On "The Design of Everyday Life"

Elizabeth Shove
Lancaster University

Abstract: The article highlights the intersection between design, STS and consumption outlining practices as the central unit of analysis. The paper illustrates this perspective with reference to a variety of examples, including home improvements and do-it-yourself (DIY) projects, digital photography and plastic stuff. In the paper some questions are raised: where does competence lie? Does it reside in the human or in the non-human, or in the relation between the two? What does the concept of a human-non-human hybrid mean for the sociology of consumption? And how does the human-material distribution of competences affect the details of everyday life and what people do?

Keywords: Design; STS; consumption; material culture; theory of practice.

Corresponding author: Elizabeth Shove, DEMAND Centre, Department of Sociology, D19, FASS Building, Lancaster University, Lancaster, United Kingdom, LA1 4YD – Email: e.shove@lancaster.uk

1. Introduction

I am glad to have the opportunity to look back to the issues discussed in *The Design of Everyday Life* (Shove *et al.* 2007) and to think about where I now stand in relation to those ideas. In particular I want to highlight points of intersection between design, STS and consumption. I am therefore going to build on a selective history of these fields and pull out some ideas which I think can be taken forward – in short my aim is to identify points of connection and cross-fertilization.

If you look at research in the sociology of consumption and in material culture as well, there is a tradition of thinking about the symbolic significance of objects and a tendency to focus more on issues of acquisition than of use. This is a very simple distinction but I think it helps to set the scene. In science and technology studies there are again many tracks and trends, for example themes of innovation, stabilization and scripting are very well documented. Meanwhile in product design, there is a lot of em-

T/S TECNOSCIENZA
Italian Journal of Science & Technology Studies

phasis on the object, on its properties and qualities and on its users. These three fields do not mesh together terribly well, and in *The Design of Everyday Life,* we started to explore points of connection.

In taking this approach we stood back and drew inspiration from a different theoretical tradition. We argued that social theories of practice provide a way of making new connections and generating different ways of thinking about relationships and interactions between objects - not only objects alone, but also complexes of objects and even infrastructures - people and practices.

In this paper I want to outline the potential and the significance of taking practices as the central unit of analysis and enquiry and show how this helps bridge between the traditions outlined above. I will illustrate this possibility with reference to a variety of practical examples including home improvement and do-it-yourself (DIY) projects and digital photography. This second example now looks rather old-fashioned, but when digital photography was new – actually not many years ago – there were many interesting transformations. In effect the elements of photography were completely reconfigured in a very short space of time. I am also going to talk a little bit about plastic. When we looked at material culture studies, one of the striking omissions was any serious or concerted analysis of material as such. By contrast, product designers were interested in material properties, and materiality is, of course, a key concern in science studies. These three examples – home improvement, digital photography and plastic - allow me to explore a number of points of intersection, all of which still deserve more work.

I am going to start with a very simple example drawn from science studies. Consider someone holding a hammer, and then think about questions of competence and skill. Where does competence lie: does it reside in the human or in the non-human, or in the relation between the two? The notion of a human-non-human hybrid implies that the hammer alone is not enough alone, and that a person without such a device will find it hard to hit the nail hard on the head. Taken to heart, STS based observations about hybrids could and should be picked up in design studies. This is important in that within design, much that has been written about 'the user' wrongly assumes that competence ultimately lies in the person, not in the thing. At a minimum, science studies says that competence is an emergent quality that is not part of the object nor of the user. One implication is that, 'the user' is not a sensible concept for those who acknowledge the intermingled character of human-non-human hybrids.

This is one contribution and at the same time one point of difference and departure. Let me now turn to the same topic but from the point of view of the sociology of consumption and material culture. What does the concept of a human-non-human hybrid mean for the sociology of consumption and provision, and how does the human-material distribution of competence affect the details of everyday life and what people do?

2. Distributed Competence

My next example is drawn from the field of home improvement and DIY. Not so many years ago, to put a good surface of varnish on a door you would have to take the door off its hinges and lay it flat, otherwise the varnish would drip and run and you would have all kinds of problems. To do a really good job you needed practice: to some extent the skill involved was necessarily embodied in the person. This is no longer the case. Modern varnish is capable of drying in twenty minutes, you can apply another coat within two hours and you can be really pretty incompetent and *still* get a relatively good finish on the door. You certainly don't have to take the door off the hinges. What has happened is that the competence that was previously embodied in the person, in the varnisher, is now in the tin. Whilst the concept of a hybrid helps explain this transition, it does not go far enough in such a notion, alone, does not shed much light on parallel transitions in systems of provision and consumption.

To address these questions we need to go further. The modern tin of 'clever' varnish brought the job of doing varnishing and home improvement within the reach of amateurs. In so doing innovations in varnish also constitute innovations in the economy and in the systems of expertise and competence on which divisions of labour depend. The boundary of competence between the person and things moves, and as this boundary moves, so does the idea of what people can do for themselves, and of when they would hire an expert in. In short, the changing contours of hybrid configurations have implications for, and are themselves outcomes of changing patterns of consumption and production.

This is just one example of just one object: a single tin of varnish. If we are to continue with this line of thinking we obviously need to go beyond single objects and think about how collections of materials and tools interact and about what this means for the types of projects that people are willing to take on themselves. Staying with home improvement, innovations in plastic plumbing provide an illustration of more systemic change. Standardised plastic plumbing fittings were so 'easy' to use that one of our respondents contemplated the otherwise risky project of relocating a radiator. When things go wrong with plumbing projects they can go badly wrong – potentially resulting in leaks and floods of water all over the place.

In this case, an entire system of plastic plumbing brought the radiator moving project into the realm of possibility. The fittings clipped together. The job went well and having gained confidence from this project, our respondent's horizons expanded: having shown that he could move a radiator he was eager to take on other more challenging jobs. This was not an unusual experience. When people talked us through the history of the tools in their tool box, they explained that tools and skills were often interlinked. Specific items were acquired for specific projects, and the tool

collection that builds up is both a residue of previous experience and a platform from and on which future projects are built.

Tools boxes proved to be revealing sites of analysis not least because of the extent to which different tools are used in combination. The box and its contents consequently provide some insight into the accumulation of hybrid competencies, sometimes built up over many years. Of course tool boxes also provide insights into failures and into careers cut short by one disastrous project or another. In any event, the point is that understanding these dynamic relationships between people, projects and objects calls for more conceptual resources than those which STS provides.

In particular we need to move beyond conventional concerns with individual objects (scripts, hybrid arrangements etc.) and acknowledge that we are also dealing with the unfolding lives of people and with changing of systems of provision, consumption and competence. In the case mentioned above, our DIY respondent acquired the skills to become an avid consumer of further tools and materials – all of which are just so much metal to those who lack the knowledge of how to use them. His next project, building a Wendy house for his children, led him to add to his collection of tools and materials and to his confidence and skill, again paving the way for the next project.

Through this example I have taken the idea of distributed competence from STS and shown how it can be re-planted in the field of consumption studies. In this role, such concepts provide some insight into the changing contours of embodied and delegated or 'materialised' expertise, and hence into the also changing boundaries of what people are and are not willing to do for themselves. As indicated above, such changes have potentially far reaching impact, being of relevance for the DIY market, and for the livelihoods of professional plumbers, decorators and other trades.

3. Reconfiguring the Elements of Practice: Making and Breaking Links

In this section I focus on the relation between material objects and social practices, concentrating in particular on the idea that social practices are made of ongoing configurations of elements. This takes us into new territory. Social theories of practice do not have the same theoretical lineage, nor do they share the same preoccupations as science studies, design or the sociology of consumption. They are nonetheless useful in conceptualising relations between materiality and competence and in understanding how such links are made and broken. Andreas Reckwitz (2002) suggests that social practices – like digital photography, showering, or doing DIY – depend on the active integration of elements. In *The Dynamics of Social Practice*, Mika Pantzar, Matt Watson and I (2012) worked with a simplified version of this scheme, focusing on just three key elements: ma-

terials, meanings and skills/forms of competence. Where a practice is regularly reproduced, these three constitutive elements are regularly combined. For example, doing DIY projects involves ongoing and continual interactions between material, competence and meaning, including the idea of what a project involves and what it means to do it well. That is the basic starting point. This conceptual scheme implies at least two other possible formulations. One in which elements (material, meaning, skill) exist but are not yet linked in practice, and another in which links which used to exist have fractured or broken, meaning that the practice is no longer reproduced. A further important observation is that 'elements' of practice are not static: they are defined and constituted in relation to each other and as illustrated in the following example, they are constantly on the move.

The recent history of photography gives a sense of these dynamic interactions. What happened when film photography was overtaken by digital photography? Which elements changed and which stayed the same? There are certainly some areas of continuity for example in the 'element' of meaning. Ideas about what makes a good photograph are fairly consistent: there are various shared aesthetic conventions. It is still important to keep the head in view and not to cut peoples' legs out of the frame. However, the practicalities of actually taking a picture, and the material elements involved have changed beyond recognition. Buying film is an odd, and now specialist pursuit and fewer and fewer people know how to manage film-based techniques of handling exposure times and the like. While elements of meaning are relatively stable, those of material and skill are much more dynamic.

Whilst these ideas provide a means of conceptualising transitions in practice, they emphasise features that are underplayed or overlooked in science studies and design. Critically, they draw attention to the ways in which elements combine and change, and to the point that social practices are multiply connected. To elaborate, doing digital photography involves making new connections – drawing on skills previously associated with computing and transferring those over to the realm of photography. When using a digital camera you do not need to know how to balance light and shade: not in the way you did with film. However, to achieve a similar result you probably do need to know how to use software like Photoshop, and how to adjust images to your liking one pixel at a time. This clearly involves competences drawn from another field but carried into and then transformed (to some extent) through new associations, becoming part of a new assembly of material elements.

Science studies and theories of material culture or consumption provide only partial insights into the ongoing flux of contemporary photographic practice. For Reckwitz, and for others who write about the evolution of practice, people (the photographers) simultaneously figure as the carriers and transformers of the practice. It is they who keep it alive, or change it, through their more or less faithful or consistent integration of

more or less changing elements. The concept of a 'user' radically underestimates the constitutive character of peoples' roles as carriers of practice. In other words, in integrating elements in the way they do, photographers are part of making photography and of changing the practice as an 'entity' – that is as something that exists beyond any one moment of performance.

To elaborate, for some people digital cameras substituted for the film versions they replaced. In these cases, some new skills were needed but in general the process of taking pictures was reproduced as consistently and faithfully as possible. This was not so for all. For other people digital photography opened all kinds of new possibilities: messing around with pictures, swapping one colour for another, editing parts of images out and so on. The totality of 'photography' represents these variant forms, some of which are more dominant than others. And of course the story does not end when the image is captured. Digital photography calls for and has generated new ways of viewing pictures, new ideas about what a family 'album' consists of and how it is shared. Whilst some of this is about making new links (with the computer), it is also about breaking old associations (with an album, with film itself).

In exploring transitions to digital photography I've moved from a discussion of competence embedded in things and embodied in people to a more complicated account of the changing relation between 'elements' including material, competence and meaning. I have also noted that the practice of digital photography is made and reproduced by cohorts of 'carriers' whose varied performances constitute what digital photography is at any one moment.

4. Material Relations

In this section I comment on what this analysis of elements and practices might mean for an understanding of materials and material culture. To explore this interface I make reference to plastic, considered as a material or, more accurately, as a vast family of materials. In the 1940s plastics were heralded as materials of the future and were valued for all sorts of different qualities: there were discussions of the wonderful possibilities of 'dirt proof windows', of 'silent, dustless floors', and of how people might live in the 'plastic age' (Yarsley, Couzens et al. 1941; Yarsley, Couzens et al. 1943). The qualities of plastic were, of course, identified in relation to the materials for which it substituted. Hence in comparison with metal, plastic does not rust; in comparison to wool it is not eaten by moths, and in comparison with ceramic it is 'unbreakable'. The plastic world was, in addition a world of colour, in contrast to the more monochrome materials that it replaced.

Wiebe Bijker's very nice history of Bakelite (Bijker 1997) is a classic tale of how the material came to be as it did. This narrative reveals the so-

cial groups and interests that had a bearing on how problems were defined and framed and on the solutions that were constructed in response. In staying with the topic of Bakelite, and in treating this as a bounded material and as something that has an existence in its own right, Bijker's account belongs in the genre of innovation studies. As such it does not follow through the changing relationship between the material and the many different products – and hence product-material relations involved. For example, in the form of a radio casing Bakelite is positioned in relation to wood, and to walnut wood in particular. But in its role as an insulator (for example in electrical components) the qualities of Bakelite are considered in relation to those of ceramic.

On the one hand, focusing on the history of Bakelite *as a material* is important and revealing – there really are innovations to be explained and described. But on the other hand it is also misleading: in the world of artefacts people encounter plastic, or Bakelite, in the guise of an object or product and not in some pure material form. In daily life, plastic is a telephone, a hair-brush, a hair-dryer, a set of buttons, a television, and so forth. There is therefore something elusive about how we know and engage with materials. From this point of view, the qualities of a material are not fixed or inherent: they are an outcome of the various product- or object-encounters through which the material is known. The idea of what plastic is good for consequently comes from nothing other than this multiplicity of material/object relations. In very practical terms, conceptualising the defects and the properties and performances of different materials – wood, steel, plastic, etc. – is at the same time a matter of conceptualising the properties of specific artefacts again not in the abstract but as they are mobilised in the course of accomplishing specific practices.

The key point is that this calls for an analysis of relations and forms of co-existence between systems of objects and practices. There are examples of work which takes this challenge on. For example, Susanna Handley's book on Nylon (Handley 1999) provides a compelling account of how synthetic materials transformed the realm of clothing, bedroom furniture and fashion. Amongst other things, she suggests that synthetic materials had the effect of democratizing the idea of owning a whole wardrobe of clothing that you could change and of having a variety of different clothes from which you could pick and choose to suit the occasion. As she explains, nylon entered everyday life through a variety of routes: the price of individual garments dropped, the variety of garments increased, the idea of wearing different colours for different occasions became established, and so on. Critically these material relations operate at a systemic scale: the story is thus not just one of how nylon came to be (interesting though that is), nor is it an account of scripting, domestication, or appropriation.

One further example gives a sense of the under explored challenges of conceptualising multiple co-existing relations between materials, technologies and practices. I am not sure that it makes sense to talk of electricity

as a material 'element', but the existence of an electricity infrastructure is evidently crucial for the conduct of many practices around which daily life revolves. Understanding the role of energy in contemporary society is an important task, not least because of the challenges of climate change. But none of the fields discussed – material culture, consumption studies, science studies and design – have quite the range of conceptual resources required to grasp the interaction between infrastructures (grids, networks etc.), the appliances that are plugged into those grids and that are the front line 'terminals' of use, and the various practices to which these powered appliances and devices relate and of which they are a part.

Many areas of daily life depend on variously invisible infrastructures, and often on the coexistence of several such networks. The habit showering arguably depends on the coexistence of electricity, gas and running water: without these infrastructures in place the practice would not take the form it does today. In this case, focusing on the design and use of the shower fitting alone would provide limited insight into the full range of materiality on which the practice depends. Within science studies/history there are excellent accounts of how infrastructures especially of electricity have developed (Hughes 1993 [1983]). As with the story of Bakelite, the emphasis is on how such large technical systems have come to be configured as they are. But again these accounts stop short of explaining how these arrangements are embedded in practice, or how they coexist and interact.

As I have already mentioned there are already many ideas about competences, projects, practices, careers, the multiplicity of relations between materials and the roles of infrastructures. These have been developed in different fields and in ways that reflect previous preoccupations, for instance with technological innovation, the status of 'users', and so forth. Further creative work is required to bring these resources together and to capture and represent those multiple, co-existing and overlapping relations between materials and practices that constitute the 'design' of everyday life. I have argued that social theories of practice provide an exceptionally useful point of reference and a framework that allows us to capture some of these interconnections. However, some questions remain and one of these has to do with the role and contribution of product design.

5. Conceptualising the Role of Design

Many objects are produced without input from product designers so just what is it that product designers really do? In promoting and selling their services professional designers imply that they have something extra to add, but what is this added value? Designers themselves have certain ideas but how does 'design' figure in representations of materials and ob-

jects of the kind developed in science studies, consumption or material culture? There are different options on offer.

One view is that design is in some way injected into an object, which is in some or in many respects 'improved' as a result. The idea that designers endow artefacts with specific qualities is widespread. There is rather more uncertainty about exactly what qualities these might be, but in general, such an approach suggests that the designer has a rather powerful role, and that the object itself does not.

A second family of ideas starts from the proposition that 'value' is not a quality of the object itself, but is something that is accorded to an object by many actors – not by designers alone. From this point of view designers do not have a unique role but are instead one amongst others involved in the ongoing activity of attributing and removing judgements of quality and value. By implication, the value of an object does not last forever, it changes all the time as the different actors circulate around it adding and taking away different sorts of meaning. At a minimum this means that if they are to add value or to contribute, designers need to understand how objects are positioned and how values and meanings are attributed by others.

A third possibility, and one that is consistent with a theory of practice, is that designers have a part to play in configuring the materials, ideologies and competences of which social practices are made. In other words, engaging with objects is at the same time engaging with elements of competence and meaning. There is some point of connection between this idea and the conclusion that artefacts actively configure experiences, images and forms and competences. From this point of view it makes sense to conceptualise design as an intervention in practice. Ironically, this depends on turning attention away from 'the' object or its purported qualities and properties, and on focusing instead on objects-in-action, that is in their role, along with co-requisite elements of meaning and competence, in the ongoing reproduction of practice.

Some designers already make such claims. For example, representatives from IDEO explain that "we think of product in terms of verbs, not nouns, not cell-phones but cell-phoning" (Kelley and Littman 2001: 46). Of course their role in *making* cell-phoning is limited: at the end of the day they work with the object itself, and with a product that is sold. As such they cannot literally *make* the practice of phoning but they can and to some extent do realise the significance of taking phoning as the central topic and focus of their work, not the phone itself. Reference to the 'user' restricts the full force of this realisation and it is worth underlining the point that what we might think of as *practice* oriented design involves much more than taking users into account – instead it calls for understanding and intervening in the lives of practices, the elements involved and the changing cohorts of 'carriers' who keep such practices alive.

In conclusion if you go along with the view that things have some kind of absolute quality, then you might well conclude that designers (or users,

or somebody) provide that quality and add that value. If you focus on things as part of situated practices/actions, it is obvious that there are no lasting qualities and that 'properties' change all the time. From this point of view it follows that design does not have a special or unique role alongside all the other processes that are going on. Finally, if you consider objects as material elements of social practice, it would make sense to suggest that designers are involved in shaping not just material elements, which have no role in isolation, but the entire complex of elements (including competence, meaning) of which practices are made. Taking this idea forward, designers, amongst many others, are engaged in making and reproducing complexes of social practice.

A final word on the implications for sustainability. It is tempting and common to think of sustainable design as that which promotes efficiency: producing 'the same' object or service but with fewer resources. Or that it is about configuring objects so as to support durability, re-use or recycling. However, there is a much broader and much more significant sense in which all designers, regardless of their commitments and green credentials, contribute in some small way to the ongoing reproduction of a vast array of social practices that depend on arguably unsustainable flows of energy. By implication promoting sustainability is not about designing objects: rather it depends on asking more fundamental questions - what are these objects for, of what practices are they a part, and can these systems of practice be somehow 'steered'? That would be the place to start.

References

Bijker, W. (1997) *Of Bicycles, Bakelites and Bulbs*, Cambridge, MA, MIT Press.

Handley, S. (1999) *Nylon: A Celebration of Design from Art Silk to Nylon and Thinking Fibres*, London, Bloomsbury.

Hughes, T. (1993 [1983]) *Networks of Power: Electrification in Western Society, 1880-1930*, Baltimore, Johns Hopkins University.

Kelley, T. and Littman, J. (2001) *The Art of Innovation*, London, HarperCollins-Business.

Reckwitz, A. (2002) *Toward a Theory of Social Practices: A Development in Culturalist Theorizing* in "European Journal of Social Theory" 5 (2), pp. 243-263.

Shove, E., Pantzar, M. and Watson, M. (2012) *The Dynamics of Social Practice: Everyday Life and How It Changes*, London, Sage.

Shove, E., Watson, M., Hand, M. and Ingram, J. (2007) *The Design of Everyday Life*. Oxford, New York, Berg.

Yarsley, V.E. and Couzens, E.G. (1941) *Plastics [With plates and portraits of the authors.]*, Harmondsworth and New York, Allen Lane.

Yarsley, V.E. and Couzens, E.G. (1943) *Plastics in the Home*, London, J.M. Dent.