work, based in cultural sociology and currently centring on cultural heritage and the specialized and vernacular practices it is embedded in, I will think about the relationship between architecture and practice. In terms of cultural heritage, architecture and restoration, the notion of "layers" might prove fruitful and could also provide a link to the work on energy use as pursued in the DEMAND programme. In the field of cultural heritage, the notion of authenticity is

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² Cf. already Marcus's (1995) proposal for a multi-sited-ethnography.

also crucial – the idea of a distinguished state of being which has to be preserved "as is" and which is yet carefully constructed at the same time with an array of heterogeneous social practices (labelling, research, restoration). This research in the field of cultural sociology could connect with some questions DEMAND might be asking about what is regarded as a "carbon-neutral" or "sustainable" kind of energy usage.

Of course, movements of practices in time and space are closely linked. For both aspects, a perspective on **institutions and organizations** seems crucial. Although some work in the field of organization theory and practice theory already exists, this topic certainly needs more reflection.

Third, we can ask what happens if practices move between social fields? If we follow Bourdieu that social fields like economics, science or art are characterized by relative autonomy, there are always specialized practices unique to each field, but there are also practices which exist in more than one specialized field and which might have different, specific qualities in each of these fields. This is especially true for "dispersed" (Schatzki 1996) practices like arguing, valuing, proving etc. If practices are shared between fields, but are used and perceived differently by the participants of these fields, this might entail a) tensions or conflict or it might b) open up a space of reflection for participants, because they might be able to distance themselves from entrenched routines by comparing different forms of practices, which might help them to assess and review practices. It might be a fruitful research perspective to follow practices as they move and are shared between social fields.

For all these new directions of research, it would be interesting as well as challenging to find appropriate **new methods** of social research. How much help are the common qualitative methods of interviews and participant observation? What are their limits? Can we find other ways to follow practices, record their movements and present our data in scientific papers? We can think about using all kinds of visualization like photographs, mind maps, cognitive maps, videos, video stills etc. in order to follow and compare practices.

Finally, the question of the stabilization and destabilization of practices in time and space also entails a reflection on their **emotional aspect**. This might help us to explain the persistence as well as the change of practices better. But how can we grasp the affective dimension of practices theoretically? And how can this dimension be integrated in a practice perspective? Although there are certainly differences in the affective quality of practices, I don't think this justifies speaking of "affective practices" as a special kind of human activity. Rather, I think the task for an integration of the emotional dimension in practice theory has to be to reflect on the affectivity of all kinds of social practices, even those normally not considered to be emotional at all, e.g. all those kinds of practices generally thought of as "rational" like economic exchange or scientific research.

I am hoping to gain insights into these and other interesting topics in the course of our workshop and I am looking forward to an engaging exchange.

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Working Paper 8: Janine Morley, Interesting topics & directions for practice theories (j.morley@lancaster.ac.uk)

What are the most interesting and important topics to pursue within the field of practice theory in the next decade? My response mostly relates to the general challenge of analysing the dynamics of energy demand within a practice theoretical framework. That has been the basis from which I have worked with practice theories, and it is evidently relevant to the DEMAND centre. But I also think there are interesting challenges here, and potentially unique questions for the development of social practice theory.

1. What Materials Do: Material-Practice Relations

The essential characteristic of energy use is that it 'energises' material processes in ways that exceed human capacities. Mined, captured and converted forms of energy are useful precisely because they do something that people either cannot or do not routinely do. The first key proposition of the DEMAND centre is that "energy is used not for its own sake but as part of accomplishing social practices"³. Yet the 'part' energy plays in social practices is not simple, straightforward or uniform. In so far as social practice theories focus on human activities, I think there is a challenge to develop conceptualisations of the varied relations, including disconnections, between practice and energy use, the social organization of what energy does within society, and how and whether attending to the nature of such material processes helps in understanding the dynamics of practice and of energy demand.

Theories of practice currently conceptualise 'materials' in different ways. To Shove et al. (2012) practices are defined by the relationships between materials, competences and meaning, whereas to Schatzki (1996, 2002, 2010) material arrangements are bundled together with practices in practice-arrangement nexuses. In the former, energy might be conceived as a material element of practices. But, if so, I think there the nature of this relationship requires care (energy is not actively integrated in the way that objects are manipulated and 'used'). Further, there are questions concerning the 'threshold' at, or qualities by, which energy and other materials can be considered to be elements of particular practices or as infrastructure to them, or neither of these.

To the latter ontology, energy consumption might be conceptualized as an 'event' or 'activity' amongst interconnected material entities. But a similar question arises of how processes of energy use relate to social practices. But Schatzki suggests a variety of relationships (causality, prefiguration, constitution, intentionality and intelligibility), which might be helpful. For instance, many arrangements may constitute practices, without being intentionally related to those practices. I would suggest that energy use embedded in practices like cooking and laundry would, for the most part fall into this category. In contrast, space heating may not necessarily constitute the social practices that take place in a given space, but it may prefigure them.

Some questions:

• Is it useful to think about 'elements' as those features which are distinctive to particular

³ http://www.demand.ac.uk/wp-content/uploads/2013/05/DEMAND-in-four-pages.pdf

- practices, or which are essential to them? These are not necessarily the same.
- Is it possible and useful to integrate varieties of relationships within an 'elemental' approach, to reflect to the different roles materials can play?
- Are there consequences of adopting one or other approach to materials? Or can 'elements' and 'arrangements' be mixed, perhaps depending upon constituting relationships?

2. What People Do: Types of Practice?

As well as an opportunity for thinking about the varied relationships between material arrangements and practice, the analysis of energy can also focus attention on varieties of practice. Some of 'what people do' is difficult to conceptualise in terms of well-bounded, discrete social practices. This is particularly apparent in relation to the provision of background material conditions, where interactions with heating, ventilation systems, and even clothing can be short, sparse and not always 'about' thermal comfort. If social practices are understood as activities with which people engage in their own right, this implies they are recognised as such by those who participate in them, and require some time and attention to undertake. It is difficult to conceive of getting dressed or adjusting radiators on these terms. Nonetheless, they are socially organised and plausibly form distinctive patterns of doing and saying. So how might a practice theory approach deal with such distributed forms of 'practice' that neither appear to qualify as 'entities' in their own right, nor are part of a practice which does (e.g. thermal comfort)?

Closely connected, is the question of what happens outside of these human activities, when the material arrangements continue to be active: as for example, when clothing continues to keep heat next to the body (or let it escape), as the body itself continues to convert food into energy and heat, and as the central heating system or sun continues warm the air in a room (or stops doing so). In particular, I would suggest that the moments of active 'arranging' of these elements should be understood in relation to these longer periods of 'not doing'. And that during such periods, there is ongoing experience, which is mediated through socially shared understandings and rules concerning appropriate conditions and appropriate responses. In other words, there is an ongoing integration of materials, competence and meaning by which experiences (of thermal conditions, at least) emerge. Could these forms of 'sub-practice' activity-inactivity be analysed in similar ways as well-bounded practices?

Even for practices that are more clearly bounded, might it also be helpful think about different types of practice? Distinctions can be made based on whether the activity involved can be delegated to another person, such as with cooking or laundry, but not with entertainment and eating. Some practices are heavily subject to social injunctions (e.g. cleanliness), others are more subject to the informal institutions and influence of professionals (e.g. cooking), others are obviously tied up with social identity and differentiation (e.g. computing), whilst other still seem to be formed in response to the options provided by pre-existing infrastructure (e.g. heating habits).

Some questions:

- Is it useful to think about 'types' of practice?
- To what extent is it helpful or detracting to explore the social organisation of small, subpractice activities and ongoing, apparently passive experiences, in social practice terms?

3. Service: Conceptualising Cross-Cutting Connections and Demand

In the case of thermal comfort, I propose that, however else they might be analysed, material arrangements that continue to be significant to experience (and energy demand) outside of observable human activity and the small, sub-practice 'arrangings' which affect such experiences are connected on account of a shared outcome: thermal (dis)comfort. I refer to this outcome as

'service', drawing on the definition developed by Shove of "composite accomplishments generating and sustaining certain conditions and experiences" (Shove, 2003: 165). In other words, the notion of service is one way of talking about the connections between different social practices, sub-practice activities, and material arrangements.

In fact, in my analysis, there are several ways in which the concept of 'service' is useful in practice theory analyses of energy demand, in reference to:

- complex and hybrid forms of organisation / connection across practices and material arrangements
- more specific functions that energy and networks of devices provide
- the inclusion of some of these functions, e.g. apps and software, as changing elements within practices.

In the conceptualisation of energy, and energy demand in particular, the inclusion of 'service' importantly accommodates the more basic recognition that if we wish to talk about demand for energy, we should really talk about demand for the services that energy provides, and how this is constituted in the accomplishment everyday practices. This is a subtle but important distinction from how energy per se is used. The notion of 'service' distinguishing means from ends, both in the case of the more direct services that energy provides (e.g. heating), and the more complex and composite outcomes of which energy is just one of many 'inputs' (e.g. thermal comfort). This helps to recognises that similar outcomes can be achieved in different ways. And this is important in analysing change: for example, services, such as thermal comfort, can become analytically distinct from the particular material arrangements (shawls, housecoats, open fires and armchairs) with which they were previously been synonymous. The 'service' can be a point of continuity as other elements, materials and competences, change. It can also be a point of commonality, amongst different contemporary means of achieving thermal comfort.

Thus, for the analysis of energy demand, service is an important topic, and it will be interesting to revisit and extend how this can be applied in debates about need and entitlement. It will also be interesting to explore whether and how it can be applied in other areas (for example, connections across eating practices) and in comparison to other cross-cutting forms of organisation (e.g. 'projects', following Pred 1981, as used by Røpke and Christensen, 2012).

Some questions:

• Is the idea of service as a cross-cutting or meta-organisation useful within practice theory approaches to topics, other than energy?

4. Dynamics and Different Blends of Human and Material Activities

This above discussion about the varieties of human and non-human 'activities' may also be reflected in the varieties of ways in which energy demand and practices change. In brief, my investigation of just three different domains of energy demand suggested that where non-human materials arrangements provide generic services, such as heating, standby and internet access, standards may escalate becoming more energy intensive. They may even converge. But where energy consumption relates more closely to how people spend their time, and the specific services integrated in such practices, there may be greater potential for sustained diversification in energy demand. However, whether such a diversification leads to higher or lower consumption is more ambiguous.

At least, this is my hypothesis: it would certainly be interesting to explore in relation to other practices and other forms of demand (energy and otherwise).

5. Variation and Change

The topic of variation within practices is interesting for several reasons. Conceptually it touches on tensions that reside at the heart of practice theories: between commonality and diversity, between practice-as-entity and practice-as-performance. Variation has also been implicated in processes of change, and this is what I am particularly interested in.

In the first instance, practices may become more or less diverse as they change. As practices become more diverse, they might even 'split' (in a kind of 'speciation' event). For example, Southerton et al. (2012) contrast diversification and multiplication, based on patterns of participation. When practitioners (continue to) engage in multiple forms of a practice, they suggest, such a practice may have diversified, yet remains singular. If, on the other hand, participants tend to engage in one form of a practice or another, Southerton et al. (2012) suppose that this represents multiple, distinct practices. This seems reasonable but it is perhaps not the only formulation of how practices diverge or split.

In addition, I would argue that diversification within practices can be deeply implicated in more general changes. Concepts of service may change when and if the means by which an outcome is achieved are extended or diversified. For example, it is only when there is an alternative way of providing hot meals, in the form of convenient pre-prepared foods, that there can be any question about what really counts as cooking, thus changing the experience of what it is to cook (well), since different 'choices' have to be made. In sum, the diversification and splitting, convergence and reformation of practices are especially important aspects of how practices change and worthy of more detailed development.

There is another way, too, in which variations have been implicated in changes in practice: that is through the different ways in which groups and individuals perform practices. Firstly, Warde (2005) suggests that different groups of practitioners might make different contributions to the development of a practice. Secondly, practices may change in relation to the inherent variability of performances: "as people in myriad situations adapt, improvise and experiment" (Warde, 2005: 141). These are not only translations into performance of the generalised pattern of a practice, but, in principle, also the means by which the practice as an entity is itself transformed. Precisely how, however, is a much under-explored question.

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Working Paper 9: Mikko Jalas, Temporal unfolding of demand (mikko.jalas@aalto.fi)

One of the areas in which theories of social practices have been found useful and made contributions to policy is the field on energy demand. Practices, it is claimed, demand energy carriers and services, and their performance in masses constitute aggregate demand. Thus, research in and management of energy demand is an area in which practice theory is put into use with interesting opportunities for theoretical development as well. This mini-manifesto aims to critique some salient assumptions in the way practice theory has been used in research on energy demand and to point some blind spots that call for clarification and theorization. More broadly, I suggest that collective rhythms continue to be important topics to theorize and that new views on materiality, duration of effects and accumulation of stocks help in developing further the studies of rhythmicity.

Do theories of social practice 'predict' the fluctuation of demand and the congestion of infrastructures?

Rhythmicity implies that performances tend occur at pre-given intervals. When a rhythms is collective and social this furthermore implies that performances both fluctuate and coagulate as they are squeezed in time and place and as congestion occurs. Electricity demand is one area where theory, empirical evidence and practical use of theories of social practice have been suggested and trialed. Fluctuation of overall demand is taken to be a result of human engagement in practices, and it seems viable that the fluctuation of demand and patterning of social life can be taken as empirical evidence of practice theory. Isolated individuals with cognitive capabilities to choose rationally would not, it appears to me, end up repeatedly in predicted moments of congestion be it in road traffic or electricity demand. Even if individuals reason the need to arrive at work at 8 o'clock and thus queue in traffic, the willingness to tolerate inconvenience and pay premiums for prime time consumption signals a social patterning. In addition to social power that forces some people to queue, fluctuation of and peaks in demand reflect the effects of positive line up and networks. My appetite for playing floorball calls for others to join in and synchronize with me. Moreover, the 'positive' congestion around team-sports, team-work or spectator events create 'negative' forced congestion around them. Overall, fluctuation of demand and the persistent rhythms in society seem to imply a host of conventions and mechanisms that operate upon individuals. If put to test and pushed to derive predictions, congestion in coordinated and materially constituted social life seems as an obvious contribution by practice theory.

Practice theory is put into another form of managerial test in the field of electricity demand. The roll out of smart grid technology is connected with questions of demand management: Will time-of-use-tariffs level off consumption peaks of electricity demand? What is the nature and force of the social mechanisms that produce fluctuation of demand and the underlying rhythmicity of practical performances in mass? In order to better understand key practice-theoretical phenomenon such as collective nature of demand and to prove useful for practical end, I suggest that temporality and rhythmicity continue to be central for advancement of practice theory.

Activities, activity spaces and infrastructures

Despite vivid representations of fluctuating demand and the parallel claim that this is a question of mass behavior, the notion that 'practices consume energy' needs to be further qualified. It can be argued that the links between energy demand and activity patterns are less direct and rather mediated by technology. For example, as a key element of energy demand, 'buildings consume energy' regardless whether they are occupied as they prepare for and maintain opportunities of engagement for humans. That is, the energy consumption by buildings has effects that endure over time. I suggest that in addition to thinking practices as activities (or verbs), we need to consider the materials of an activity, and that the notions of activity space and infrastructure prove helpful.

If we accept the notions that buildings or cities consume energy, we change from an activity-based register to a spatial register. It is no longer, or not only, practices that consume energy, but the maintenance of buildings and other material conditions of human action as *activity spaces*. Yet, spaces are not attended constantly; they can be on idle or in operation with different effects that depend strongly on the type of spaces. A motored space such as a car, for example, consumes little when not operated and commanded by humans. The distinction between idling and operating city is more difficult to establish. Activity spaces differ at least in terms of how dedicated they are and how strong and instant the influence of an occupant, user or operator is in the space.

Most spaces can host many activities and assemble and bundle them. Majority of the built environment exist in order to support and enable a particular set of activities, and includes designer induced-scripts for human engagement. However, the solidness of the link between space and action varies. Scripts can be multiple and uses of spaces are not confined to scripts. I suggest to use the term *infrastructure* for materially constituted spaces that satisfy both the two criteria: 1) such spaces enable many different activities and thus constitute open-ended activity spaces and 2) are characterized by a loose coupling of between the resources needed to maintain and operate them on the one hand and the level of human engagement on the other hand. Cities and more confined parts of the build environment, for me, appear to function as such infrastructure of practical performances.

To a degree it is arbitrary whether we prefer an material or action oriented ontology in practice theory. Yet, this choice appears important for analytical and practical purposes. In conducting empirical analysis of societal energy flows, I have for example been faced with the question whether domestic space-heating should be allocated to activities that take place at home. Answer might be simple: just observe whether occupancy rates of homes affect energy consumption of homes. However, one can also regard home as an infrastructure that is needed to engage in the full range of activities in one's life. If then 'infrastructures consume energy', we step one step further away from the ideal that practices consume energy in a straight-forward way, and introduce a hierarchy between them. 'Infrastructure' such as 'home' or 'eating' can probably be thought of as practices, but at the same time have enduring effects that last over time and detach infrastructures from the temporal coordinates of social life.

To spur further thoughts, I realize I have personally a normative stance towards not allocating all energy consumption to activities. To argue that energy is consumed to maintain and run activity-spaces and infrastructures such as homes and cities seems to grant some important freedoms for individual and slack in how global environmental management in brought to bear ever more details of individual lives. However, I realize that effective demand-management may call for more fine-grained analysis, and, as a concerned climate citizen, I sit uncomfortably on both of these chairs.

Duration and stocks of effects

Both of the previous pieces of thought of fluctuation of demand and spatiality of practices couple with question of duration of effects and stock that accumulate as outcome of practices. An activity-space that is constructed and maintained to enable particular set of activities is a stock of effects that endures in time. Such a stock may encompass entire infrastructures such as the road network that is on idle and serves its users at request for a long time. Stocks and rates of their consumption can, however, be more tightly coupled. At the other end, stock may be limited to the endurance of the acts of heating a fireplace and enjoying the warmth for couple of hours. Somewhere in between, the stock of firewood may last for two winters and stocks of heating oil or coal cover the need for half-a year. Energy intensive practices such as eating or personal hygiene also have effects endure in time. Hence, the maintenance of the conditions of practices include not only material spaces with suitable or comfortable conditions but also the body. Thought in this way, the body, properly nurtured, cleaned and clothed is an infrastructure of consumption, while it is, at the same time, an object of maintenance. More generally, can one distinguish between productive practices and consumptive practices based on whether stocks appear (locally) to accumulate and replenish or dilute and diminish?

Consumption at the end of supply chains

My struggles of deciding whether and how to allocate energy consumption to various activities relates to broader questions of supply chains. To say that practices consume energy is to construct chains of causal effects that guide a researcher to allocate the acts energetic conversion (combustion of fossil fuels, conducting electric currents etc.) to performances of practices and the acts of consumption. Yet, the lack of conceptual thinking around the links between and the nesting of different practices, and the resulting ad hoc allocation rules make social modelling of energy demand less applicable and appealing for policy-making. It seems necessary to try to distinguish between general purpose infrastructure and dedicated spaces that can indeed be analyzed as active operations that define these spaces.

Economists appear to have a clear yet a different way to distinguish between production and consumption. The notion of final consumption refers to the acts of private and public final consumption and to consumers who do not produce value, but consume it. Value is delivered to consumers via supply chains, and the acts of final consumption constitute a primary sphere that drives and mobilizes a large set of economic activities and exchanges. Economy and the different systems of production and distribution that are in place, in this ideal construction, resemble infrastructure. Is production the infrastructure of consumption?

Regardless of the validity of such one-way constitution of economic/private relationship, interesting thoughts are at reach. It is in these acts of final consumption that usefulness appears as exchange values are converted to use values. Usefulness is thus a thing/concept/phenomenon located at the border of economic life and private life worlds of which economist have little to say. Things at this border become simultaneously priceless as they exit the economy and useful as they enter the realm of consumption.

Usefulness might come at hand in the struggles to account for activity spaces and infrastructure that endure in idle form and store and accumulate stocks in the form of being ready for human practitioners. Buildings, for example, must justify the energy claims that their maintenance poses and become or promise to be useful at future instances. In case of Finland, there is for example on increasing activity spaces such as summer cottages and second homes that command ever more

resources and appear useful even they have low occupancy rates. Infrastructures, such as the military force, can be at the same time in an idle state and not produce any immediate service or host ongoing activities and yet be (regarded as) useful. If one would follow this thought, the spatial/material ontology I have suggested in this manifesto could include operational spaces, such the motored car, activity spaces as such as the home, and backgrounded infrastructure that surfaces as useful only randomly. Being aware of and developing such spatio-temporal reaches of material settings seems for me to support the development and use of practice theory.



Working Paper 10: Elizabeth Shove, Demanding ideas (e.shove@lancaster.ac.uk)

Thinking about the next decade is too daunting so my list of unfinished business consists of more immediate puzzles that have arisen from working with others in the DEMAND centre. DEMAND's research is organised around the idea that energy is used in accomplishing social practices and that such practices depend on (and constitute) infrastructures and institutions. This basic starting point has generated a series of trickier and broader questions about how social practices relate to each other, via material arrangements and infrastructures, and through various forms of temporal and spatial coordination. My mini-manifesto deals with these topics, and with some ideas about prefiguration, obduracy and accumulation.

Infrastructures, material arrangements and practices

In the *Dynamics of Social Practice*, (Shove, Pantzar et al. 2012) we suggested that practices typically involve the integration of material elements, along with elements of competence and meaning. We discussed this proposition, derived from Reckwitz's summary (Reckwitz 2002), with reference to a selection of simple and hopefully persuasive examples like the toaster, the shower, or the Nordic walking stick. In taking this approach we chose to ignore a host of other more complicated cases, overlooking the systems through which electricity, bathrooms or walkable pathways are provided, and skating over the fact that such systems are co-constituted by the enactment of multiple social practices. Within DEMAND we have had to pick up some of the problems we previously left behind, including the challenge of conceptualising infrastructures like those involved in the provision and consumption of oil, gas and electricity.

Schatzki's broader concept of material arrangements which includes "humans, artifacts, organisms, and things of nature" (Schatzki 2010: 129), is useful in recognising a range of more extensive material relations amidst which practices transpire. For Schatzki, material arrangements, which exist but do not happen, includes all sorts of features some of which are integral to the reproduction of specific practices and others of which are not.

I have the feeling that there is something complicated, and something missing between this all encompassing concept of material arrangement, on the one hand, and an overly narrow interpretation of material element on the other. And I think this elusive something is important in conceptualising relations between practices and in conceptualising the dynamics of energy, mobility and demand. This agenda can be developed in different directions.

How material elements and arrangements overlap and figure in many practices at once

One future task is to better characterise and understand the types of relationships that exist between practices and material arrangements. These might include element-like relationships in which some material artefact is integral to the conduct of the practice, alongside other genres of material configuration, interconnection and overlap.

For example, single purpose/single practice artefacts such as toasters or electric showers depend on multi-purpose, multi-practice arrangements of wires and electric power. Taking a shower

presupposes coexisting (but different) multi-practice infrastructures of gas and/or electricity and of running water, drainage etc. In addition, what is an integral material element of one practice can figure as a less constitutive, more optional but nonetheless relevant material arrangement amidst which other practices go on.

Concepts of flow and of practice-arrangement-nexuses (Schatzki 2010: 137) give a sense of the multiple relationships involved, but do not provide a vocabulary with which to represent or distinguish between them.

How infrastructures are developed and sustained by and for many practices at once

Accounts of how networks and infrastructures come to be as they are (Hughes 1983; Rosen 1986; Graham and Marvin 2001), show them to be outcomes of investment, design and sometimes deliberate planning, often related to one or more visions of the future practices of which society is or should be composed.

Histories of infrastructures are largely histories of supply. What is missing is a more practice-oriented analysis of the development and ongoing adaptation of 'networks' not in the actor-network theory sense, but in the sense of material arrangements that are defined by multiple connections between multiple distributed 'nodes' and that both suppose and depend on the repeated, recurrent performance not of one but of many different practices.

From this point of view, the challenge is to understand how the networked features of (some) material arrangements emerge, and how these plug into and depend on a raft of specific but varied social practices. The internet, electricity, gas, water and road networks, along with office blocks, homes and cities could all be considered in these terms, though the links and connections at stake clearly differ from one case to the next.

In any event some new thinking is required if we are to conceptualise the dynamic 'lives' of material arrangements that enable, limit and are co-constituted by the enactment of multiple social practices. In short, we need to show how "nets of practice-arrangement nexuses" (Schatzki 2010: 130) are woven.

How energy becomes embedded in different social practices

Within DEMAND we are focusing on the question 'what is energy for?' on the grounds that demand arises from the enactment of social practices. But this is only half the story. We also need to think about how different forms of energy, along with related systems of provision, and infrastructural configurations transform and sustain the performance and range of social practices enacted today.

Exactly how different forms of power, or mobility, become integral to the performance of one or more practices is an empirical question, but one that is likely to involve some discussion of the development (and loss) of infrastructures and of institutions and systems of provision. Each case will be different, but there may be some commonalities. For example, electrification is often associated with the delegation of competence and labour from person to machine/resource (e.g. hoovering as distinct from sweeping; washing with a machine rather than by hand). A second feature has to do with time: electrically powered drilling is much faster than most other forms.⁴ And in terms of mobility faster rail systems have reduced the time it takes to travel from London to Lancaster – and

⁴ http://www.lowtechmagazine.com/2010/12/hand-powered-drilling-tools-and-machines.html

to lots of other places too. This is important for the duration and timing of any one practice, and for how multiple practices are sequenced and scheduled through the day, the year etc.

One question for DEMAND is whether there is or has been a cross-practice trend towards increasing resource/energy intensity and if so, how and why might this be the case? Again taking this question forwards depends on analysing and conceptualising trends across many social practices at once.

How some material arrangements become critical for the conduct and circulation of many social practices

Although arguably constituted and reproduced one practice at a time, the electrification of daily life has become so widely embedded that failure (in the form of power cuts) has instant, far reaching effects. Nye's (2010) book on blackouts gives a sense of the interdependent complexes of social practice that now rely on the consistent provision of power. This points to a form of systemic codependence the compulsive nature of which is not fully captured by the appropriately flat concept of material arrangement.

A related, but different topic has to do with processes of international convergence. Social practices and daily lives remain immensely diverse, but there seem to be areas of increasing commonality, often with implications for energy demand. Examples might include the spread of the western diet, or the standardisation of indoor climates around the world. It is possible to point to the diffusion of requisite 'materials' e.g. air conditioning units, refrigeration, etc., and to notice the circulation of 'meanings' e.g. of a modern way of life. Mika Pantzar and I suggested that practices-asperformances are always localised integrations, but that elements travel and that their circulation is crucial for the reproduction of practices across space and time (Shove and Pantzar 2005). This is still only part of the story in that more is required to explain the multiple transformations involved as diverse sets of practices anchored in extraordinarily disparate material arrangements converge around an increasingly standardised form.

Various questions arise: for example, how do multiple forms of co-dependence between specific and/or overlapping material arrangements and complexes of practice coalesce? Likewise, how do previously vital relations of co-dependence fall apart, or take new shape. Again we are missing terms in which to organise these more collective forms of analysis. We are also short of experience in thinking about the role of industry, and of commercial interests and organisations – not as forces that exist outside of practice, but as sites in which integrative, cross-cutting connections are formed.

Loose connections and forms of relative independence: material arrangements and complexes of social practices

It is not always the case, but some infrastructures last for much longer than the complexes of practices of which they were once a part. We are consequently surrounded by the remains of previously 'networked' material arrangements that are no longer sustained by the links that used to hold them in place. Disappearance is often partial in that contemporary complexes of practice draw upon bits and pieces of previously integrated material configurations, blending these into new combinations. Adaptation is constant. For example, parts of a once integrated freight network (the canal system) have been re-integrated into a variety of leisure pursuits. By contrast, in Stevenage, one of the sites of DEMAND research, miles of cycle ways remain relatively unused since people travel to different destinations, and often do so by car. These observations raise further questions about *adaptation* and the flexibility or otherwise of material arrangements in relation to complexes of practice. They also highlight the possibility that new variants or complexes of practices might form around infrastructural 'remains'.

Bringing these threads together, the first part of my mini-manifesto calls for more attention to be paid to different types of material arrangement-practice relations (shared, specific, stand-alone, networked, etc.), to how they are formed and to how they change at different scales. This is part of a bigger project of identifying and conceptualising dynamic processes that evidently involve multiple social practices at the same time. (I know all changes are a bit like this, but even so..).

Synchronisation, coordination and institutions

In my contribution to *Time, Consumption and Everyday Life* (Shove 2009) I fantasised about three imaginary indices that might be used to describe a) the ebb and flow of social practices in society (the fossilisation, innovation, transformation index), b) the social and spatial distribution of contemporary social practices (the chart-atlas of contemporary practice), and c) the extent to which people are, or are not engaged in the same social practices at the same time (the societal synchronisation index).

In the energy world, there is increasing interest in managing daily and seasonal peaks, especially in electricity consumption. Since DEMAND argues that energy consumption is an outcome of social practice, it makes sense to ask what it is that people are doing at different hours of the day and night, and to learn more about the synchronous enactment of diverse social practices. There is no necessary link between synchronisation and 'peak' energy demand: e.g. sleeping is highly synchronised, but low energy. However, the project of reducing peak demand is different if that peak is made of a wide range of energy demanding practices, or if it is the result of the simultaneous enactment of 'the same' few high energy practices.

Ben Anderson has produced a simple measure of synchronisation (this being the inverse of variation in what respondents say they are doing at a particular moment in time), and has applied this to time use data linked to data on energy consumption and travel. The results are not that surprising: for example activities on Sundays turn out to be less synchronised than those on Wednesdays. Likewise, the reasons for travelling during the morning peak are more alike and the timing more synchronised than in the evening.

What is more interesting is why the enactment of different practices has the aggregated rhythm it does. To go further we need to consider the sequential ordering of different practices, their duration and how they relate to temporally dominant 'projects' like the working day, meal times, or the week-end. Within DEMAND, Giulio Mattioli has been looking at recurrent sequences of 'practice' represented in time use data by coded activities such as preparing and eating food and then washing up. Understanding these temporally inter-dependent sequences is important for the prospect of 'shifting' activities or whole clumps of inter-linked activities to off-peak hours.⁵

In his article on squeezing time, Southerton suggests that individuals rush certain practices in order to make more time for others (Southerton 2003). This implies that some practice-related time-demands are malleable and that patterns of attention vary, to some degree, depending on the priorities of individual practitioners. Jalas addresses similar issues, but with a focus on how practices like those involved in caring for a wooden boat come to dominate the schedules of their enthusiast

their routines if price signals are strong enough.

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⁵ The energy policy literature identifies a series of 'shiftable' practices, e.g. the laundry that can, in theory, be done at any time of day or night. There is some understanding of temporal rhythms in that meal times are not thought to be shiftable, combined with the belief that people will change

carriers. Both conclude that carriers' orientations are relevant but Jalas goes one step further, arguing that orientations are, to an extent, an outcome of the practice itself (Jalas 2009). This leads to other questions about how practices-as-entities acquire characteristic temporal features. For example, how does it come to be that the proper performance of a practice means it is enacted at the 'right' time, in the right order and for the right amount of time. Further, how do these features relate to the performance of other practices, and do how they change?

In working environments features of duration and sequence are often pre-defined. Zerubavel's (1979) detailed study of temporal rhythms in hospital life shows how the institution coordinates and schedules the practices of employees and patients alike. Institutionally determined patterns of timing and synchronisation variously relate to necessary or contingent forms of co-presence, coordination, sequence, cooperation and power, or to other institutionally timed 'events'. In this situation the carrier's orientation is of little or no consequence. Instead the rhythm of the hospital coordinates - and is made by - a distinctive organisation of practices and priorities.

In so far as peaks and off-peaks of energy and mobility demand are outcomes of practice(s), the possibility of deliberate peak load shifting depends on the relative fixity and flexibility of individuals, or groups of individuals, as carriers of multiple practices and on the repertoire of practices that are carried/enacted. This makes sense, but again I have a feeling that there is something missing. Ok we can focus on temporal rhythms as experienced by people who carry many practices. Ok, we can consider the typical temporal/normative 'features' of any one practice-as-entity, noticing that these change all the time. But how are we to conceptualise either the clumping together of sequences of practices, or what we might think of as more 'institutional' arrangements? Is it useful to think of an organisation, like a hospital, as an orchestrator of what people do and when they do it? To conclude that such an organisation is, at the same time, an outcome of what people do (Schatzki 2006), does not negate the processes of ordering and organizing that Zerubavel describes. However, it does suggest that other ideas are required to explain how temporal coordination is achieved. For example, how is it that Wednesday's practices appear to have more coordinative bonds than those that are enacted on Sundays? More broadly, are we how to explain the existence and the persistent and pervasive power of the 9-5 working day, or the working week – and the impact these temporal systems and/or dominant practices have on other areas of daily life?

More immediately, the idea that peaks and troughs in energy demand are outcomes of the temporal location of a series of bounded and therefore shiftable practices misses the point. Peaks and troughs are consequences of how relations between practices play out through the day, and across seasons, years and generations. From this point of view there is no such thing as 'a' shiftable practice: all are meshed in relation to each other whether as preconditions, co-requisites or variously causal sequences. In this context, 'flexibility' is a matter of reconfiguring relations within a complex of practices. The scope for doing so depends, in part, on the existence of dominant and for whatever reason non-negotiable demands/practices.

The second part of my mini-manifesto again calls for more understanding of how practices relate to each other this time with a focus on how some practices or sets of practices come to dominate the coordination of others. I am unsure about how institutions and organisation ought to figure in this discussion, but I think they have a place.

Prefiguration, obduracy and accumulation

One of the challenges for DEMAND is to find a useful and sensible way of contributing to discussions about the future. Current government policies rely on scenarios and analyses of options for promoting efficiency and decarbonising energy supply whilst maintaining current standards of living.

In effect these methods suppose that present practices will remain the same far into the future. This is highly unlikely: practices change all the time – but what, if anything, do we have to say about possible directions of change, or about the potential for deliberately steering the range of practices that might be enacted in the years ahead?

The terminology of 'path dependence' has used to describe points of no return in the development of sociotechnical systems. The classic example here is the persistence of the deliberately awkward QWERTY typewriter keyboard and of the skills involved in using it (David 1985). Is it at all useful to think about practice-path-dependencies and 'lock-in' in similar terms? More specifically do current practices, and material arrangements throw shadows into the future?

Schatzki suggests that present practices prefigure the social future. He writes as follows: "Prefiguration is the social present shaping/influencing/affecting the social future, above all, the nascent social future" (Schatzki 2010: 140). In his words, "Prefiguration is better understood as a qualification of possible paths of action on such registers as easy and hard, obvious and obscure, tiresome and invigorating, short and long, and so on." (Schatzki 2010: 140). Past and present practices influence judgements of hard, easy, etc. but Schatzki's point is that they do not *make* future paths. The future is inherently open, but prefigured in that not all possible paths are thought to be equal.

This conclusion does not close off lines of enquiry which go further into the topic of how and by whom terms like 'hard' and 'easy' are mobilised and used, which ask about how the 'inconceivable' is made, and about how material arrangements feature in this process. Hommells addresses some of these issues in an article which starts by underlining the obduracy of urban structures: "Once the high-voltage electricity distribution system is in place, it is hardly conceivable to deconstruct it and shift to a decentralized system of windmill power generation; once a city's downtown area, including all its buildings, roads, and distribution networks, is there, it displays obduracy and offers resistance to change (Hommells 2005: 329). This extract focuses on the hardware and on what it is that makes the infrastructure itself 'hard' to unpick. It says nothing about the practices that the high voltage system enables, but by rights both are at stake. In other words, qualities of obduracy and resistance to reconfiguration or unpicking apply to sets of practices as well as to the material arrangements that such practices co-constitute.

There is more to discover about how 'blocks' of obduracy are established in, and through social practice, and about the extent of their future reach. Hommels goes on to distinguish between three types of obduracy: that which is associated with persistent mental models and frames; that which has to do with being embedded or multiply anchored; and that which relates to forms of momentum or long term cultural tradition. In theory all three are part and parcel of making the range of arrangements to which prefigurational judgements of 'easy', 'hard' etc. are applied – and all three are also part and parcel of the judgements themselves.

For an individual, as for an organisation or a city, the chances of taking one but not another path of future action vary depending on past and present practices (hence the idea of prefiguration). So far so good, but just what is it about these past and present practices that makes a difference?

As indicated above, some clumps of past/present practices may prove to be obdurate or sticky: hanging together in ways that make persistence the 'easier' route to take for all sorts of different actors/practice-performers. But for an individual, the range or array of 'easy' or plausible options is also likely to depend on a more personalised repertoire of resources and capabilities – again born of past practices. This suggests that there might be different modes of accumulation, loss and storage to consider with respect to individuals, institutions, complexes of practices and societies. The

accumulation and distribution of requisite elements is clearly part of prefiguring future lines of action, but the processes involved are probably not the same as those that constitute obdurate configurations.

Since this is an exercise in looking ahead, it is appropriate that the third part of my mini-manifesto calls for more systematic and careful consideration of how past and present practices and material arrangements flow into the future.

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Working Paper 11: Stanley Blue, *Time, Difference and Change: Moments and Rhythms of Practice* (stanley.blue@manchester.ac.uk)

Although I have tried to put them in manifesto form, I must admit that these notes are more in the form of sketches and workings out than a consolidated plan of action and argument. In these notes, I have attempted to pull together a number of threads, some attached to my recently completed doctoral work, others to my current reflections on that work and more to my future ambitions for working within the field of 'theories of practice'. I hope to re-present a snapshot of how these ideas are currently forming and to make a suggestion, by way of manifesto, that 'practice theorists' may do well to continue to investigate the lucrative relationship between practice and time over the next decade, to exploit rich social and philosophical arguments in these areas to account for themes currently under-considered in this field (e.g. inequality, power).

In writings on 'theories of practice' we are encouraged to understand practices as being fundamentally routinised, as repeated aggregates of individual actions that are ordinary, mundane and everyday. At its base, this implies a close association (and perhaps stronger than that) with the temporal. I claim here that it is the theoretical positioning of activity and time that foreshadows our ability to analyse, to take account of organising principles, processes of re-production and therefore systems of power and inequalities. As such the relationship between practice and time warrants further investigation.

Stuart Elden⁶ reminds us that for Lefebvre, the notion of 'everyday life' (*la vie quotidienne*) retains two important senses: first, 'everydayness' (*quotidiennété*) refers to the repetition of daily life and second, 'everyday' (*quotidian*) suggests the *commodification* of ways of living that has made human life come to be experienced as dull, mundane and trivial. It seems to me that until now, 'practice theorists' have been exceptionally successful in accounting for the repetition of social action, but have had less to contribute to conversations regarding how these re-productions, that is the processes of re-production, are themselves re-produced as a consequence of those wider systems of commodification, exploitation and alienation. One method for providing a critique of the 'everyday', in order to investigate inequalities and relationships of power, might be for 'theories of practice' to engage with an alternative and fresh conceptualisation of 'time'. To consider 'everydayness' not only as repetition, as the ordinary or the normal, but perhaps to engage with it in a more similar way to that of Heidegger and Lukács' notion of *alltäglichkeit* - as the domination of modern, technological, capitalist systems of exchange that produce and re-produce social action, human life and practice, in a particular way, as mechanical, trivial and dominated by commodity fetishism.

This then, would be my manifesto: That to engage with processes of social change and to address under theorised concerns of power and inequality for example, 'practice theorists' need to account for the temporal relates to wider systems of production and exchange. In what space remains, I attempt to sketch out one starting point, taking my cue from Henri Lefebvre, that the sociologist's first step in analysing the modes of the re-production of practice is to do away with the commodified, the mediatised and the re-presented and to turn one's attention to the presencing of social action. As such I focus here on his theories of moments and rhythms of practice rather than on

⁶ Elden, Stuart. 2004. Understanding Henri Lefebvre: Bloomsbury Academic, p 112.

performances and entities. In the final section I show what differences and additions that this theoretical re-alignment might make to our analyses of social action.

Performances and Entities

In 'Social Practices' (1996), Schatzki describes three notions of practice. The first and currently under-re-presented notion is that of practice as a process, of practice as learning and as "development through doing" (89). Schatzki accounts for this notion through the interplay of the following two notions of practice as performance and entity. However, I want to bring a focus exactly to this under-re-presented notion of practice as an instance of doing and as development in order to offer a third and potentially complementary notion of practice that could open the field to new ways of thinking about time, practice, change, power, etc. First it is useful to say something of practice-as-performance and practice-as-entity by way of contrast.

Since the publication of Schatzki's text, those that have worked with the ideas of social practices have tended to consider them both as (somewhat) bounded entities, made up of a "nexus of doings and sayings" that, in connection with networks, webs and bundles of other practices, emerge, persist and disappear in space and time; and as distinct performances, individual enactments of the practice. Significantly, Schatzki writes:

"Each of the linked doings and sayings constituting a practice is only in being done. Practice in the sense of do-ing, as a result, actualizes and sustains practices in the sense of nexuses of doings."⁷

Usefully, this allows an account of social action as do-ing. By studying the interplay between practices-as-entities and practices-as-performances, in various empirical situations, 'practice theorists' have made great strides beyond traditional and critical fractures in social theory and philosophy, between re-presentations of the individual and the whole, the universal and the particular and between structure and 'agency'.

However, making an analytic distinction between performance and entity has particular consequences. It maintains a distinction between subject and object and externalises change from action. By providing an analysis that argues that practices-as-performances (as re-presented instances of social action) are shaped by practices as entities (as subjects), even if this relationship is mutually configured, the impetus for change is situated outside of the doing itself. I.e. changing the elements of the entity affects performances and changing individuals' performances will change the configuration of the entity itself.

The distinction between performance and entity also plays out in and maintains a distinction between subjective and objective time, that is, time as lived experience on the one hand and time as quantifiable clock hours on the other. In Bergsonian philosophy, this distinction is paralleled in that the past, present and future of activity only exist as separate and distinct in objective or 'spatialised' time. In subjective or 'real' time, they occur "all at one stroke". This unfolding 'duration' is to be considered as the experience of:

"... the continuation of what precedes into what follows... uninterrupted transition, multiplicity without divisibility, and succession without segmentation."

⁸ Bergosn in Schatzki, Theodore. 2010. *The Timespace of Human Activity: On Performance, Society, and History As Indeterminate Teleological Events*: Lexington Books, p 189.

⁷ Schatzki, Theodore. 1996. *Social Practices: A Wittgensteinian Approach to Human Activity and the Social*. Cambridge: Cambridge University Press, 90.

It is this formulation that underpins current conceptualisations of the relationship between practice and time. Memory and intellect do not introduce segmentations, defining actions, rather, they remember segmentations that were *actually there* (i.e. practices-as-entities). That is, whilst we may experience human life \acute{a} la Bergson, as a continuous unfolding, it is a continuous unfolding of particular practices-as-entities:

"True, both my performances of these actions and my lived-through experiences of this series were continuous. But the continuous performance of action was of precisely these actions, and my continuous performance took precisely those turns." 9

In synthesising the segmentation of particular actions (practices-as-entities) with an understanding of continuous unfolding (as continuous performance), Schatzki provides a schema which links practice and time in a particular way, i.e. synthesising performance and entity with subjective and objective time.

This is significant to note because it is this distinction that organises analyses from within the field of 'theories of practice' that are focussed on the ordering of practices-as-entities 'in (objective) time' as a result of, or in creating experiences of (subjective) time as harried, busy, rushed, relaxed, etc. ¹⁰ Conclusions that usually follow are that perceived notions of 'busyness', 'time-squeeze', etc. might motivate people to re-order practices in some potentially more or less sustainable ways, or engage in new practices that make use of technologies and energies which might have detrimental or beneficial impacts on the environment. Of course this is an over simplification of complicated analyses which have made a significant impact in environmental policy and practice. However, such arguments quickly reach their limits in accounting for different strategies of coping with 'time-squeeze', for different orderings of practices, and further defined understandings of inequality and power. Or at the very least, inequality and power come to be explained by access to resources (through practices) and time itself becomes reduced to one of those resources.

There seems to me to be much more that 'theories of practice' could learn from a wider engagement with and further development of the social and philosophical literature available on time. Particularly in search of novel ways of conceptualising and accounting for various, and currently under theorised themes. One method might be to put aside the distinction between subjective and objective time, between practices-as-entities and as-performances and to consider practice as immediate and as development, through a theory of moments and rhythms.

Moments and Rhythms

Lefebvre's critique of everyday life and his analysis of rhythms provide us with one example for reconsidering the relationship between practice and time, and potentially for accounting for change and intervention in certain actions in new ways. Much of this work involves a critique of the representation of human life and social action as commodified, as *things* (entities) that return (emerge, persist and disappear) over time. Instead, Lefebvre seeks to capture the presencing of social life through an alternative understanding of repetition – not repetition of the same *thing*, but repetition of difference, or change:

"Repetition of behaviour patterns (conditionings)... cannot be assimilated to repetition of states [i.e. entities]... We must distinguish between repetitions of situations [i.e. performances]... and repetition of certain systems... If repetition, return or renewal of the same (or more or less the same) phenomenon should be understood according to each

⁹ Schatzki, Theodore. 2010. *The Timespace of Human Activity: On Performance, Society, and History As Indeterminate Teleological Events*: Lexington Books, p 193.

¹⁰ For example see Southerton, Dale. 2003. "Squeezing Time." *Time and Society* 12 (1):5-25.

specific case and type, the same can be said of the relation between what is reproduced and the newness which springs from repetition (for example, repetition of sounds and rhythms in music offers a perpetual move-ment which is perpetually reinvented)."¹¹

We can draw three important ideas for understanding the relationship between practice and time here from Lefebvre: First, that being is becoming. That in its enactment practice changes – it is not static, rather practice is itself change. Second, that if practice is change then we can no longer think about it in terms of re-presented entities and performances, but instead need to consider its immediate and becoming qualities in *the moment*. And third, that a turn to the moment requires a different understanding of 'lived time' through a specific modality of repetition: "'Something' – which is certainly not a thing – is encountered once again." It is this repetition of 'moments' of practice, thus conceived as never a repetition of the same, but as always drawing with it 'something' different, that constitutes Lefebvre's analysis of rhythms.

Clearly then, in Lefebvre's formulation at least, rhythms do not belong to practices-as-entities, traceable along an x-axis and re-presentable in graphic form as they often are through representations in time-use data, for example. He makes this point clear when he writes:

"Everybody thinks they know what this word means. In fact, every-body senses it in a manner that falls a long way short of knowledge: rhythm enters into the lived; though that does not mean it enters into the known. There is a long way to go from an observation to a definition, and even further from the grasping of some rhythm (of an air in music, or of respiration, or of the beatings of the heart) to the conception that grasps the simultaneity and intertwinement of several rhythms, their unity in diversity." ¹³

The repetition of the moment does not happen in isolation. Instead it occurs within the polyrhythmia of the everyday. That is to say that any given rhythm can only be understood in relation to its contextual and supporting rhythms. Rhythms shape each other. This can happen in two ways. First, rhythms can be in a state of eurhythmia, of co-ordination and concordance in their normal and everyday (*quotidian*) state. However, rhythms can also break down. This second state is described by Lefebvre as arrhythmia, as the de-synchronisation of rhythms which results in the extra-everyday:

"[W]hen they are discordant, there is suffering, a pathological state (of which arrhythmia is generally, at the same time, symptom, cause and effect). The discordance of rhythms brings previously eurhythmic organisations towards fatal disorder." ¹⁴

Importantly however, arrhythmia does not indicate the end of a rhythm, or a stepping out of polyrhythmia. Instead it is a re-alignment, a re-synchronisation of the polyrhythmia of the everyday. Breaks in eurhythmia are not rare, but continuous — as soon as one eurhythmia breaks down, another immediately aligns. What matters for Lefebvre, is how the continuous discontinuities are reproduced, how the processes of repetition themselves affect and shape ongoing change. To this end he distinguishes between two structures of rhythms: the cyclical and the linear. This is not the same as a Bergsonian distinction between 'real' and 'spatialised' time. Both linear and cyclical rhythms are constituted by the production of difference through repetition, but they do this in different ways. Whilst cyclical rhythms are of biological and cosmic origins, linear rhythms are born out of the

¹¹ Lefebvre, Henri. [1961] 2014. Critique of Everyday Life, Vol. 2: Verso, p 634.

¹² Ibid, p 636

¹³ Lefebvre, Henri and Régulier, Catherine. 1985. "The Rhythmanalytical Project." *Communications* 41: 191-199, p77.

¹⁴ Lefebvre, Henri. [1992] 2004. Rhythmanalysis: Space, Time and Everyday Life. Translated by Stuart Elden and Gerald Moore. Edited by Stuart Elden. London, New York: Continuum, p 16.

technical-social. Importantly the continuous interaction between the cyclical and the linear is the site of domination by mechanical and technical, linear rhythms over 'natural' human rhythms. Nevertheless, for Lefebvre it is also the site of struggle, the place to contest capitalist rhythms of production and exchange that have come to organise bodily and 'natural' rhythms of becoming.

Power then, in this account, depends on time. Not more simply on the access to time as a resource. Instead power is expressed through the organisation of societal rhythms of practice. Similarly, inequality could be conceived in terms of the rigidity and flexibility of those rhythms. This argument clearly requires further crafting, but for present purposes it is enough to propose for discussion the idea that thinking about practice and time through a theory of moments and rhythms might well provide an interesting avenue down which to pursue, thus far under-considered concepts, such as power and inequality, and to conclude by imagining what some of those differences might look like.

The Next Decade – *Time* for Desperate Measures (*Mesures*)?

The practical implications of exploring this shift in theoretical orientation vary in how much they might change current recommendations for intervening in and shaping practices. It is clear that novel interventions in the arrangement of rhythms, for example, are possible, and yet intervening in the material infrastructures that form part of the moment of practice, or re-ordering practices in time will still affect the symphony of rhythms thus conceived. However, what is interesting to note and warrants further discussion are the differences or additions that thinking about the relationship between practice and time might be. In the space below I outline a few of these differences as summary.

a) Re-production not Repetition

One common goal within 'theories of practice' is to understand the relationship between social action and social change. The DEMAND centre explores this question through its second theme framed as: 'How End Use Practices Change'. From a practice theoretical perspective focussed on moments and rhythms we might suggest that this framing involves re-presenting a specific and (to some extent) bounded entity that emerges and persists through repeated performances until something changes either within the internal configuration of elements or through an example of performance, that then might lead to the disappearance or re-constitution of that practice. It might also be useful to consider social action as already constantly changing, as un-boundable, and un-re-presentable in this way, and to turn our attention to the very ways in which moments of action become re-produced. Significantly this might promote an even further emphasis on the relationship between moments of practice rather than on the internal configurations and boundaries of practices-as-entities.

b) Syncopation not Synchronisation

Synchronisation is fundamental to the study of rhythms and is also of conceptual significance to the DEMAND centre's first research theme on 'Trends and Patterns in Energy DEMAND'. Currently however, emphasis is placed on the synchronisation of practices and not on rhythms (as described above). This means that the concept can only be put to use in a limited way, aggregating patterns of the use of time (as a resource) for certain activities. Of course, this is extremely important for capturing analyses of peak energy load, for example, but it does less to explain the resulting 'lock in' of rhythms established by a harmonious and eurhythmic working day, re-produced through repetitive, linear, mechanistic, technical and rational rhythms of production. In order to extend this analysis of synchronisation we might do well to add the idea of syncopation. That is, to stress, or emphasise a particular action or measure (mesure) that might disrupt the 'locked in' eurhythmia of rhythms of practice that exist around peak demand. Establishing these kinds of arrhythmias could

then lead to the establishment of new sets of rhythms, a new eurhythmia that consists of a more dispersed set of rhythms of practice that doesn't produce peaks in energy demand.

c) Time as Difference not as Resource

The central argument from these notes that I suggest by way of manifesto is to echo Schatzki's argument in *Timespace*¹⁵ - to move away from conceptualising practices as existing in a kind of temporal container, in objective time. I argue that it may also be fruitful to go even further and to consider Lefebvre's suggestion that time is *difference*. That is to say, that to extend social theories of practice through a further engagement with social theories of time promises to open new ways of considering the relation between social action and social change. One preliminary route is to work with moments and rhythms to study the various ways in which moments of practice are reproduced.

d) Not Just Everydayness but the Everyday

Lefebvre's work challenges us to go beyond analyses of the routine, the mundane and the ordinary and to investigate the commodification of everyday life that produces that triviality, banality, repetition and alienation. Significantly this requires us to account for the relationship between the extra-everyday and the everyday, between the cyclical and the linear and between mechanical rhythms of exchange and human, bodily rhythms of becoming. In short the concept of the 'everyday' is a rich site from which to investigate new questions and themes over the next ten years.

e) Festival and Triviality

I will end with another quote from Lefebvre, which sums up the point I have tried to make in these pages, that further developing notions of practice and time, could well point us in the direction for building new practice-theoretical concepts that can help us to account for the commodified and repetitive everyday and how it changes:

"The theory of moments will allow us to follow the birth and formation of moments in the substance of the everyday in their various psychic and sociological denominations: attitudes, aptitudes, conventions, affective or abstract stereotyped, formal intentions, etc. Perhaps it will even permit us to illuminate the slow stages by which need becomes desire, deep below everyday life, and on its surface. But most importantly, it must be capable of opening a window on supersession, and of demonstrating how we may resolve the age-old conflict between the everyday and tragedy, and between triviality and festival." ¹⁶

¹⁵ Schatzki, Theodore. 2010. *The Timespace of Human Activity: On Performance, Society, and History As Indeterminate Teleological Events*: Lexington Books

¹⁶ Lefebvre, Henri. [1961] 2014. Critique of Everyday Life, Vol. 2: Verso, p 652.



Working Paper 12: Lenneke Kuijer, A call for more practice theory on the future (s.c.kuijer@sheffield.ac.uk)

Based on Kuijer (2014)

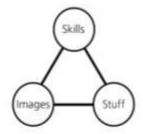
If asked what DEMAND demands from the future of practice theory, I would call for more practice theory on the future. From my experiences with social practice theory in a – inherently future-oriented – product design context, I found that practice theory could be enhanced when it comes to the DEMAND objectives of thinking about 'how social practices and related patterns of demand change and how they might be steered'. In my PhD thesis, I've identified a number of potentially promising directions to do so. In this paper I will briefly address three of them:

- 1. To refine the three ball images-skills-stuff model to a bubble model of groupings of elements and multitudes of links;
- 2. To use this model to develop conceptual handles for thinking about change in and 'steering' of practices;
- 3. To explore the (dispersed) practice of improvisation in relation to (radical) change.

Throughout the paper I will use examples from my empirical work on bathing and staying warm at home.

From balls to bubbles

Zooming in on practices as a constellations of elements (as in the 'Shovean' images, skills and stuff model (e.g. Shove and Pantzar 2005)), my thesis introduces an adjustment of the model by visualising the elements as groupings of elements and the links as multitudes of links (Figure 1). I've found this adjustment useful for several reasons.



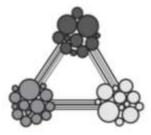


Figure 1: From balls to bubbles (Kuijer 2014)

For one, it helps to clarify the distinction between practice-as-entity and practice-as-performance, because, as visualised in Figure 2, the bubbles model makes it possible to represent single performances as partial manifestations of the entity. This highlights that although they are manifestations of the same practice, performances integrate varying sets of elements. All these elements and their links together form the practice-as-entity. Conversely, the entity contains many other varieties of performances. So for example, although rarely deployed in the same performance, images of refreshment and of getting warm are both part of the practice of showering.

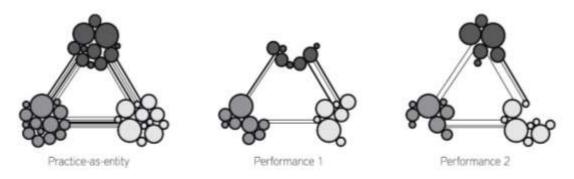


Figure 2: The relation between entity and performance visualised (Kuijer 2014) (note: a practice-asentity generally 'consists of' more than two performances)

Second, the bubble model helps to conceptualise change from a design perspective. Before explaining this point, there is a need to say a few words about the relation between practice theory, DEMAND and design.

In the definition of Herbert Simon – one of the founders of design theory – design is about 'Devising courses of action to change existing situations into preferred ones' (Simon 1996: 111). Although I expect few DEMAND'ers to directly or comfortably identify with this definition, I would say that the idea of steering practices and related levels of energy demand is present in the centre's objectives. What this implies, in my view, is that DEMAND is at least playing with the designer's hat (or glasses if you like). When positioning design in relation to practice theory, it is important to make a distinction between change and design. Practices(-as-entity) change because of the sum of changes that happen in everyday performance. Change is omnipresent and continuous in practices. This change is not initiated by anyone in particular or directed in any particular direction. Design, however, is about initiating and facilitating change in preferred directions.

The concept of change ('steered' or not) inherently refers to the practice-as-entity. However, since entity and performance are so closely intertwined, they cannot be seen as separate from each other. To develop this argument, I'd like to build on the premise that 'practices change when new elements are introduced or when existing elements are combined in new ways' (Shove et al. 2012: 120). In other words, when aiming to change a practice, one way to go about it is to introduce new elements into them. Something I will refer to as making an intervention. This process can be described in more detail and visualised using the bubbles model.

Because new does not necessarily mean new to the world, but new to the particular practice-asentity, these 'new' elements and combinations (links) will here be referred to as unfamiliar elements and links. Notably, unfamiliar elements are not necessarily (only) things; they can also be unfamiliar skills and/or images. Moreover, I would argue that what Reckwitz refers to as 'crises of routine'¹⁷ are situations in which performances integrate unfamiliar elements or links into existing configurations of images, skills and stuff. Reckwitz goes on to explain that in these situations, the 'breaking' and 'shifting' of structures takes place (Reckwitz 2002: 255). This breaking and shifting of structures is here referred to as reconfiguration. Integrating unfamiliar elements or links into a performance requires (more or less extensive) reconfiguration of elements and links into a new configuration that works and makes sense. In addition to the breaking and shifting of links described by Reckwitz, this process can also involve recruitment of unfamiliar elements, and rejection of existing ones. In practices of staying warm at home for example, the introduction of liquid fuel has rendered elements like coal sheds, coal scuttles, coal dust and skills of making and maintaining a coal fire

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¹⁷ Schatzki calls them 'contingent events' (2001: 53) and Shove et al. 'disruptive moments' (2007: 31)

obsolete, while piping, oil stoves and skills in preventing fires became required to make the practice work. In spite of all these changes, some elements remained part of the practice, such as ideas of cosiness and comfort, chimneys, seasonality and kitchens. In Figure 3, the bubbles model is used to depict this process of reconfiguration graphically.

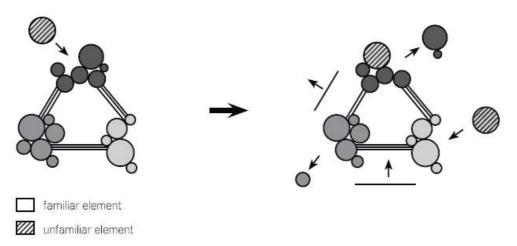


Figure 3: When an unfamiliar element is integrated into the performance of a familiar practice, reconfiguration happens (Kuijer 2014)

So, to return to the relation between entity and performance when it comes to change, this relation could be specified by saying that change in the practice-as-entity is both a consequence of and a catalyser for reconfigurations of elements that are formed in performances. I would argue, in addition, that there is something particular about these performances involved in change; they are of the type that Warde (2005) refers to as instances of 'adaptation, improvisation or experimentation'. From a design perspective, these instances are of core interest. But before going deeper into them, it is important to note that these forms of performance in themselves do not change the practice-as-entity. Only if a reconfiguration is repeatedly performed by several practitioners, can it become collectively recognized as normal performance and thus as part of the practice-as-entity. This process of moving from exceptional to normal will be elaborated on below.

Repetition and recruitment

Here, I would like to introduce another visualisation of the relation between practice-as-entity and practice-as-performance that emphasizes the role of *repetition*. Schatzki explains that the practice-as-entity forms a structure that establishes certain forms of performance to be correct (in certain situations), and other forms of performance as acceptable (1996: 101)¹⁸. Along the same lines, Warde explains that 'the patterning of social life is a consequence of the established understanding of what courses of action are not inappropriate' (2005: 140). Consequently, besides establishing whether a performance is correct or acceptable, the practice-as-entity also establishes what types of performance are inappropriate or unacceptable. For example, bathing in a canal is generally not considered an acceptable way of washing the body, and wearing coats indoors not an acceptable way of staying warm at home. Knowing about these categories is part of being a competent practitioner¹⁹. As mentioned, there is a relation between the number of performances of a certain

¹⁸ What Schatzki refers to as 'correct' can also be called mainstream. I regard mainstream as the type of performance most practitioners perform most of the time. For example, in the Netherlands showering is the mainstream form of bathing. Taking a bath is a less common form of bathing, but it is also acceptable.

¹⁹ Notably, these categories of correct, acceptable and unacceptable exist across many different dimensions and vary across sub-groups of carriers. For example, there are correct, acceptable and

type and the categorization of this type of performance as correct, acceptable or unacceptable. This relation represents a relation between the practice-as-entity and the practice-as-performance. Figure 4 illustrates how the practice-as-entity is made up of a variety of situated performances²⁰.

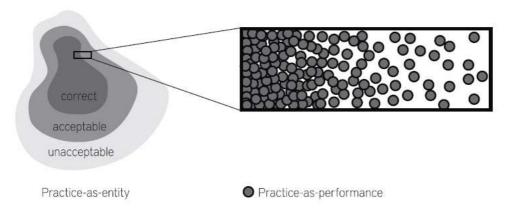


Figure 4: The relation between entity and performance II (Kuijer 2014)

Because practices continuously change, these categories of correct, acceptable and unacceptable are not fixed. What mainstream forms of bathing are, or acceptable indoor temperatures is something that changes over time. In bathing for example, mainstream practice has over the past century shifted from a weekly bath to (close to) daily showering (Hand et al. 2005). The relation between the practice-as-entity and the practice-as-performance thus conceptualised, highlights that the more a certain form of performance occurs, the more acceptable or mainstream it becomes²¹.

Summing up, introducing an unfamiliar element or link into a performance can trigger the forming of a reconfiguration of elements that works and makes sense, which subsequently can recruit more, and more faithful practitioners. If successful, such a repeatedly performed reconfiguration can change what is considered correct and acceptable, and thus the practice-as-entity. Having said this, the next section will return to those particular types of performances in which reconfiguration happens.

Improvisation

Following the terminology of Warde (2005), the process of (per)forming a reconfiguration (i.e. a 'beside normal' performance) can be referred to as instances of 'adaptation, improvisation or experimentation'²². Making an intervention can be viewed as the deliberate staging of a crisis

unacceptable frequencies of washing the body, correct, acceptable and unacceptable indoor temperatures, and so on.

²⁰ What the figure also visualises is that there is no clear line between the categories; e.g., in some situations, for some people wearing coats indoors can be acceptable, while in others it is not. This does not mean, however that a type of performance only rarely performed is unacceptable per see. As Schatzki explains, there are 'ranges of acceptable doings and sayings broader than the behaviours already performed in the practice' (1996: 102). Therefore, it is possible that people happen upon new ways of proceeding that are found acceptable by other carriers of the practice.

²¹ This also implies that the effects of any one performance fade over time and thus that a form of performance that is not practiced moves to the periphery of the structure (i.e., becomes a fossil (Shove and Pantzar 2005))

²² It has to be noted that since all practices change over time, change is part of normal practice. In fact, Reckwitz, connotes 'crises of routine' as 'everyday crises of routine'. 'Crisis' situations happen so often that adaptation, improvisation and experimentation can be seen as routine parts of daily life. Can they be viewed as dispersed practices (Schatzki 1996: 91)?

situation in order to trigger these instances. To better grapple with the effects of an intervention in practice theoretic terms, I therefore argue that adaptation, improvisation and experimentation, should be explored in greater detail.

Making a first attempt at this renders that adaptation and improvisation are similar; both can be responses to an intervention and both are directed at adjusting a normal configuration to make it work in the situation at hand. Because improvisation implies a more extensive form of change, it seems to be the more interesting of the two in the current context. It can be defined as 'creatively inventing a reconfiguration in the spur of the moment with what is conveniently at hand'. Experimentation is different from the other two in the sense that it does not necessarily imply an intervention in the form of an unfamiliar element. Experimentation can happen in the face of familiar situations. It implies an active search for reconfigurations of existing normal practice from the side of the experimenter. Moreover, it involves a process of planning, performing and evaluating. It can therefore be of interest for DEMAND, but not directly for the form of change here discussed.

When talking about extensive reconfiguration, which is the type of reconfiguration aimed for by DEMAND, improvisation may offer a stepping stone towards this aim. Being a (dispersed) practice, carriers can have varying levels of competence in improvisation. We all know how to improvise because improvising is a routine part of everyday life. However, what is nice about improvisation is that some people are explicitly trained to do it and therefore stuff has been written about the particular skills involved. Seham (2001) summarizes these as 'a mixture of "making do" and "letting go". Making do refers to skills of 'using bodies, space all human resources, to generate a coherent physical expression of an idea, a situation, a character' (Frost and Yarrow 1990) while 'permitting everything in the environment (animate or inanimate) to work for you' (Spolin 1999). Letting go refers to the ability to 'free oneself from socially accepted frames of reference and assumptions of expected behaviour', to 'focus on the process' and 'suspend judgment of the outcome' (Vera and Crossan 2004). These enhanced skills of improvisation could be of particular use to DEMAND, because it is not just change it is aiming for but radical change.

Conclusions

Because DEMAND is about radical change and in my view therefore toys with a design orientation, I would argue that DEMAND could benefit from some of the concepts developed in my thesis work on practice-oriented design. As a potentially useful concept in this regard I introduce the 'bubbles' model as an expansion of the 'balls' model of images, skills and stuff. I argue that this model is useful for several reasons: (1) it clarifies the relation between practice-as-performance and practice-asentity, and (2) it helps to specify the process of reconfiguration. When aiming to steer a practice in desirable directions, one way to go about it is to deliberately create crises of routine by introducing unfamiliar elements or links into performances. Such so-called interventions can trigger instances of improvisation which result in reconfigurations of elements that work and make sense. When capable of recruiting more and more faithful practitioners, such reconfigurations are able to result in change in the practice-as-entity.

Clearly these are just some directions that have been superficially explored so far. Many questions remain to their regard. For example, what are other forms of steering than making interventions in particular practices and how do they relate. The account makes steering practices sound somehow straightforward, which it of course is not. Practices consist of complex configurations of elements that are in turn part of webs of practices that work. Even if an improvised performance itself, in a particular situation works for the performer, it may not be suitable for repeated performance beyond that situation, by the performer or by others. Links can be made that make no sense (beyond the particular situation) or elements can be integrated that are not available elsewhere. In

other words, making available unfamiliar elements does not mean that they will be integrated into desirable (i.e. from the point of view of energy demand) reconfigurations, let alone become part of the practice-as-entity. Facilitating reconfiguration through improvisation is a process that takes time and effort and throughout which interventions (in the form of unfamiliar elements or links) can be rejected. Moreover, to change the practice-as-entity, the reconfiguration needs to recruit more and more faithful practitioners, a process through which the reconfigurations itself will necessarily transform. This process may go in undesirable directions.

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Working Paper 13: Nicola Spurling, The relationship between (practice) theory and policy intervention: an in-progress framework (n.spurling@lancaster.ac.uk)

This short paper focuses on a challenge commonly thrown at those working with theories of practice on issues of sustainability: what is the potential of theories of practice, and empirical studies that draw on this work, to inform government policy? The paper argues that to unpick this question, we need to take a step back and think about the relationship between theory, empirical research and policy per se. I start by outlining an in-progress framework that identifies several of these theory-research-policy relationships, namely: framing problems – a relationship in which theory enables the systematic critique of taken-for-granted assumptions, as well as the proposal of alternative framings; policy influence and change – a relationship in which theory and research seeks to understand the potential role of policy within social change; the use of new kinds of data for intervention design, which come from empirical research that 'operationalises' aspects of theory; and policy evaluation, which focuses on the success or failure of particular interventions or programmes. The framework is applied to the recently published 'Developing DECC's evidence base' (DECC, 2014), showing that these different roles of theory are often conflated in policy documents. The framework also provides a tool to evaluate research on theories of practice and policy and identify where future work could focus.

Introduction

The main argument of this paper is that if we are to understand the potential for policy of theories of practice, it is necessary to take a step back and think about the relationship between theory, empirical research and policy per se. I make this point for two reasons. Firstly, research about practice theories and policy that has emerged across the last few years draws on theory and empirical research in quite different ways, making a wide range of claims about how theories of practice might be useful and relevant. In thinking broadly about this work I had the idea that a framework to help us think more clearly about the theory-empirical research-policy relationship (from now on referred to as the TRP) would be useful.

Secondly, and related to the above, my experience in recent discussions – at academic conferences, the Scottish Government and other engagement events— is to be commonly asked 'is this a behaviour change intervention?' or 'what is a practice theory intervention?' I have a problem with these questions, as I think they oversimplify and conflate the complex and multiple relationships between theory, empirical research and policy. To understand what is different about these approaches requires a more sophisticated understanding of the TRP relationship.

I want to emphasise that this is work-in-progress, and I am interested in feedback on whether developing the framework further is worthwhile. There are four reasons why I think it is. Firstly, I think such a framework could help to provide clarity on the aims of research concerned with the TRP. Secondly, it would enable an evaluation of the current state of the art, in relation to theories of practice and policy and help to identify a future research agenda. Thirdly, it provides a means of reviewing how policy understands evidence, for example, I have recently co-authored a response to the DECC evidence base (with Elizabeth), a document which slips between very different

conceptualisations of the TRP, without recognising it is doing so. I will highlight later why this can be problematic. Finally, the framework potentially provides a method for contrasting theories of practice to the behavioural change approaches currently popular in policy.

An in-progress framework

The table outlines an in-progress framework. It identifies four different kinds of theory-research-policy relationship (nb these conceptual distinctions are overlapping and interrelated). In each case I provide a short description and note some of the literature I have identified as being relevant to each. This literature helps to explicate the TRP relationship in each case and comes from a range of research fields including technology studies, health research, innovation studies and social policy. These different research traditions appear to have strengths on particular aspects of the TRP relationship. My idea is that delving into them has the potential to move forward our thinking about theories of practice and sustainability policy. Below the table I explain a little more about each of the TRP relationships.

TRP Relationship	Description	References
Framing problems	Theory (e.g. a theory of how social change happens) enables the systematic critique of the taken for granted assumptions embedded in policy problems.	Hommels (2005) provides an overview of 'frames' – a set of concepts from technology studies concerned with fixed ways of thinking and acting that can constrain the working practices of planners, engineers, architects etc. Rein and Schon (1993) write about the concept of frames in policy analysis.
Using data/research findings to inform intervention design	The use of data for intervention design, which comes from empirical research that 'operationalises' aspects of theory. Nb data does not only have a 'real' role but also justifies/legitimises.	Mackenzie (1981), Law (2009), Osborne and Rose (1999) write about how social statistics and large scale surveys enact a particular social world. Although these critiques exist, few alternatives are offered. There is a history of approaches to this aspect of the TRP in health research. These move beyond critique to the development of alternatives. For example there are critiques of systematic review and randomised control trials: (Pawson et al., 2005; Cartwright and Hardie, 2012). Alternatives include realist review (Pawson et al., 2005; Pawson and Tilley, 1997), and meta-narrative mapping (Greenhalgh, 2004)
Policy influence and change	Theory and research provides understanding of the potential role policy can play in social change.	Cartwright and Hardie (2012) discuss cause and effect in the context of policy intervention. Rip (2006) writes about reflective governance. Shove and Walker (2007) critique transitions management. (Pollitt, 2008) writes about temporalities of policy.
Policy evaluation	Focuses on collecting particular kinds of data to evaluate the success or failure of particular interventions or programmes	Recent publications focus on a 'what works?' agenda in all areas of public policy. (HM Government, 2013; Puttick, 2012) Cartwright (2010) and Cartwright and Hardie (2012) critique the focus on 'what works?'

'Framing problems' refers to a TRP in which theory (e.g. a theory of how social change happens) enables the systematic critique of the taken for granted assumptions which underpin current policy problems and the solutions that are deemed to be plausible and possible. The concept of frames has been developed in technology studies and social policy analysis. Broadly speaking, these concepts refer to "...situations in which town planners, architects, engineers, technology users, or other groups are constrained by fixed ways of thinking and interacting. As a result, it becomes difficult to bring about changes that fall outside the scope of this particular way of thinking." (Hommels, 2005: 331). When applied to policy, the concept of frames highlights that the definition of problems, what counts as evidence, the way that evidence is interpreted and plausible and possible solutions are all intrinsically interrelated (Rein and Schon, 1993: 145). Social theory provides a way of critiquing framings which may have become part of 'common sense', this opens up new opportunities for policy by posing different questions, and bringing alternative solutions into the frame.

Much of the initial work about theories of practice and policy has focussed on this aspect of the TRP, examples include (Shove, 2010; Shove et al., 2012; Spurling et al., 2013). For example, challenging behaviour change framings, and taking steps to illustrate how problems and sites of interventions might be reframed differently using concepts from theories of practice.

A second TRP relationship is one in which theories inform research designs, which in turn produce different data. Data, and the methods used to collect that data, are implicated in producing particular realities. Law's (2009) 'Seeing Like a Survey' focuses on the Eurobarometer investigation into European citizens' attitudes to farm animal welfare, to show some of the 'realities' which this particular survey enacts (2009:240). His observations include that the survey reproduces the individual act of consumption as the proper location for political action, enacts Europe as an isomorphic population of individuals, and enacts a consumer who cares about farm animal welfare. These observations have resonance with the discussion of 'frames' above, and illustrate how research methods and data can reproduce particular problem framings. Data can make some sites and styles of intervention visible and plausible, and others invisible and implausible.

Although critiques of such policy data exist within the sociology literature, work to develop and integrate new forms of data within policy processes is more difficult to locate. This is in contrast to the health sciences, where methods to collate and consolidate data for policy has a longer history. My initial dabbling in this literature has identified a range of methods, some of which have gained greater status than others. They include systematic review and randomised control trials, realist review and meta-narrative mapping. I'm wondering why an equivalent to this doesn't exist within social science research, and think it would be worthwhile to consider what it would look like to move things in this direction. In terms of research framed by theories of practice, although studies that address this TRP are less common, they do exist. An example is Browne et al's work (2013), www.sprg.ac.uk which 'scales up' research on practices, developing a method to understand water use in alternative ways to those currently used by water companies.

On policy influence and change, recent work on evidence based policy (Cartwright and Hardie, 2012) suggests that it does not make sense to conceptualise policy interventions in terms of simple relations between cause (an intervention) and effect (an outcome). Rather, the same intervention will likely have varying effects in different times and places because of the historically and culturally specific mechanisms involved. Shove et al (2012) make a similar point, suggesting that if the world is constituted of social practices (Giddens, 1984), that have dynamics of their own then "...interventions have effect (some intended, some not) as part of the ongoing dynamics of practice" (Shove et al., 2012: 145). Understanding the potential influence of policy, and the mechanisms by

which policy has effect has implications for sites and styles of interventions, and for the practices of policymakers per se (i.e. policy does not only take effect through deliberate interventions).

Finally, policy evaluation has always been important for policy makers, to evaluate whether an intervention or programme has been successful, and whether it should be 'rolled out' elsewhere. Recent moves in government have seen the rise of a 'what works?' agenda, based on similar principles to RCTs (Puttick, 2012; HM Government, 2013), this emphasises collating examples of policy programmes and interventions that 'work' so that good practice can be shared. This recent focus signifies the valuing of a particular kind of knowledge, which tells us little about how or why particular interventions work in particular places, and instead focusses on rates of success. There are multiple problems with this approach, and a more detailed critique can be found in Cartwright (2010) and Cartwright and Hardie (2012) but to put it briefly they assume direct cause-effect relationships between an intervention and an outcome, pay no attention to the historically and culturally specific mechanisms within which policy takes effect, and as such can mistakenly assume that an intervention will work (or fail) everywhere because it works (or fails) somewhere. For theories of practice this TRP is unchartered territory.

Applying the framework to DECC's evidence base (DEB)

Having defined an in-progress framework, what can we say about the TRP relationships that policy, or specifically 'Developing DECC's evidence base' (2014), draws on?

Framing problems

The potential of theory to frame problems is not a TRP relationship that is recognised within the DEB. On themes of energy demand and energy efficiency the DEB is quite clear that the priority lies in consistently meeting present levels of demand in a manner that is secure and decarbonised. For example, "We need to make sure our networks are reliable as we decarbonise our supplies, and as demand changes as a result of new technologies" (DECC, 2014: 6).

As such the strategy does not address more debatable questions about need, including the 'need' for electricity. This is one aspect that those working with theories of practice challenge. For example, rather than taking the status quo for granted, the DEMAND centre's research will identify instances in which the practices on which energy demand depends are expanding, contracting and changing (e.g. business travel, home IT use etc.) (see www.demand.ac.uk). As such, our work will reveal the variety of contemporary 'needs' and practices; it will show how interpretations of normality and 'need' change over time, and promote debate about what energy is for and how much is 'needed'.

Another predominant framing in the DEB is the focus on "increasing the share of electricity and heat supplied from low carbon technologies" (DECC, 2014: 11), and on the uptake and effective use of energy efficiency measures (DECC, 2014: 16).

The DEMAND approach shows that focussing on more efficient technologies and marketing to this end is in essence about meeting existing 'needs'. As such the promotion of efficient technologies legitimises and perpetuates the demand for certain levels of heating, hot water, lighting, cooking, home entertainment, etc. despite the recent social history of these aspects, and their potential openness to change.

The DEB does not recognise this TRP, and as a result it is locked into a particular framing which limits the potential of policy in unnecessary and counterproductive ways. So, though the DEB does not recognise this TRP, it would benefit from being more open in this regard.

Using data/research findings to inform intervention design

The use of research and data to inform intervention is strongly recognised in the DEB. However, this takes a particular form (which relates to the current framing of problems noted above). As such, although the DEB recognises that research and data can be useful to inform intervention, it does not recognise that new and different forms of policy intervention are likely to rest upon, and call for different types of data and analysis.

In the DEB there is an interest in collecting evidence about 'people/behavioural drivers', 'buildings and technologies' and 'energy use'. These categories are significant because the way the field is carved up relates to an understanding of the nature and scope of policy intervention. Some of DEMAND's research is 'useful' to the policy system as it is presently configured, but DEMAND research also points to new sites and styles of policy influence. Here are some examples:

Understanding people and institutions (DECC, 2014: 14): The DEB seeks "to improve our understanding of how people behave, whether as individuals at home or work, or as part of communities, businesses or whole supply chains or workforces" (DECC, 2014: 14). Organisations are approached in the same terms, hence: "We want to understand more about how different types of organisations make energy-related decisions..." (DECC, 2014: 17), and "Getting a better understanding of how investment decision-making works in practice, understanding what drives behaviour, including the role of key individuals, organisational culture, customers..." (DECC, 2014: 24). As these extracts demonstrate, the purpose is to learn more about individual decision makers/decision-making on the grounds that they constitute possible subjects and sites of intervention.

This is not the only way to go. For example, rather than treating an organisation as an energy-related decision maker, it would be possible to track how office work is simultaneously constituted, reproduced and transformed by many different organisations: facilities managers, developers, standards bodies, business organisations etc, and by the technologies and infrastructures involved (Falconbridge and Connaughton, Project 3.2, http://www.demand.ac.uk/research-themes/theme-3-managing-infrastructures-of-supply-and-demand/3-2-negotiating-needs-and-expectations-incommercial-buildings/). Such approaches open the way for thinking about how policy has a bearing not only on individual choices, but on the longer term development of what are taken to be normal and ordinary ways of life. Evidence like that would identify different political subjects, and potential new sites for intervention.

Another example on this topic is that the DEB outlines the potential for making use of (smart) metered data about domestic and non-domestic energy consumption. A key concern is to use more detailed data on electricity demand to "refine policy" (DECC, 2014: 22). However, knowing how much energy is used and when, does not of itself, provide much insight as to the range of energy-using practices involved, the extent to which these are flexible or must happen at particular times or where opportunities for policy intervention might lie.

Within DEMAND we are developing methods of showing how more and less energy intensive social practices are coordinated in time and space (http://www.demand.ac.uk/research-themes/theme-1-trends-and-patterns-in-energy-demand/). This work underlines the importance of institutionally timed events, opening hours, etc., on a seasonal as well as a daily/weekly basis. As such, it potentially identifies other plausible ways of intervening, for example exploring institutional timetables as opportunities for load shifting.

Although the DEB recognises the relevance of this TRP, it remains disconnected from 'framing problems', as such, methods which inadvertently reproduce existing framings form the main source

of data which is used to inform intervention design. In terms of communicating with policy, this observation opens up two possibilities. The first is to continue working with policy at the level of reframing problems (the first TRP outlined above). The second possibility is to note that this is not necessarily the best starting point and that a better approach might be to focus on how different kinds of data might be used to open up new opportunities for policy. To move in this direction would require a research agenda for theories of practice that specifically focussed on the development of new methodologies and kinds of data. There is some existing work that provides an example of how such a genre might develop (Browne et al., 2013)and as noted above, several DEMAND projects develop this aspect.

Policy influence and change

Interpretations of policy relevant evidence reflect underlying theories about how change comes about and whether and how it can be steered. The DEB offers a variety of different perspectives.

In several places we find the idea that the energy system will respond to policy intervention, simply by policy having effect - "In order to achieve our objectives, and as a result of our policies, our energy mix will change, and different energy vectors will be used for different purposes" (DECC, 2014: 35). Or because there will be a predictable take up and usage of new technologies: "We need to make sure our networks are reliable as we decarbonise our supplies, and as demand changes as a result of new technologies" (DECC, 2014: 6).

In contrast, other parts of the DEB suggest that the energy system has a dynamic of its own, for example, "... people at home consume nearly a third of total UK energy and this share is rising over time" (DECC, 2014: 18), or "We expect that electricity will have an increasing role in meeting our needs... Our needs vary daily and annually – and these characteristics will also change in the future..." (DECC, 2014: 32).

There is the frequently discussed idea that policy is capable of promoting change in the purchasing decisions of individuals in domestic and non-domestic settings. In particular that policy can intervene in the drivers and barriers of particular decisions.

Finally, there is also a recognition that sometimes policy has unintentional effects, or that non-DECC policy can have effect on energy demand. For example, the DEB says there is interest in "understanding how our policies interact from the perspective of people and institutions: for instance, identifying risks and opportunities with the delivery of smart metering, the Green Deal and the Renewable Heat Incentive" (DECC, 2014: 15). There is further recognition of the need to understand how policy portfolios intersect: "how we can look across our and other government departments' policy portfolios to understand the interactions" (DECC, 2014: 13-14), and "...we need to understand the interactions between different sectors (such as how action on heat influences the requirements for electricity generation); [...] In understanding these trade-offs we also need to understand how policies interact – for example on a national and European level." (DECC, 2014: 15).

Recent work on theories of practice has begun to conceptualise the relationship between policy and practices. This includes DEMAND research, which looks at how a wide range of policies (and not just energy policies) promote, justify and make normal particular end-use practices. Focusing on end-use practices shows that non energy policies relating to security, health and safety, education and employment can have major implications for energy demand (http://www.demand.ac.uk/research-themes/theme-4-normality-need-and-entitlement/4-3-implicit-energy-governance/).

Policy evaluation

The DEB explains that "We need evidence to help us see what really works..." (DECC, 2014: 4), arguing that such an understanding can be used "to inform future policy development" (DECC, 2014: 13). The implication is that successful interventions (what works) at one place and time might be appropriately 'applied' in other times and places.

Because the emphasis is on 'what' worked, not on 'how' and 'why' it worked, research/evaluation in this vein is unlikely to identify the historically and contextually specific mechanisms involved. The project of identifying 'transferable' conclusions rests on a specific (but unstated) theory of change (involving driving factors, barriers, etc.). As such it takes the mechanisms of policy influence for granted and does not enquire further into how change actually comes about, or the role of policy within those processes.

A further problem with such an approach to 'evaluation' is that it separates evaluation from the other TRP's identified. This means that the framing of the problem, the data and research used to inform intervention design, and the subject and site of intervention all remain external to the evaluation, and beyond the scope of critique and change. An approach to evaluation that brings such aspects into view would create a broader range of possibilities for policy learning.

Conclusion

This short paper highlights some of the different conceptualisations of the relationship between theory, empirical research and policy which have been identified, discussed and developed in a range of literatures, including health policy, innovation studies, social policy and technology studies. Applying the framework to the DECC evidence base shows which of these conceptualisations exist alongside one another, and which are completely missing. The analysis shows that the first TRP 'framing problems' is not recognised at all in the DEB. The second TRP – using data/research findings to inform intervention design - is recognised within the DEB, however there is a focus on large scale surveys, which enact a particular reality, reproducing existing problem framings (which as noted are not open for debate). The implications of this for research might be interpreted in two ways: first that more work needs to be done to highlight 'framing problems' as a TRP that policy should value, or second developing a research agenda focussed on new kinds of methods and data, to communicate with policy from this alternative starting point. The third TRP exists within the DEB, to the extent that a variety of formulations of how policy does and does not take effect can be identified. Finally, the fourth TRP, takes a particular form, focussing on 'what works?', and separating off evaluation from the other TRPs, removing the framing of problems and use of data from the realm of evaluation, further reproducing current frames, and limiting policy learning.

For theories of practice, the framework highlights that to date the majority of research relating to policy is concerned with the first TRP of 'framing problems', there is still much scope for research which develops methods and data, which seeks to understand the role of policy in changing practices and which contributes to the challenges of policy evaluation and the transferability of interventions.

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The paper refers to a range of DEMAND projects, details of the research teams and progress of specific projects can be found at www.demand.ac.uk. The section on 'Developing DECC's Evidence Base' draws on a DEMAND Centre response which was co-authored with Elizabeth Shove.

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Working paper 14: Frank Trentmann, Commentary on DEMANDing ideas (f.trentmann@bbk.ac.uk)

Note: Frank was invited to comment on the mini-manifestos produced by Allison, Mikko, Hilmar, Ted and Matt.

The five memos by Allison, Mikko, Hilmar, Ted and Matt gives us plenty to talk about. For me, there are three kinds of issues that especially call for discussion: Theoretical boundaries; the relational side of practices; and scale.

Theoretical boundaries and content

We have radical and conservative theorists in this group. For the former the main goal is to stretch theories of practice and expand the map of the subject. For the latter, the goal is more moderate, and to gain clarity about the limits of its theoretical application. The first group consequently seeks to expand the realm of practices – e.g., to the practices of politics. The second, by contrast, sees additional dimensions as relatively autonomous, and as such something that need to be added to practice accounts to give these greater explanatory power – e.g. institutions, architecture, infrastructures.

To talk about the future shape of practice theory it might be a good first step to identify more precisely where the boundaries currently are - and what all the particular case studies add up to. While there is some shared language cropping up in these memos (recruitment, performance, procedures), this is not yet enough to tell me exactly what sort of properties currently are a shared part of a "theory" of practice. A related point concerns the properties assigned to practices themselves. I asked myself how one might find a typology that would allow one to see the shared or different properties of practices as such. Allison refers to the 'inequality' of practices – asymmetry or variety might be better. What kind of criteria or metrics might enable one to draw a map of practices, and what might be useful axes? The rate of repetition, frequency, rhythm, synchronic degree, points of dependence or contact with other practices, longevity, degrees of collective action ,and so forth would have to be all compared. To follow these across time adds enormous complications, since we do not have historical registers of practices. (Since I am not sure what Ted means by "event cum action series", I leave it for him to speculate how one might represent event and action series.) I am reminded of the initial diagrams by Bourdieu in Distinction and the extended and more nuanced and multi-dimension versions generated by the cultural consumption group around Mike Savage and Alan Warde for their more recent book. What might be ways of organising and displaying practices to clarify and illustrate the nature of practices and thus specify the boundaries of practice theory?

Allison, tellingly, ends her comments by noting how currently 'theories of practice are often difficult to digest ... and not always easy to translate into methodological and empirical terms'. This is rather interesting, since, after all, the theory is meant to be about very ordinary aspects of everyday life: what people are doing. Why should this be? I am not sure it is the subject matter — Norbert Elias, cultural historians, microstoria etc. are if anything renowned for their stylistic power and clarity of presentation. I think it has to do with what remains a certain tension or gap between a theoretical reach that tries to create unity or comparability among ways of doing and what are ultimately more or less different forms of action. Hence, the verbs are troubling in the current theoretical vocabulary.

Does sewing "enrol" understandings and aims (p. 11)? Is knitting a "performance"? Does skateboarding "recruit"? Few people would say: "I was recruited by cooking" or "Skiiing has recruited me: I love it." Armies recruit — and this is a different process from cooking, skiing etc.; of course, we could try and describe and analyse the way the Swiss state recruits all male adults into their army as a "practice" but it is a fundamentally different series of actions from cooking, Nordic walking etc. My point here is not simply a stylistic one but to suggest that the ambivalence or distortion inherent in some of the current terms of art reflect a deeper unclarity about the components of practices that refuse to be captured in a single shared verb.

Relations

The tension between theoretical moderation and imperialism is replicated in the treatment of institutions, spaces and politics. For Allison, "procedures or methods for bringing elements together exist within a practice". For Matt, power consists of practices. By contrast, for Mikko, practices happen within spaces of action that have their origins outside the practices themselves: the practice of walking does not build a city, but the city creates a space for walking/commuting etc. For Ted, similarly, there is a big world outside practices that includes institutions and much else. Presumably, the same holds for Hilmar: to study the transfer of practices we need some agency or institution that enable them to move from one place to another (such as transnational social reform movements, architecture schools, ideas etc). Of course, we could object with Lefebvre that it is the doing that creates the space – but this still leaves us with the problem of how infrastructures, grids, transport networks come into place and why some societies favoured apartment-blocks and central heating while others went for individual houses. Again, this is in my view not a question that can be settled abstractly: some practices may possess resources that enable the integration of other practices – but other practices may need resources that lie outside the practice itself: e.g. cooking needs fuel, but the practice of cooking does not decide whether the fuel used is wood, gas or electric.

For DEMAND the last point is particularly important, because a practice is only partly responsible for the energy that is ultimately consumed. Here, Mikko's concern about how to allocate energy between buildings and practices is important (though I am not sure that "eating" is an "infrastructure" p 15.) – and deserves to be extended further. Yes, all practices are energy-hungry but how much energy precisely is consumed requires locating the practice along a much longer chain of energy use, production and transmission. The same practice of cooking (same length, same dishes, same location) could have hugely different consequences for actual energy use, depending on how and where the energy is generated, what fuel is used and much else. It might be useful to consider and chart the changing energy intensity of a practice – although I am sure this will not be easy. Mikko's attention to "stocks" in addition to flows is also important – in addition to stocks of wood or oil in the tank, the "stock" might be expanded to the in-built energy in houses, buildings, roads and infrastructures more generally. That is a stock that is passed on and that favours certain practices over others.

The relational nature of practices is important because it is one reason why the empirical study of practices is so difficult, or, more precisely, why it is so difficult to reach a generalisable picture of various practices. Most practices have outside as well as inside relations — and these outsides pull research away from the practices themselves. I noted in several papers emphasis on the resilience of practices. Practices are stubborn, have a life of their own, never are exactly the same, but repeat themselves. All of this is true, and yet this emphasis on their routine replication also tends towards an exaggerated view of the inner self-conserving power of practices at the expense of the power of external forces of change. Surely a European or Japanese person born in 1800 would be stunned to see how hugely different practices and everyday life more generally is in 2000. Sleeping, working, eating, moving about and, above all, daily habits of hygiene have vastly changed. This is not a process generated by the practices themselves. It often involved the imposition, marketing and

socialisation of new practices – often having to overcome considerable resistance. I am not sure what Hilmar had in mind when he referred to "education", but loosely understood, there is a huge amount of it in the modern period. The millions of Chinese who have moved from country to city in the last decade or so have not just recycled all their practices. There is more than repetition, and to think about change requires us to do more than just look at the dynamics of practices themselves.

Matt is right to emphasize power. But I think there is so much more power that students of practices should concern themselves with first before trying to analyse the practices of power more specifically. Of course, we do not want to return to a simple institutional understanding of the monopoly of force. Equally, governmentality has diffused power so much, that everything and nothing is and has power. It is useful to retain a distinction between the Maxim Gun and a red postal letter box. Nor am I sure that the practices of power are so distinct in and of themselves. For example, Patrick Joyce has studied the civil service file and filing as a technique of power in the governmental fashion. Does this advance our understanding of power or the practice of filing for that matter? I am not sure. NGOs use files, including those resisting authority. I have filing cabinets, although I am far from being a "competent" "practioner" and show ("perform") the limits of "liberal" governmental discipline in shocking ways. Yes, states acquire power with the help of certain practices (such as collecting taxes, counting them, asking citizens to file tax reports, etc.). But what would such practices reveal about power? Very little – power depends on how much a state taxes, who is taxed, for what purposes and on whose command. Similar matters apply to the unequal distribution of resources, knowledge, land, capital etc. Interests and Ideas matter. And it is these that leave their mark on practices (more than the other way around), in part by shaping the unequal distribution of stocks, infrastructures and resources which enable and constrain people's lives.

Scale

The theoretical ambition and promise of practice theory is inevitable tied to its relative ability to move between scales. My first observations on the difficulty of capturing a variety of practices with singular analytical verbs might be read as a sign of scepticism. However, my second point about the relational life of practices might also hold out some potential for scaling up research. I do not think the issue is whether empirical research is naturally limited to a practice within set local configurations. All empirical research is so by its very nature. Microstoria and earlier studies of everyday life sometimes argue that the macro is contained in the micro; I am not so sure about that. Rather my point is that the simple fact that a number of practices are not limited to unique local spaces but can be observed in a number of places suggests that practices themselves move up and down scales. This has to do with their transfer, which in turn has to do with the (uneven) global spread of certain ideals of the good life, and their adoption and diffusion by authorities, experts and also social movements. That this is not a simple top-down process, does not mean we should just look at one scale only.



Working paper 15: Harro van Lente, Commentary on DEMANDing ideas (H.vanLente@uu.nl])

Note: Harro was invited to comment on the mini-manifestos produced by Janine, Elizabeth, Stanley, Lenneke and Nicola.

First of all, thanks a lot for accepting me in the circle. I am afraid my notes will not be in time to circulate. Therefore, a few sketches and questions. I am sure, the rest will come in discussions. Inspired by the mini-manifestos, I would like to highlight four basic tensions.

Tension 1: Ontology and dynamics

The ambition of the DEMAND project is to deepen and enrich practice theory, in order to cope with intricate questions of energy use and reduction. In response to this ambition, quite a few minimanifestos stress the need for further clarification of terms and their relationships. This can be read as a quest for ontological reflections. In the meantime, questions about how things change are then less visible. How to understand changes in practices? What kinds of patterns and forces can be seen/expected to play a role? How to modulate such patterns in better directions?

Tension 2: Analytical and empirical questions

In general, a researcher can raise analytical and empirical questions. Or, as Kant introduced them, analytical and synthetic questions. The former can be answered by referring to logic and by sorting out conceptual issues, the other by referring to observations: logically it could have been otherwise, but it is this. It seems to me that the emerging and joint research agenda does not contain enough empirical questions. Elisabeth raises a few. How energy becomes embedded in different social practices; is there "a cross-practice trend towards increasing resource/energy intensity and if so, how and why might this be the case?" (p.35). I would like to see more of these: what kinds of *specific* questions are to be addressed. Of course, empirical questions presuppose conceptual work, but there needs to be a balance.

Tension 3: Problems and solutions

Nicola's concern is about the way theories can be meaningful for policymaking. This, indeed, is a question on its own, but is seems important for the DEMAND project, which carriers promises of providing clues to change energy use. The mini-manifestos stress the intricacy of the problem. What about ideas of solutions. When, how, why do they occur. What kinds of solutions are to be imagined, in the first place?

Tension 4: Demands and Needs

While 'demand' is in the title of the project(s), the very notion of 'demand' is less problematized. I have worked on the issue of needs, and studied how needs have been defined. I find it intriguing that needs change. Given the central position of 'needs' in the understanding of sustainability, I think this is a central issue. Depending on time and occasion, I could expand a bit on this. For now, I add an abstract and two figures that summarize my thoughts.

"When technologies are promised, developed and used, many things change in the same movement. One of the ambitions of anticipating such changes is to improve the embedding of technology in society and to do 'better' the next time. A change that often is overlooked is the change in 'needs'. According to the old wisdom, need is the mother of invention. When an innovation is successful, the argument goes, there must have been a need for this, albeit 'latent'. On the other hand, history suggests that technological change will incite new needs. This raises the intriguing question how novelty and needs are co-produced. When needs are not pre-given, but dependent upon socio-technical configurations, and, in fact, both cause and effect of technological change, a range of philosophical, sociological and design questions come to the fore.

In this paper I will address the central question by following two lines. First, the various uses of the concept of 'need' in technical change are studied and categorized. Here I explore various strands of innovation literature as well as technological and cultural criticism. A recurrent theme is whether and how what is conceived of as needs depends on the historical period and the locality. Central here is the institutional definition of needs by experts or markets. Second, I will review a few cases to reconstruct how needs are part of the co-evolutionary process of technical change and provides new suggestions how to anticipate science and technology in society.

The pattern that appears is that novelties are turned into needs and, subsequently, into rights. I conclude that the distinction between 'real' or 'genuine' needs on the one hand, and artificial needs on the other is misleading. Therefore, the question whether needs are real or artificial is not very helpful. The relevant and sensible question is which needs we can afford."

production of needs experimentation and learning excitement & selection curiosity production of domestication novelty and appropriation background meanings for 'novelty' stabilized life forms including needs experimentation and learning excitement & re-active TA selection curiosity etement & pro-active TA production of domestication nd appropriation background stabilized life form background stabilized life form including needs

Postscript: Three questions for practice theory – notes from a Windermere session (Harro provided these notes after the workshop)

We had an amazing time in Windermere, socially and intellectually. The format of mini-manifestos incited programmatic and forward looking discussions (in contrast to paper presentations which tend to lead to justifying and backward looking defenses. Many issues were discussed. For me the following stand out, which I thus offer as a summary of the discussions and collective thinking. Practice theory stresses local specificities. The starting point is that social life is not a homogeneous affair but differs per site, each with its own rules, language and logics. This raises questions about how practices are interlinked, since it is hard to imagine that practices are just sitting next to each other. Practices are not solipsistic worlds that thrive in perfect isolation. First of all, practices will overlap: one activity may contribute to multiple practices at the same time. Second, practices are informed and constrained by generic, overlapping norms and ideologies. Third, practices can only exist with infrastructures, which may be material and/or institutional. While such overarching conditions are not explicitly denied by practice theory, they not taken up systematically either. What is the status and importance of 'supra' practice phenomena, such as

- infrastructure (tangible, institutional);
- cultural repertoires and ideologies;
- knowledge.

The second question that deserves more attention is how practices change. Again, the starting point of practice theory is the remarkable consistency of social life: we don't take decisions on a day to day basis, but tend to behave repetitiously and predictably. The starting point is the amazing lack of change. Yet, also practices occur and many studies have addressed this. Yet, a systematic comparison and the theorizing of change is still work to be done. This requires the adoption of concepts of dynamics: patterns, trajectories, phases, etc..

A third issue we discussed was not theoretical but practical: which audiences are (to be) addressed with practice theory research. Who is to be convinced of what? What is to be contributed to whom? This may vary with the funding of the research and the setting (teaching, interviews), but may be interesting to be less ad-hoc here and to consider a strategic positioning.