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Stuff, image and skill: towards an integrative theory of practice

The American consultancy firm, IDEO, has been remarkably successful in promoting and publicising what it pitches as a novel approach to design. In the words of its director, 'we think of products in terms of verbs, not nouns: not cell-phones but cell-phoning' (Kelley and Littman 2001: 46). By implication, 'Individual technologies add value only to the extent that they are assembled together into effective configurations' (Suchman, Blomberg et al. 1999). Or, to put it more strongly, objects have no purpose, value or identity unless integrated into practice and allied to requisite forms of competence and meaning.

In conceptualizing technologies (or products) as "configurations that work" (Rip and Kemp 1998) the commentators quoted above have a common interest in understanding how such configurations come into being, how they change and of what they are composed. These questions are as vital for practicing designers as for theorists of consumption and technology who conclude that the design and development of systems or products 'is not the creation of discrete, intrinsically meaningful objects, but the cultural production of new forms of practice (Suchman 1999: 404). For those who go along with these ideas, it makes sense to put the evolution of practice centre stage.

In 1992, Latour commented that 'students of technology are never faced with people on the one hand and things on the other, they are faced with programs of action (Latour 1992: 254). There are obvious parallels between this statement and Giddens' conclusion that the social sciences study "neither the experience of the individual actor, nor the existence of any form of social totality, but social practices ordered across space and time" (Giddens 1984: 2). Whilst Giddens says almost nothing about the material world, it is possible to bring these strands of thought together and define practice as a process of integration resulting in a structured arrangement (i.e. resulting in a practice that exists as a recognisable entity such as caravanning, cell-phoning, Nordic walking). More specifically, we suggest that practice routinely involves the active integration of three foundational elements: stuff, (by which we mean materials, technologies and tangible, physical entities); image (including the domain of symbols and meanings); and skill (which encompasses competence, know-how and technique).

With these ideas in place, we go on to argue that practices come into existence, persist and disappear when links between constitutive elements are made, sustained or broken. We use this scheme to examine critical moments like those in which proto-practices become real (innovation), and in which established practices break down (fossilisation). New configurations or innovations in practice arise when entrepreneurs – who include ordinary users and consumers as well as producers, designers and manufacturers – combine, relate, integrate and organize pre-existing but previously separate components in novel ways (Schumpeter 1911/1949).

The plausible suggestion that innovation is in essence about making new combinations of existing elements supposes (perhaps less plausibly) that elements have a prior existence: that they are somehow ‘out there’ in the world, waiting to be linked together in new combinations. Indeed it is likely that many of these ‘floating’ or homeless elements are the fossil remains of previously integrated social practices. In other words we are surrounded by materials, ideas and types of know-how that have become separated, stranded or dislocated as practices evolve.

This is a strange but intriguing idea. It is also an idea that is consistent with the view that despite appearances, practices, which are always the result of localised integrative effort, do not diffuse. As Disco and van der Meulen notice (when writing about technological innovation) ‘what actually diffuses is not the local practice ... or even the innovative artifact itself, but some resilient and mobile representation of it’ (326: 1998).

As well as thinking about how practices cohere, designers and theorists of consumption should also consider the relatively independent circulation of elements of which practices are formed. What trans-practice dynamics propel or animate the migration of objects, images, competences and what are the different processes involved? We use a range of examples, including sunglasses and book-keeping techniques, to explore possible mechanisms of mobility including those of classification, codification and transportation.

Although we suggest that elements can travel, we also argue that they are reproduced when, and only when, they are integrated in practice. This not as inconsistent as it sounds for the relative autonomy of elements relates to the fact that they are multiply embedded. Their instantiation in and through any one practice transforms the element in question (however subtly) and is therefore of consequence for all other practices of which that element is a constitutive part. While the co-evolution and the circulation of materials, images and skills is of some importance for the durability, reach and range of specific practices, the reverse is also the case.

These two ideas: one that elements of practice co-evolve as a result of their successive integration in practice(s), the other that relatively autonomous elements circulate between (and thereby create linkages between) practices are of some significance for what we might think of as ‘practice oriented’ product design.

There is no harm in paying close attention to the reactions and responses of individual users and it is undoubtedly instructive to pause for a moment and think about how some new commodity might fit into someone's life. However, such enquiries are unlikely to reveal the unfolding, uncontrollable relation between object, image, competence and practice. User-oriented design methods, interactive design, "anthropological" enquiry and the like may scratch the surface of what is involved but at best these techniques provide a static snapshot of symptoms and outward manifestations of the multiple and typically collective dynamics at stake in making or at least temporarily stabilising 'configurations that work'.

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