Design Practice within a Theory of Practice

Guy Julier
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Guy Julier, Leeds Metropolitan University, UK

Abstract: ‘Practice’ in a sociological sense refers to routinised behaviours that consist of several elements, interconnected to one another. To paraphrase Reckwitz, these include forms of bodily activities, forms of mental activities, artefacts and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge. Using ethnographic and interview data that focuses on teenagers’ use of iPods, this presentation maps out the sociality of practice. Through this analysis, I argue for an approach to design that does not focus on individual users and objects, but for a complex appreciation of the networks of artefacts and actions that are contingent upon one another within respective fields of practice. Thus it is perhaps most productive for the designer to look at the norms and ‘rules’ of these fields, but also at their edges and overlaps with other fields.

Keywords: Practice, Contingency, Sociality, iPod

On 6 July, 2006 at Durham University, UK the ‘Practice Oriented Product Design’ (POPD) (Shove and Watson 2006) manifesto was launched. This was the culmination of three exploratory workshops under a research project entitled ‘Designing and Consuming’. This formed part of the Economic and Social Research Council and Arts and Humanities Research Council special programme on ‘Cultures of Consumption’. The project was led by Elizabeth Shove of Lancaster University, with the workshops involving the participation of designers, sociologists, design historians and researchers. Their aim was to explore the interconnections between design practice and consumption theory, leading to the production of a new conceptual model for designing. Hence POPD.

In essence, POPD attempts to instrumentalize a sociological theory of practice as a way of exploring the routines of users, leading to the possibility of further design innovations springing from this analysis. Key to it is its turn away from design merely being about the relationship between individual user and object. POPD presents a more socially embedded view of use that engages networks of users with constellations of artefacts and systems. It stridently proclaims that:

POPD renounces all approaches, whether in social science or in design, that focus on specific products or upon individual users. POPD focuses on the routine ways of doing, understanding, knowing and desiring comprise human experience and social structure at all scales. It is in the performance of practices that users and products come together, in complexes of skills, meanings, materialities and temporalities (Shove and Watson 2006).

This article uses the POPD manifesto as a starting point, elaborating it as a conceptual tool for designing. It extends its definition and outlines its academic backgrounds. It then turns to a qualitative, primary study of teenagers’ use of iPods to reveal how practice theory may be mobilized to understand the complexity and instability of product use. The results of this study are then used to provide further suggestions for how designers might use practice theory, both in identifying and exploring design opportunities but also in understanding where perceived opportunities may not function so efficiently in reality.

Practice Theory

Developments in the sociological consideration of consumption have led to a greater sense of connectivity that provide compelling structures for investigating the role of design in society. Beyond individual, privately-orientated activities of use, ownership and maintenance focused on the domestic sphere, are layers of socially-constituted activities where individuals are carriers of collectively held practices and may comprise sets of conventions and procedures (MacIntyre 1994). By thinking in terms of consumption as ‘practice’, we can begin to explore it in a way that considers the specificity of its various modes and locations, the possible interrelationality of objects, spaces and images and the ways by which rules of engagement act.

For Reckwitz (2002: 249):

A ‘practice’ … is a routinised type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of...
understanding, know-how, states of emotion and motivational knowledge.

A consideration of practice therefore brings together material and immaterial processes. Practice is supported both by designed artefacts— for example, things that are used, spaces that define activities or images that communicate information— as well as shared ideas as to how those practices may be carried out or what they might mean. Practices are ‘filled out’ by a multitude of individuals and products that act as their carriers. They are therefore socially constituted and socially observable.

Molotch develops this idea in terms of what he terms ‘lash-up’. He uses the simple example of the toaster, explaining that its existence presupposes the supply of bread of a certain size and other material supports. Objects are contingent upon the existence and successful functioning of others. ‘Not just having a taste for toast, people enroll, as sociologist Bruno Latour [1987] would say, in the toaster project’ (Molotch 2003: 2). Furthermore, the toaster engages physical and mental activities from the skill required slice bread and place it in the toaster to knowing the most appropriate settings for different thicknesses. Beyond such knowledge, it also engages the emotional internalization of the routine of breakfasting. These therefore involve social knowledge and shared understandings. Practice also involves orders of contingency. Thus the toaster is unusable without a supply of electricity and pointless without sliced bread. A second order of contingency rests in other material objects such as jam, bread knives or plates. These extend and enrich the toaster project, making it more viable as an acceptable practice. But they may also belong to other practices (like sandwich making and eating). Ultimately therefore, as the POPD manifesto would have it, ‘No object is an island’ (Shove and Watson 2006).

Practices are conceived in terms of various forms of consumer activities, each with its sets of rules and norms. Bourdieu (1974; 1992) developed the notion of ‘field’ as an extension of practice. He was primarily concerned with explicitly competitive versions of practice wherein the field provides the setting for its rules (Warde 2004; 2005). Analogously and quite literally, many sports take place in fields and require specific and agreed rules for them to be carried out. They also include designed hardware that provides the focus for their play, supports their rules and facilitates their spectatorship. However, even sports involve a combination of competitive-based rules and non-competitive understandings and their successful function requires the combination of these. Thus it is necessary to go beyond a competitive conception of field— where all actions are strategic— to embrace a more nuanced understanding of practice.

Schatzki (1996: 89) argues that practices work as both coordinated entities and are performed. In the former case, rules are explicitly formulated in order for practices to coalesce and be understandable. This may be implicit in terms of the tacit, shared ‘doings’ and ‘sayings’ within a practice or it may be explicit through rules, principles, precepts and instructions. In the case of Molotch’s toaster project, there are the explicit rules laid out either in the gadget’s instruction manual or in the affordances given by its interface and function. But there are also shared forms of guidance that are more tacit: knowing, through trial, error and observation, the correct settings that produce the perfect piece of toast for either margarine or butter. Finally, this may exist through what he calls, ‘teleoaffective’ structures in which a shared aim defines how a practice is carried out and thought about. Practices are sustained through their performance. Regular enactment of practices tests and reinforces their norms. Repeated toast-making at breakfast time involves the honing of bodily and social skills as, for example, a family learns how best to regulate the various activities associated with achieve toast— where best to slice bread without getting in the way of someone else who is using the toaster, how best to stop crumbs spilling over the kitchen floor, how to store butter so that it is not too hard to spread on warm toast and so on. The emphasis, in using this approach to practice, is on the relationality of people and artefacts.

In terms of questions of design in relation to practice theory, value is not perceived to reside in products or services themselves nor in the meanings attached to them (for example through product styling, branding or advertising), but it emerges in practice itself (Shove, Watson and Ingram 2005). Economic value is only as much as people are prepared to actually pay; the environmental value of a ‘green’ product is only realised upon its use; the emotional value of a brand requires a shared frame of reference among its participants. Artefacts give focus to, facilitate, mediate and explain norms of practice but they only have value in so far as their consumers are prepared to engage them.

This leads Warde (2005: 141) to suspect that, ‘the distinct, institutionalized and collectively regulated conventions’ of practices insulates their carriers from, ‘the blandishments of producers and promotional agencies’. The routines of everyday life as well as institutionally imposed rules make consumers of products and services unchanging in their habits. As long as a family has a routinised approach to making toast, it is unlikely to replace the toaster project with some other device.

However, while practices may indeed display facets of normative action, they are also continually evolving. This may be in response to external stimu-
lae such as climate change, environmental legislations, rising interest rates, the threat of terrorist attack or war. Rising electrical power costs may cause a family to reconsider toaster usage. But corporations are also constantly devising ways of moulding existing practices or creating new ones. Thus in introducing new products or services, producers seek to destabilize established practices (Slater 2003).

By considering consumption in terms of practice, the analysis is shifted away from thinking about the transactions between individual user and singular object. Instead, one is encouraged to consider different activities as constituting a network of people and products. In a similar spirit Reckwitz (2002) attributes the emergence of practice theory to a wide network of thinkers. Beyond the pivotal role of the aforementioned Bourdieu, Reckwitz identifies, for example, the influences of the ‘performative’ gender studies of Butler (1990), Giddens’s theory of structuration (1984), Garfinkel’s ethnomethodology (1967), Latour’s science and technology studies (1991) and Foucault’s investigation of the relationships between bodies, agency, knowledge and understanding (1978). This is a heady and diverse list of contributors. But perhaps their common element is in placing the social not solely as mental activity, nor as discourse or interaction (Reckwitz 2002: 249). Rather they seek an interconnectedness between these and material circumstances. Within design theory itself, an approximation to this attitude is in Margolin’s conception of a ‘product milieu’ that he defines as, ‘the aggregate of objects, activities, services, and environments that fills the lifeworld’ (Margolin 1995: 122). By extension this ‘aggregate’ is understood, regulated and routinized through knowledges.

Practice theory and, in terms of design, its more explicit articulation in POPD, encourages an abandonment of characterizing consumption in terms of the relationship of individuals to singular objects. Within the sociology of consumption this latter approach may be (stereo)typified in Slater’s (1997 Chp. 1) claims that consumption entails an exercise of private, personal choice to be identified as a culture of freedom and individualism – a private act which is consigned to personal pleasure rather than public good. Within design theory it may be (stereo)typified in Norman’s (1988) highly focused studies of interaction with things that lies at the base of User Centred Design. Elsewhere, I have critiqued a similar impulse toward singularization of the object that stems from particular approaches to Visual Culture studies, arguing that, by contrast, design culture involves the repetition or reformatting of related visual and material phenomena through a multitude of planes and moments (Julier 2006).

Having established a conceptual framework for understanding the interrelationships of the material and the immaterial within practice, it is productive to explore these through a real-life example.

**Teenagers Practising the ‘iPod Project’**

Since the release of its first generation version in October 2001, the iPod mp3 player has been the focus of growing popular and academic discussion. Popular discussion, in particular through online blogs and message boards such as www.ilounge.com, http://playlistmag.com, http://blog.wired.com/cultofmac, http://www.ipoditude.com and http://blog.easypod.co.uk, has largely concentrated on its technical developments and potential and/or individual actions and experiences of the product. Likewise, in academia Bull (2005) has analyzed the object’s ability to mediate space and experience, showing how users create playlists that help to ‘narrate’ everyday activities through choosing specific sets of songs to colour routines such as jogging or taking public transport. Kristensen (2006) explores the design details of the object’s hardware to reveal the way by which its use instigates a highly embodied experience of exchange, between human manipulation and electronic responsiveness. Cooley (2004), speaking more generally of handheld electronic gadgets that include screens (otherwise known as ‘Mobile Screening Devices’), calls this process ‘tactile vision’. The fit in terms of the relationship between eye, hand, body and listening also extends the act of looking into a strongly embodied process. The design of the iPod therefore facilitates a transition from visual appearance, through tactile engagement to aural immersion.

Such studies are useful in understanding iPod usage. However, they are partial in that they only refer to one specific element of the ‘iPod project’, that of the individual’s experience of using an iPod for listening. What happens when their earplugs are disconnected? Are there other, connections that are mobilized around the iPod? How is the iPod instrumentalized within social networks? What are the orders of contingency that surround the object and mark out an ‘iPod practice’?

These questions motivated a study carried out through the summer of 2006 of teenagers and their iPod usage. This initially drew on the practices of teenagers aged 14-16 in the neighbourhood in which I live (a relatively middle-class suburb of a large city in the North of England). For the sample group – facilitated through social and family networks – I used close ethnographic observation of the interactions between them that hinged on iPod use in particular and music following in general.
Notwithstanding potential ethical conflicts, the age and cultural distance between myself as a middle-aged academic and the teenagers would restrain the depth of ethnographic observation. Hence this was supplemented by in-depth, loosely structured interviews with 10 teenagers of both genders who are linked through friendship and kinship networks. Questions began by focusing on the various advantages and disadvantages of using an iPod over other mp3 players as well as how they coordinated their use with each other and across different music technological platforms. This allowed for the exploration of deeper issues relating to how they imagined their and others’ iPod usage to function within their social groups. It also included exploration of their notion of value and design. Most of the interviews also extended to discussing other objects in their social lives. Thus we discussed how they use communication networks such as mobile phone texting and MSN. Notes of the discussion were written up and the quotations used in this article were subsequently checked over by the respondents.

The decision to focus the study on teenagers aged 14-16 was partly guided by the networks of respondents available. But it also proved to be an age group where the meanings and significances of the practices under analysis are intensified. By and large these are teenagers with reduced expendable incomes as compared with older teenagers who have access to part-time jobs. Some of their material possessions appeared to play a significant role in their life-worlds as achieving them is a relatively harder challenge, requiring more patient saving up or waiting for their possible gifting. Furthermore, not least because of their psychosexual development as described by Erikson (1959), they are an age group with a heightened sensitivity to the relationships of individual identity and peer recognition and the ways by which these are manifested. As a result the teenagers interviewed provided articulate and insightful accounts of their practices.

It immediately became apparent that beyond individual listening, a range of other activities gave meaning to the ‘iPod project’. Collecting, archiving and display of mp3 based music was of supreme importance to them. For ‘iPodders’, the supporting iTunes software and interface was just as important in this process. This interest is obviously not dissimilar to the practices of collecting of vinyl – as fictionalised in Nick Hornby’s novel *High Fidelity* (1996) –, cassettes or compact discs. However, the ease of distributing and duplicating mp3 files combined with the ability to display lists on iTunes added extra weight to this activity. As Joe (16) remarked:

> It’s good to go round to friends’ houses and see what music they’ve got. You get to know what they’re like through that. Sharing the music is really important. So looking at their iTunes and playlists is an easy way find out what someone’s like. But it can be other stuff, other forms of MP3, CDs, records...whatever.

The teenagers observed and interviewed were certainly not precious about the brands they used. They were clearly aware of the various distinctions between them. This was expressed almost to a point of ‘tribal honour’. But they were also keen to point out their ability and readiness to move across platforms, bodging and hacking their way through any obstacles that were designed to discourage ease of movement. Antoine (16) puts this as follows:

> I like to talk with friends who have Creatives because we can tell each other how well we’ve done getting these at half the price than iPods… I tend to swap music files with other Creative users as it’s easier, though it’s not impossible to swap iTunes files.

Equally, George (15) moved freely between brands, stating that:

> The Creative is where I store all my music and the Nano is for carrying my music around. But I always end up carrying both around. I prefer the iPod…it’s just cool... the Creative does the job, but the iPod looks better and it’s easier to manage with my friends’ stuff.

The ease of displaying and swapping music files through iTunes was important to these teenagers, as Becca (14) describes:

> I don’t think that any of my friends have got iPods. They’ve got Shuffles or Nanos. I quite like the idea of building up my collection. I got an iPod because everyone else has got iTunes as well and it makes it easier then.

Ethnographic observation revealed the sociality of iPod and iTunes use even more starkly. These teenagers create social gatherings in order to compare playlists and swap music. Parties are an opportunity to perform the cultural capital that is manifested through their playlists through iPod dj-ing. Communication networks and nodes such as MSN, e.mail and MySpace allowed for music and its accompanying knowledge base to be moved around within their groups.

The study revealed two clear issues in the context of this discussion of practice. Firstly, it showed that, at least amongst these teenagers, there is a looser correlation between taste and product than marketing specialists might imagine. Muñiz and O’Guinn (2001) propose the notion of a ‘brand community’ where individuals who engage in extended and deep...
enthusiasms for a particular brand of product might form support networks that constitute a community that is clustered around it. This may be separated from other forms of community identification and processes. For these teenagers this only had a partial effect, however. Tastes in music may sometimes be replicated by certain technology choices. Thus, for example, Jamie (15) stated that he was unlikely to get an mp3 player as he didn’t think that many of his friends were into his tastes in music (a mixture of death metal and late romantic classical music). But overall, their fluidity between makes of mp3 player and, indeed, other music technologies, their pragmatism in placing the exchange and storage of music files beyond any slavish brand following and their more limited financial resources, meant that the aesthetic thrill of owning and using an iPod was just one in a list of reasons for using one. There are the official ‘rules’ that constitute using iPods and its contingent iTunes as specified by the affordances allowed by their technologies. On the other hand there are the unofficial understandings that allow these to be circumvented and make up their successful play in social life.

Secondly, then, the iPod is part of a ‘network sociality’ (Wittel 2001) that is facilitated by a mixture of contingent and improvised connections. Or put the other way round, in addition to being the object of individual contempation in the way that Boradkar (2003), Bull (2005) or Kristensen (2006) describe, the iPod is also a social instrument. Diagrammatically, the interconnected bodily, mental and emotional activities, the knowledge, understandings and the use of things that constitute Reckwitz’s definition of a practice would be as follows.

Using Practice Theory for Designing

The identification of what constitutes specific practices provides a useful conceptual framework that takes the designer beyond the individual user to understanding the constellations and dependencies that link objects, environments, systems and users together. By analyzing the ‘suites’ of contingent objects (the toaster, sliced bread, butter, jam, small plates etc. or the iPod, the computer, portable hard-disks, MSN, mySpace etc.) on the one hand and the knowledge, understandings, bodily activities and states of emotion that are shared between users on the other, the designer may start from an enriched awareness.

As the above diagram suggests, there are first orders of contingency that make up ‘suites’ of objects. These are objects that have dependency on each other for their basic function: the toothpaste and toothbrush, the toaster and sliced bread, the iPod, computer and iTunes.

There are also second order contingencies that the designer may take into account as well. These are the ones that are not necessarily requirements for the primary object to function but they do facilitate an extended use of it. Hence the toothbrush holder, jam or mySpace. These secondary orders of contingency are often where the social questions of value, taste or connectivity may exist. The toothbrush holder creates the ‘family’ of toothbrushes of a family – it orders, displays and identifies them. Jam allows for shared appreciation of the individual’s food enthusiasms. MySpace is where teenagers display their personal music interests through which music file swapping subsequently takes place. The connection between first and second order contingencies is not necessarily always intended by manufacturers. However, if the designer were to explore the relationships between these two, then more extended innovations may take place.
The use of a practice theory approach also takes the designer beyond questions of ergonomics or emotional response of the individual user. Whilst these are important, practice theory suggests that the designer may also think in terms of ‘social ergonomics’ by considering the embodied actions of individuals in relation to others. This isn’t merely about the design of objects for sharing, but about the social behaviours that objects facilitate. The interviews and ethnographic observation of teenagers using iPods demonstrated that beyond the bodily actions of individual use (such as scrolling through the tunes menu or plugging the earphones in) there is also an embodied form of social use. At a basic level of product use, the design of its interface meant that users are quick to learn their navigation and therefore browse each others’ tunes. The recognizability of the distinctive product form subsequently triggers an almost instantaneous curiosity to know what songs were on each others’ iPods. The size of the screen enables the display of playlists to each other. By thinking in terms of ‘social ergonomics’, the designers might therefore consider secondary, social usages and how the design of products accommodate these.

Practices are rarely stable, however, and it is important that designers appreciate their instability within making design decisions. The POPD manifesto itself acknowledges that they are in long term evolution. As new product design intervenes on practices, as do a myriad of other influences (social, cultural, environmental, technological and so on), so those practices change.

Between carrying out the fieldwork and the writing of this paper there have been interesting developments that may alter the ‘iPodding’ practices described. Steve Jobs’s confirmation on 9 January 2007 that Apple would be launching an iPhone that year which would integrate telecommunications, internet, e.mail and mp3 capabilities was just one point in a lengthy treadmill of rumours regarding the brand. However, according to the Annual Digital Music survey of 3,000 British consumers, carried out by Entertainment Media Research and the law firm Olswang, take up of the idea of combining mp3 and telecommunications capabilities is patchy (Allen 2006). Their research found that most teenagers were open to an integrated machine but just over half would pick a phone with a music player over a phone-enabled mp3 or iPod.

This resistance may be explained by a number of factors such as the perceived high cost of such apparatus or the lack of music storage facility delivered by mp3 enabled mobile phones (the Motorola ROKR launched in 2005 that incorporated iTunes capability stored just 100 tunes). If viewed through the lens of practice theory it is clear that ‘iPodding’ and mobile phoning for teenagers occupy different but related domains of practice. We have seen that amongst iPodders the collection, exchange, archiving, display and performance of music files clusters a range of specific technologies. If we were, by contrast, to view the mobile phone as part of a range of technologies that are mobilized within teenagers’ communication practices, then these may be viewed quite separately. Mobile phones, MSN, e-mailing and making announcements on platforms such as MySpace belong, for these teenagers, either to the social bonding of ‘chat’ or, crucially, as instruments to coordinate other practices. The timetabling, coordination, agreement and organization of leisure activities in intensified, highly calculated ways is, as Souherton (2003) argues, a relatively contemporary rather than traditional phenomenon. It is a practice in itself. While sharing some technologies and, indeed, motivations (such as social acceptance) with iPodding, the organization of their respective routines are distinct from one another.

The iPhone sits on the boundary between two social practices. How comfortably it will occupy this position remains to be seen. Given the instability of practices, particularly those involving intensely marketed technologies and highly flexible teenagers, one can only regard this particular issue in historical terms. Consideration of this iPhone question suggests, however, that the designer might not only explore the constitutive phenomena of discreet practices but may also regard practices as nesting upon one another, as mutually dependent or, sometimes, in conflict. By intervening through products, images, environments, services or systems that exist between practices, the designer may enhance their relationships or help in the creation of new ones. Such interventions may be made on the things that provide focus for practices or on the background understandings that influence how they are carried out.

The relationality of objects has been expressed in aesthetic terms, for example, through the so-called ‘Diderot effect’ (Kopytoff 1986; Schor 1998). This well-known tale refers to the quandary produced when someone buys a new item which in turn makes all their other possessions seem out-of-date. Everything else subsequently needs updating. Designing with practice theory in mind may dispense with such an aesthetic homogenizing impulse, unless, of course, the practice in question is concerned with this in itself. Instead, the constellation of artefacts and human activities within a practice may include a mixture of levels in terms of designerly sophistication or advancement.

In terms of social well-being and environmental agency, the proposals of Ezio Manzini, though not explicitly, come close to an expanded application of practice theory. Rather than taking on the traditional ‘problem solver’ mantel, Manzini and Jegou (2004)
propose that the designer develops tools to recognize and analyze social innovations that engage very
everyday practices – taking children to school, preparing meals, sharing dwellings. The designer’s next
job is to develop services, systems and/or artefacts that either ensure the continuation of such practices
or their replicability in other contexts. His methodology encourages a pragmatic, open-ended and media
agnostic engagement of design while also requiring the designer to undertake highly focused analyses of
the material and immaterial features of specific practices. Ultimately, he also considers the relation-
ality of practices, so that sustainable communities are carried by their interlocking and mutuality.
Beauty may be in an individual object, but may also be in the textures that constitute the functioning and
interrelatedness of a practice. His conception of creative communities does not assume an all-encom-
passing conception of ‘community’. Rather, a creative community is the result of the nesting of mul-
tiples of specific practices that are finely and sensitively tuned within themselves and to each other.
Whilst not explicitly so, Manzini’s thinking resonates with a practice theory approach to designing.

Just as no object is an island, so no theory is an island either. Aside from Manzini’s concept of
‘Sustainable Everyday’, one may note the rise of the importance of ethnography to design practice (e.g.
Tso 1999) or the innovation of ‘Cultural Probes’ (e.g. Gaver, Dunne and Pacenti 1999) as elements of the
design research toolbox that have accumulated in the past decade. These also point toward the reinvig-
oration of design practice orientated toward sociality.

Conclusion

Viewed in historical terms, practice theory, as de-

erived from sociology, and its application to design

might help resolve the schism between a Modernist

enthusiasm for collective standardization and the

Postmodernist solipsism of the sovereign individual

consumer. Arguably, High Modernism concerned

 itself with all objects and people being equal and

therefore homogenous. Postmodernism promoted

the idea that individual taste and experience mattered

before social processes and activities. Practice the-
yory’s dogged focus on ordinary, routine processes

acknowledges the specificity and diversity of human

activities rather than reducing them to single, aesthetic
denominators. Equally, it reinvigorates a commit-
tement to the importance of the social networks that

make everyday life hum. Notwithstanding its poten-
tial commercial applications, for social and environ-
mental reasons alone it seems opportune to sign up

to the project of practice theory and its instrumental-
ization through design.

This article does not claim a special place for the
iPod as a social instrument. It merely provides an
accessible example to illustrate the relationship of
design to practice. Likewise, I do not assume that
designers are unaware of the wider systems within
which objects function. But practice theory provides
a structured and articulated framework by which
designers may undertake their research. In particular
the consideration of first and second order contingen-
cies, as I have called them, may help in the mapping
and evaluation of the significance of the objects that
designers develop. Practice theory may also be used
to analyze the connections between different clusters
of related activities. Design intervention subsequently
becomes conceived as a process of destabilizing their
relationships, mediating their conflicts or achieving
more harmonized, efficient dependencies between
them. More generally, it is hoped that embracing
practice theory will aid a deeper consciousness and
more knowing appreciation of the relationships
between material goods and immaterial processes.

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About the Author

Prof. Guy Julier

Guy Julier’s research activities range through design-led urban regeneration, design and social participation, political economy and the sociology of design culture. Throughout these his interest is investigating the networks and relationships between material and immaterial artefacts and practices. This interdisciplinary approach is demonstrated through his book The Culture of Design (2000; revised edition forthcoming). Earlier publications include New Spanish Design (1991) and the Dictionary of Design since 1900 (1993, revised 2004). He is a correspondent of Experimenta (Madrid), an Editorial Board member of the Journal of Visual Culture and a contributor to 2+3D (Krakow).
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