



Chimps, Designers, Consultants and Empathy: A “Theory of Mind” for Service Design

Steve New and Lucy Kimbell

Saïd Business School, University of Oxford

steve.new@sbs.ox.ac.uk

Keywords: Strategic Design, Service Design, Consulting, Design Thinking, Empathy

There are substantially divergent views on the differences and similarities between design-based and traditional, rationalist consulting-based approaches. We explore the extent to which these postulated differences might be related to different manifestations of empathy, and examine some of the consequences.

DESIGNERS AND CONSULTANTS: WHAT’S THE DIFFERENCE?

"So what is Design Thinking anyway? Sometimes the best way to understand something is to understand what it is not. So think of how McKinsey solves a problem. Now imagine the opposite. That's Design Thinking".

(Ostrower 2011).

"Consultancies such as IDEO, Continuum, and Ziba Design have positioned themselves as ready business partners, the more creative equivalents of McKinsey or Bain."

(Walters 2009).

"Empathy and collaboration are the hallmarks of McKinsey problem solving."

(Beaujean et al 2006).

One of the features of the design discourse is that 'design' (or 'design thinking') is frequently positioned in contrast to alternative ways of tackling problems. In particular, it is repeatedly characterized in opposition to a caricature of rationalist, analytical 'orthodox' approaches characterised by traditional management consultancy. This paper arises from the authors' involvement in a research project on service design in technology-based organisations conducted at the Saïd Business School at the University of Oxford (<http://www.sbs.ox.ac.uk/d4s/default.htm>). A central thread of the project was a series of workshops which brought together design professionals, academics and representatives of

high technology organisations. The discussion here owes much to these events. Those of us involved in the “Designing for Services” workshops repeatedly found our putative arguments jamming up at the point where we try to deal with the distinction between traditional consulting and design-led interventions. This paper is an attempt to unclog this.

A few observations set the scene. Firstly, although the types of work embarked upon by consultants and designers do not overlap exactly, there is common ground. Indeed, we are aware that increasingly famous design-based firms such as IDEO are encroaching on work that might traditionally have gone the way of established firms of management consultants. Secondly, although the superficial apparatus or terminology might differ, we note there is sometimes much in common between the working practices of the two domains.

Part of the problem is that it is just too easy to slip into sketchy caricature, where the stereotype of the one-dimensional, shiny-suited consultant is compared with the unbounded, groovy designer. This polarity of contrasting idea types is clearly false, but perhaps useful as a structure around which some provisional observations can be woven, using a form of Weberian Ideal Type argument, conceding that they are “...heuristic aids which, by themselves, tell you nothing about the real world, but which throw into relief its deviations from themselves” (Watkins, 1952:25; Weber, 1947). So to enable the discussion to proceed, we will use the (flawed) notions of capitalised Designer and Consultant.

Some differences between conventional management consulting and design-led interventions are easy to enumerate: designers seem to make a bigger deal of imaginative visualisations of their ideas (Tversky et al 2003); they possibly have a higher tolerance of ambiguity (Owen 2006), being less keen to force a client’s problem into a pre-determined solution; they may use a logic that is more allusive and metaphorical than their rationalist cousins (Martin 2009). And they generally get paid (much) less¹. But one significant issue is the extent to which designers are pre-disposed – and make systematic efforts – to try to get under the skin of clients and users and see and feel the world as they see and feel it (Nussbaum 2005).

The field of management consulting covers a wide canvas, especially when considering the vast corpus of boutique firms; however, following our Ideal Type strategy, we here focus on the broad characteristics of the major consulting firms. The literature presents a picture which focuses on their role as creators of and traders in specific knowledge - which might be knowledge of markets and industries, or managerial practices (Kipping 2002; McKenna 2006; Kipping and Clark 2012). Significant research has explored the nature of this ‘knowledge’: some have emphasised the way in which consultants become the generators and purveyors of ‘fads’ (Abrahamson and Fairchild 1999; David and Strang 2006); others have focused on the dynamic creation and diffusion of knowledge with organisations (Grant 1996;

¹ <http://salarybystate.org/> presents US salary data for ‘user experience designer’ in the range \$45k-\$119k for 2013; a Charles Aris Inc. 2013 report on salaries for recent entrants into strategy consulting presents a range \$73k-\$293k. (<http://salarybystate.org/tag/how-much-do-user-experience-designers-make;> <http://consultantsmind.com/2012/12/11/consulting-salary/>. Accessed 2nd July 2013.

Morris 2001; Sturdy 2002). Large consulting organisations are also often associated with strong, ideological positions - maintained by what Alvesson and Kärreman (2004) describe as 'cultural engineering' - that mean that the engagement with clients is driven not only by the transfer of information and expertise, but also by the communication of specific values and assumptions (eg O'Shea and Madison 1998; Salaman 2002; Toffler and Reingold 2003).

These features of management consulting practice can be seen to centre on the notion of expertise, and, in particular, the gradient of expertise between the advisor and the advised (Werr and Stjernberg 2003). Although some management consulting work, even by the big famous companies, is about providing 'merely' an alternative point of view, or an extra pair of hands, or some symbolic imprimatur to add weight to a course of action, the core element of (our Ideal Type) management consulting is that *they* know something *you* don't. They understand the problem better than you (they do a diagnosis) and they understand the prescription better than you (they provide the solution).

The designer, in contrast, has general expertise in a *process* - not necessarily any expertise in your particular problem; the process of working to a solution is different to that of drawing on prior experience or pulling the right solution from a pre-existing portfolio. In the famous ABC Nightline TV programme in which a team from IDEO redesign a shopping cart, co-founder David Kelley says 'The point is we're not actually experts at any given area. We're kind of experts on the process of how you design stuff.' (ABC 1999). Empirical studies of designers suggest that the design problem co-evolves with repeated attempts to solve it (Dorst and Cross 2001). This necessitates a form of deep engagement with the client and users of the system in question. In respect of product service systems (PSSs), De Lille et al (2012:3) say:

*The design thinkers' ability to empathize with multiple kinds of people and the skill to co-create enables collaboration to develop PSS. **Empathic understanding** goes beyond knowledge: when **empathizing** you do not judge, you 'relate to (the user) and understand the situations and why certain experiences are meaningful to these people, a relation that involves an **emotional connection**... Using **empathy**, the design thinker can identify needs of the different stakeholders and react upon them. Through a complex and iterative process of synthesis and transformation of research data, design thinkers **empathize** with the stakeholders through revealing future design opportunities.* (Emphasis added).

Not all accounts of design emphasise the idea of empathy. The recent extensive review by Johansson-Sköldberg et al (2013) essentially ignores this issue. Those drawing on the extensive theoretical and practical engagements between ethnography and design (eg Suchman 2002) might see Designers' empathy as dumbed-down ethnography. But there are sufficient grounds elsewhere to justify an exploration of how the idea manifests itself, and how it operates. But we need also to bear in mind that empathy is frequently discussed as virtue in the world of the Consultant (Golightly 1987; Wang et al 2005): it is claimed that empathy is the 'most valuable thing' taught at the Harvard Business School (Beier 2012).

EMPATHY: ALTERNATIVE MANIFESTATIONS

Empathy's Journey

Empathy has become a topic of great interest in both academic and popular literatures: scholars from a range of disciplines have explored the idea from philosophical and physiological angles, notably Rifkin (2010); De Waal (2011), Baron-Cohen (2011), Keysers (2011) and Howe (2012).

The notion of 'empathy' has disputed origins but the word finds its way into English from the Greek *εμπάθεια* (roughly, physical affection) via the German *Einfühlung*, the latter sometimes attributed to the art historian Robert Vischer (1847-1933; Vischer 1844), although others associate the concept with the earlier philosopher Novalis (real name von Hardenberg, 1772-1801; Gunkle 1963). At this stage the concept is relatively imprecise and is something to do with the resonance or mutual interaction between subject and object. The English word (and its contemporary meaning) comes courtesy of the psychologist Edward Bradford Titchener (1867-1927; Titchener 1909), who appears to appropriate it from the aesthetic philosopher Theodor Lipps (1851-1914; Lipps 1903). The tangled origin is important because from the Titchener ends up using the word in a different way to Lipps: whilst the former is about putting oneself in the position of another, imagining what it is like for me to be you, the Lippsian version is more akin to the modern psychological concept of 'projection', or ascribing what I feel to you, or wondering what I would do if I were in your place. We will carry these contradictory definitions forward into the argument, but it is worth commenting that during the twentieth century psychologists and social psychologists have developed empathy into a more rigorous concept which relates to individuals' ability to imagine the opinions and feelings of others (Hastorf and Bender 1952; Hobart and Fahlberg 1965; Clark 1980; Gladstein 1981; Emery 1987; Duan and Hill 1996). In parallel, several other strands of inquiry draw on the idea including art theory (Ames 1943; Davies 1990), Method Acting (Stanislavski 1936), ethics (Deonna 2007) and cognitive science and neuroscience (Charman et al 1997; Decety and Jackson 2004; Langford et al 2006; Decety and Ickes 2011).

We now turn to two ways in which the nature of empathy in design and traditional consulting may vary. First, we characterise the essentially aesthetic mode of empathy with that of the rationalistic empathy of the consultant. We then contrast the ideas of cognitive and affectual empathy, before moving on to explore how these ideas are institutionalised in practice.

Rationalist and Aesthetic Empathy

It is unlikely that any management consultant would claim that empathy with a client was unimportant. Certainly, understanding and 'getting to know the client' is taken for granted in at least the rhetoric of the consulting industry (for example, Kubr 1976; Smith 2000). However, it is possible to suggest that the flavour of empathy is one based on a rationalist, technicist worldview, in which the 'seeing the problem from the client's viewpoint' is just

one more technique in the consultant's tool bag: no need for deep human-to-human connection, or a shared set of meanings.

Figure One crudely sets out the main dimensions in which we might compare the rationalist empathy of the traditional Consultant with the more aesthetic empathy of the Designer.

RATIONALIST EMPATHY	AESTHETIC EMPATHY
Based on demonstrable method	Based on intuitive response
I try to understand your problem by locating it within a universe of familiar problems	I try to understand what it would be like to be you
Reductive	Holistic
Nomothetic	Ideographic
Focus on diagnosis and prescription	Focus on interpretation of a representation/representations of the situation

Figure 1: ALTERNATIVE VIEWS OF EMPATHY

Examples of rationalist empathy can be drawn from parallel professions: medical doctors are frequently pilloried for seeing their patients as mere bundles of symptoms (Waitzkin 1991). But in their defence, perhaps what matters is the accuracy of their diagnoses. They must carefully investigate, teasing out details of the patient's experience with great skill. They need to know what the patient feels, but perhaps they do not need to imagine what it feels like to be that patient. There is a type of empathy, but one which is exercised by the deployment of some procedure or programme of inquiry. But for anti-technicist writers like Jacques Ellul (1964), technique remains technique, however dressed up.

In contrast, we might claim that the design mentality brings with it a profound, imaginative and affective immersion in the life and experience of the client. The bond between a designer and the client and their users is about a level of a creative leap into the experience of another. Whereas a Consultant can see that a business process fails to achieve some performance target, and may know what to reorganise to improve things, the Designer understands what this target means to the people involved, and is concerned with it relates to a wider group of stakeholders including users. For the Consultant the web of meanings that participants bring to a situation, and the rich texture of the detail of the context, provide merely the backdrop to the main action; for the Designer, they are essential data. For the Consultant, the problem is the (nomothetic) manipulation of variables; for the Designer, the issue is the (ideographic) story (Quesenbery and Brooks 2010). For the Consultant, the key issue is analysis and isolation of the problem; for the Designer, it is seeing problems and solutions holistically.

This type of dichotomy is not limited to the 'design versus consultancy' debate, but crops up in a range of settings, from the training of sociologists (Stevens and VanNatta 2002) to Checkland's 'Soft Systems Analysis' (Checkland 1999). Both of these solutions, like design thinking, entail the creative exercise of empathetic imagination. Although design is not 'art', it requires an aesthetic sensibility to make the intellectual and emotional leap which means

one can see the world like someone else does. In contrast, consulting's empathy has more in common with Lippsian empathy-as-projection; rather than imagining what the client's life is like, the Consultant imagines what it would be like if the client was more like the Consultant. It should be added, however, that even though there may be mileage in the projection/empathy distinction, the language used by Designers may blur the contrast. For example, IDEO's Jane Fulton Suri, in recounting a story of 'going and seeing' people who'd had toe-losing accidents with poorly designed lawnmowers:

*"To get people to share the truth of what happened, I was using all of my psychology skills—perception, cognition, interrelating with people and getting them to open up and remember. And at the same time that I was asking people to show me how they cut the lawn, I would be **projecting myself** into that situation to think, Would I make the same mistake in this situation?"*

(Berger 2010, emphasis added)².

Cognitive and Affective Empathy

Another important distinction made in the literature is the difference between cognitive and affective empathy. Cognitive empathy relates to an individual's ability to work out what is going on in the other's mind; affective empathy refers to a shared emotional response - for example, feeling fear or excitement. The boundary between the two concepts is not rigid, and in the literature of both human and animal psychology the empirical challenges of differentiating the two are considerable. Nevertheless, the distinction has some face validity, and may read across to the comparison between Ideal Type Designers and Consultants. The idea of affective empathy is more than just using one's imagination to get a fuller picture of the other's experience. Affective empathy requires a kind of emotional labour: the understanding is not just descriptive, but embodied.

To illustrate these distinctions, it is helpful to consider the way in which (our idealised) Designers and Consultants might go about the task of how someone in a wheelchair might use an automated ticket machine at a railway station. Applying rationalist empathy, the Consultant might collect data - perhaps quantitative - on the process in question and calculate how long the queuing and ticket buying might take. They might explore whether the options available for travel meet the postulated needs of the disabled traveller. They might try to imagine what it would be like to be the person in the wheelchair and whether the person could reach the touch-screen and the ticket dispenser when seated. This is all - indisputably - a kind of empathy, but would fall short of the type of immersive, ethnographic design thinking normally associated with a Designer. In contrast, conventional design practice would perhaps involve the designer themselves using a wheelchair, or collecting data on the *overall* travel experience, and look for interactions with the wider process. Is, for example, the

² It is incidentally amusing to note that in Pugh's (1991) seminal work on engineering design, lawnmowers are the example given of a product for which the designer probably has no need of direct user engagement, as "market research and investigation of user needs is a task for others" (p.30).

lighting on the concourse such that a seated person cannot see the credit card instructions because of reflection? Is there room, once the wheelchair has approached the machine, for the chair to be turned around if there is a dense queue of people behind? These details require more than a superficial technical description of the problem, and require a deeper sense of 'what it is like to be someone else'. Elaborations of this approach are one of the key elements of design thinking as promoted by Brown (2009), Martin (2009) and many others.

This type of empathy, however, might still only be 'cognitive'. For 'affective' empathy to be involved the process of seeing through others' eyes requires a deeper engagement: this requires sharing the emotional response of the other. In the wheelchair example, it would require the designer to share, perhaps, the level of anxiety that a user might experience in the situation, or anger. This is not 'understanding that the person might get angry' - but actually to share the experience of anger (Postma et al 2012a; 2012b). It is not that one can rationally appreciate the fact of another's emotions, *but that one has the emotions oneself*.

These two framings of empathy suggest four permutations of which three seem to make sense in the context of the contrast between Consultant and Designer approaches (Figure Two). The top left quadrant appears problematic; the two right hand quadrants appear to map onto versions of the design thinking approach. This perspective leads to two further issues: the extent to which the empathic responses require some kind of machinery, and the potential obstacles to aesthetic/affective empathy.

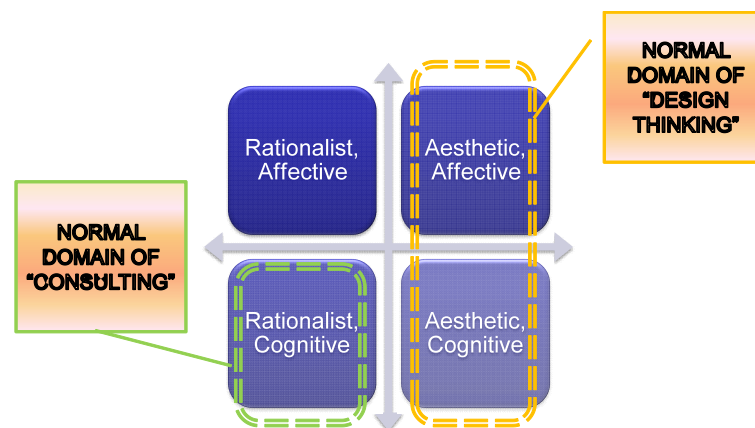


Figure 2: Versions of Empathy

MACHINERY AND OBSTACLES

Equipment for Empathy

One of the drivers for the growth in popular interest in empathy has been advances in human and animal neuroscience and psychology. In particular, techniques for analysing brain activity have led to insights into the ways in which empathy is operationalised as a physiological process. Part of the excitement in this field has been the discovery of so-called mirror neurons, leading to the idea that brains include some type of dedicated circuitry which

is responsible for - simplistically - running a kind of simulation programme that enables one actor to imagine what is going on inside the mind of another. Baron-Cohen (2011) is at pains to point out, however, that mirror neurons can only be conceived of as part of the machinery of empathy, and instead discusses the idea of the 'empathy circuits'. Regardless of the detail of the biology, however, the key issue is that, for living beings, there is 'equipment' for empathy, and, if it is absent or malfunctions, an organism's capacity for empathy is impaired.

For the debate about Consultants and Designers, it would be easy to slip at this point in the argument about individual personality types. However, there is no evidence to our knowledge that people who work in these sectors are a priori different in terms of their psychological make-up: indeed, our experiences in teaching MBA students suggest to us that many individuals can and do flip between the different approaches. What is more interesting is the extent to which the equipment idea can be applied at the organisational and institutional levels. In other words, can the capacity for (different sorts of) empathy be embodied in (different sorts of) organisational 'equipment', which might be reflected at the level of processes, techniques and capabilities?

This line of argument is risky because it entails a leap of analogy from human (or, indeed, chimp) to organisation; this is where our Ideal Type trope requires some qualification, because we are considering not just an idealised Designer or Consultant acting as an individual but in the context of collective professional apparatus. While it is easy to slip into this language ("IDEO really understand the users' needs..."), there is a need for caution as one does so. In construing some 'collective mind' (Weick and Roberts 1993) we need to avoid the idea of everyone thinking the same; however, we do have to consider what mechanisms are available for the (shared) cognitive processes of communication and memory (see also Boland and Tenkasi 1995; Tsoukas 1996; Tollefsen 2006).

To understand the possible *machinery* of empathy, there are several obvious approaches: the 'standard' design tool kit of visualisation, ethnographically-inspired research, role play, and immersive exploration are well-described in the literature and well-established in practice (Stickdorn and Schneider 2012; Curedale 2013). However, might there be more to aesthetic and affective empathy than this? If you do these things, do you naturally become empathetic? Are these tools necessary and sufficient for empathy? And is it the presence or absence of these methods that really explain the difference between Consultants and Designers?

We do not presume to know the answer to this question, but suggest three data points that might inform this debate. Firstly, we note that although there are some 'craft' elements to these traditional mechanisms of designerly interaction, they are not difficult to use: they can be taught relatively easily, and although sometimes time consuming and labour intensive, they are not especially expensive. Secondly, we note that variations of them - with different labels, or with different stylistic tics, or different levels of emphasis, are used in Management Consulting. But we also note that - when used by both Designers and Consultants - that these apparently empathy-oriented tools can be used in ways which are superficial, patronising and

inauthentic - or at the very least incomplete (Caplan 2009). In other words, if we wish to identify the machinery of empathy, it needs to be more than a toolkit.

Obstacles to Empathy

One possibility is that the institutionalised exercise of empathy requires mechanisms of internal communication and knowledge management. The discussion of empathetic (product) design processes in Nonaka and Takeuchi (1995) emphasise the need for the development of 'archetypes' - shared linguistic and conceptual models of relevant issues, redundancy in information sharing, and the role continuous translation of tacit to explicit knowledge (and vice versa). This implies that for some kind of institutional empathy to evolve, there needs to be some process of intensive, shared communication and interaction between the Designer and the client/user and, in a collective, institutional setting, between the Designers. Possibly, it is only this intensive level of detailed interaction that might give rise to sufficient insight to enable empathetic connection. This in turn has two implications for the comparison with the way empathy might operate for Consultants. Firstly, it may set a limit on the size of design firms: if you want to develop the kind of intensive internal discourses that enable aesthetic or affective empathy, you can't do it with an enormous, distributed, bureaucratic organisation.

A final set of points about the mechanisms of empathy relates to the reflexive character of the client-advisor relationship, and considers the obstacles to empathy. It could be that there are features of the traditional consulting relationship that work against empathic relationships. In traditional consulting, the 'real' client is typically the top management of the client firm, even if much of the actual interaction takes place with people lower down in the organisation. In some ways, this generates a power imbalance in the relationship between the consultant and the people with whom it might be necessary to empathise: the consultant may be seen, for example, as a kind of spy. The relationships formed therefore deviate significantly from a Habermasian "Ideal Speech" situation - communication is distorted by the asymmetry of power. In other words, the machinery of empathy may be disabled by the power imbalances: the Designer says "Tell me your pain..."; the Consultant tacitly appends "...so I can sneak on you to your boss."

Furthermore, the (relatively) high fees of traditional consulting mean that it becomes incongruent to maintain a position where the user or client's expertise is more important than that of the Consultant. The (relatively) low fees of the Designer mean that offering merely a process, rather than an 'answer', may be more palatable. If one pays McKinsey's fees, one does not want the Consultant to turn up with *just* a flip chart and process for visualising what one already knows, or could find out oneself (Fincham 1999). In Korczynski's (2005) terms, the high fees require a high degree of 'enchantment'. The presumed expertise of Consultants perhaps eliminates the humility and acceptance of ignorance required for empathy.

Finally, although Consulting has not developed into a formal profession, it has evolved a set of common ethical practices (not, of course, always observed) based on the notion of telling the client the truth - regardless of what the client wants to hear. This idea is embedded in the

ethical guidelines of various consulting bodies, and - for the top firms - is an essential part of their marketing message (Harte and Dale 1995; Edersheim 2010; McKenna 2010). Gunz and Gunz (2008) write about the problem of 'client capture' - in 'professional services' it is important to maintain a degree of formality and distance, which in turn may limit the scope for (especially, affective) empathy.

CONCLUSIONS

In this paper we have reflected on the way in which consideration of the concept of empathy might shed some light on the distinctions between Ideal Type comparisons of Consulting and Designing. Our analysis has suggested that the understanding the processes and obstacles to empathy may go some way to explaining some features of the professional landscape: Consulting firms are bigger, trade on expertise, have distinctive client relationships and charge more. All of these features may have implications for the ways in which 'empathy' is exercised. This raises questions for research (in terms of efforts to delineate the essence of design and/or design thinking) and also for practice (especially the trajectory of design firms such as IDEO, and adoption of design-style practices by established consultants or MBAs).

The discussion also leads us to reflect on the enthusiasm (admittedly, possibly waning: Nussbaum 2011) for design thinking as a panacea for business. In Baron-Cohen's (2011) consideration of individual empathy, he argues persuasively for the merits of a *lack* of empathy: although empathy deficiency can lead to evil (in his view) it can also be associated with a propensity for systematization and quantification. In Baron-Cohen's view, we owe much by way of scientific progress and technology to individuals who operate with less than normal empathy: he argues for a connection between mathematics, engineering and Asperger's syndrome. Extending this idea to our contrast between Consultants and Designers may be a fruitful avenue for further research, and certainly cautions against presenting overly-simplistic manifestos for the superiority of the design approach.

BIBLIOGRAPHY

- ABC Television. (1999). Nightline: The Deep Dive. Retrieved from <http://www.youtube.com/watch?v=JkHOxyafGpE> on December 20th 2012.
- Abrahamson, E. and Fairchild, G. (1999). "Management fashion: lifecycles, triggers, and collective learning processes." *Administrative Science Quarterly*, 44: 708–40.
- Alvesson, M. and Kärreman, D. (2004). "Interfaces of control. Technocratic and socio-ideological control in a global management consultancy firm." *Accounting, Organizations and Society*, 29/3-4: 423-444.
- Ames V.M. (1943). "On empathy." *The Philosophical Review*, 52/5: 490-494.
- Baron-Cohen, S. (2011). *Zero Degrees of Empathy*. London: Penguin.
- Beaujean, M., Davidson, J. and Madge, S. (2006). "The 'moment of truth' in customer service." *McKinsey Quarterly*, February, 62-73.

- Berger, W. (2010). "Jane Fulton Suri on the power of empathy." *Glimmersite*. 23 February 2010. Retrieved from <http://glimmersite.com/2010/02/23/jane-fulton-suri-on-the-power-of-empathy/glimmer-voices/> on June 30th 2013.
- Beier, G. (2012). "Empathy: the most valuable thing they teach at HBS." *ChiPlatform*, August 16. Retrieved on July 2 2013 from <http://chiplatform.com/blog/2012/8/16/empathy-the-most-valuable-thing-they-teach-at-hbs>
- Boland, R.J. Jr. and Tenkasi, R.V. (1995). "Perspective making and perspective taking in communities of knowing." *Organization Science*, 6/4: 350-372.
- Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. New York: HarperCollins
- Caplan, R. (2009). "The Empathetic Fallacy." Aiga. Retrieved from <http://www.aiga.org/the-empathetic-fallacy/>
- Charman, T, Swettenham, J., Baron-Cohen, S., Cox, A. Baird, G. and Drew, A. (1997). "Infants With Autism: An Investigation of Empathy, Pretend Play, Joint Attention, and Imitation." *Developmental Psychology*, 33/5:781-789.
- Checkland, P. (1999). *Systems Thinking, Systems Practice*. New York: Wiley.
- Clark, K. B. (1980). "Empathy: A neglected topic in psychological research". *American Psychologist*, 35: 187-190.
- Curedale, R.A. (2013). *Design Thinking Pocket Guide*. Topanga, CA: Design Community College, Inc.
- David, R., and Strang, D. (2006). "When fashion is fleeting: Transitory collective beliefs and the dynamics of TQM consulting." *Academy of Management Journal*, 49: 215–233.
- Davies, S. (1990). "Functional and procedural definitions of Art." *Journal of Aesthetic Education*, 24/2: 99-106.
- Decety, J. and Jackson, P.L. (2004). "The functional architecture of human empathy". *Behavioral and Cognitive Neuroscience Reviews*, 3: 71-100.
- De Lille, C., Roscam Abbing, E. and Kleinsmann, M. (2012). "A designerly approach to enable organizations to deliver product-service systems." *2012 International Design Management Research Conference*, August 8-9, Boston MA.
- De Waal, F. (2011). *The Age of Empathy: Nature's Lessons for a Kinder Society*. London: Souvenir Press Ltd.
- Deonna, J.A. (2007). "The structure of empathy". *Journal of Moral Philosophy*, 4: 99-116.
- Dorst, K. and Cross, N. (2001) "Creativity in the design process: Co-evolution of problem-solution". *Design Studies*, 22, 425–437.
- Duan, C. and Hill, C.E. (1996). "The current state of empathy research". *Journal of Counseling Psychology*, 43:261-274.
- Edersheim, E.H. (2010). *McKinsey's Marvin Bower: Vision, Leadership, and the Creation of Management Consulting*. Wiley: New York.
- Ellul, J. (1964). *The Technological Society*. New York: Knopf Publishing, 1964.
- Emery, E.J. (1987). "Empathy: Psychoanalytic and client centered". *American Psychologist*, 42: 513-515.

- Fincham, R. (1999). "The consultant-client relationship: critical perspectives on the management of organizational change." *Journal of Management Studies* 36 /3, 335–351.
- Gladstein, G. A. (1981). "Empathy: An unneglected topic in psychological research". *American Psychologist*, 36: 224-225.
- Golightly, H. O. (1987). "The value of good manners and kindness." *Journal of Management Consulting*, 3/4:33-37.
- Grant, R. (1996). "Towards a knowledge based theory of the firm". *Strategic Management Journal*, 17: 109-22.
- Gunkle, G. (1963). "Empathy: implications for theatre research" *Educational Theatre Journal*, 15/1: 15-23.
- Gunz, H.P. and Gunz, S.P. (2008). "Client capture and the professional service firm." *American Business Law Journal*, 45/4, 685–721.
- Harte, H.G. and Dale, B.G. (1995). "Improving quality in professional service organizations: a review of the key issues." *Managing Service Quality*, 5/3: 34-44.
- Hastorf, A.H. and Bender, I.E. (1952). "A caution respecting the measurement of empathetic ability," *Journal of Abnormal and Social Psychology*, 47:574-576.
- Hobart, C.W. and Fahlberg, N. (1965). "The Measurement of Empathy" *American Journal of Sociology*, 70/5: 595-603.
- Howe, D. (2012). *Empathy: What It Is and Why It Matters*. London: Palgrave Macmillan.
- Johansson-Sköldberg, U., Woodilla, J. and Çetinkaya, M. (2013). "Design thinking: past, present and possible futures." *Creativity and Innovation Management*, 22/2: 121-146.
- Keysers, C. (2011). *The Empathic Brain*. Amsterdam: The Social Brain Press.
- Kipping, M. (2002). "Trapped in their wave: the evolution of management consultancies". In: Clark, T. and Fincham, R. (Eds), *Critical Consulting: New Perspectives on the Management Advice Industry*. Oxford: Blackwell: 28–49.
- Kipping, M. and Clark, T. (Eds) (2012). *The Oxford Handbook of Management Consulting*. Oxford: Oxford University Press.
- Korczynski, M. (2005). "The point of selling: capitalism, consumption and contradictions." *Organization*, 12/1: 69-88.
- Kubr, M. (ed.) (1976). *Management Consulting: A Guide to the Profession*. Geneva: International Labour Office.
- Langford, D.J., Crager, S.E., Shehzad, Z., Smith, S.B., Sotocinal, S.G., Levenstadt, J.S., Chanda, M.L., Levitin, D.J., and Mogil, J.S. (2006). "Social modulation of pain as evidence for empathy in mice". *Science*, 312:1967-1970.
- Lipps, T. (1903). *Asthetik. Pyschologie des Schiinen und der Kunst: Grundlegung der Aesthetik*. Hamburg and Leipzig: Leopold Voss.
- Martin, R. (2009). *The Design of Business: Why Design Thinking Is the Next Competitive Advantage*. Boston: Harvard Business School Press.
- McKenna, C. D. (2006). *The World's Newest Profession: Management Consulting in the Twentieth Century*. Cambridge: Cambridge University Press.

- Morris, T. (2001). 'Asserting property rights: knowledge codification in the professional service firm'. *Human Relations*, 54: 819–838.
- Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford: Oxford University Press.
- Nussbaum, B. (2005). "The empathy economy." *Business Week*, March 8th.
- Nussbaum, B. (2011). "Design Thinking is a failed experiment. So what's next?" *Fast Company*. April 6. Retrieved from <http://www.fastcodesign.com/1663558/design-thinking-is-a-failed-experiment-so-whats-next> on 30 June 2013.
- O'Shea, J. and Madison, J. (1998). *Dangerous Company*. Harmondsworth: Penguin.
- Ostrower, D. (2011). "Top 6 Ways to Actually Make the Design Thinking Process Useful." May 10, 2, Retrieved June 20, 2013 from <http://altimeter-blog.altitudeinc.com/bid/37850/Top-6-Ways-to-Actually-Make-the-Design-Thinking-Process-Useful>.
- Owen, C. (2006). "Design thinking: notes on its nature and use." *Design Research Quarterly*, 2:16–27.
- Postma, C., Lauche, K. and Stappers, P.J. (2012a). "Social theory as a thinking tool for empathic design." *DesignIssues*, 28/1: 30-49.
- Postma, C. E., Zwartkruis-Pelgrim, E., Daemen, E., and Du, J. (2012b). "Challenges of doing empathic design: Experiences from industry". *International Journal of Design*, 6/1: 59-70.
- Pugh, S. (1991). *Total Design: Integrated Methods for Successful Product Engineering*. London: Addison Wesley Longman.
- Quesenbery, W. and Brooks, K. (2010). *Storytelling for User Experience Design*. New York: Rosenfeld Media.
- Rifkin, J. (2010). *The Empathic Civilization: The Race to Global Consciousness in a World in Crisis*. Cambridge: Polity.
- Salaman, G. (2002). "Understanding advice: towards a sociology of management consulting." In: Clark, T. and Fincham, R. (Eds), *Critical Consulting: New Perspectives on the Management Advice Industry*. Oxford: Blackwell. 247-259.
- Smith, R. (2000). *Mind for Hire: A Practitioner's Guide to Management Consulting*. Claremont, Australia. University of Western Australia Press.
- Stanislavski, C. (1949). *Building a Character*. New York: Theater Arts Books.
- Stevens, D. and VanNatta, M. (2002). "Teaching critical observation as a sociological tool" *Teaching Sociology*, 30/2: 243-253.
- Stickdorn, M. and Schneider, J. (2012). *This is Service Design Thinking*. New York: Wiley. See also: <http://thisisservicedesignthinking.com/#>
- Sturdy, A. (2002). "Front line diffusion: the production and negotiation of knowledge through training interactions." In: Clark, T. and Fincham, R. (Eds), *Critical Consulting: New Perspectives on the Management Advice Industry*. Oxford: Blackwell. 130-151.
- Suchman, L. (2002). "Located accountabilities in technology production." *Scandinavian Journal of Information Systems*, 14/2: 91-105.

- Titchener, E.B. (1909). *Lectures on the Experimental Psychology of the Thought Processes*. New York: The Macmillan Company.
- Toffler, B. and Reingold, J. (2003). *Final Accounting: Ambition, Greed, and the Fall of Arthur Andersen*. New York: Doubleday.
- Tollefsen, D.P. (2006). "From extended mind to collective mind", *Cognitive Systems Research* 7/2-3:140-150.
- Tsoukas, H. (1996). "The firm as a distributed knowledge system: a constructionist approach." *Strategic Management Journal*, 17: 11-25.
- Tversky, B., Suwa, M., Agrawala, M., Heiser, J., Stolte, C., Hanrahan, P., Phan, D., Klingner, J., Daniel, M.-P., Lee, P., and Haymaker, J. (2003). "Sketches for design and design of sketches." In: U. Lindemann (Ed.), *Human Behavior in Design: Individuals, Teams, Tools*. Berlin: Springer. 79–86
- Vischer, R. (1844). *Kritische Gänge*. Stuttgart: Verlag der J.G. Cotta.
- Walters, H. (2009). "Inside the design thinking process." *Bloomberg Businessweek*, December 14. Retrieved June 20, 2013 from http://www.businessweek.com/innovate/content/dec2009/id20091214_823878.htm
- Waitzkin, H. (1991). *The Politics of Medical Encounters: How Patients and Doctors Deal With Social Problems*. New Haven, CT: Yale University Press.
- Wang, I.M. Hsiao, J. and Shieh, C-J. (2005). "The relationship between service quality, customer satisfaction and customer loyalty: a study on the management consulting industry." *Journal of Information and Optimization Sciences*. 26/ 2: 371-393.
- Watkins J.W.N. (1952). "Ideal types and historical explanation." *British Journal for the Philosophy of Science*, 3/9:22-43.
- Weber, M. (1947). *The Theory of Social and Economic Organisation*. (Trans A.R. Henderson and T. Parsons). New York: Oxford University Press
- Weick, K.E. and Roberts, K.H. (1993). "Collective mind in organizations: heedful interrelating on flight decks." *Administrative Science Quarterly*, 38/3:357-381.
- Werr, A. and Stjernberg, T. (2003). 'Exploring management consulting firms as knowledge systems'. *Organization Studies*, 24, 881–908.

AUTHOR BIOGRAPHIES

Steve New

Steve teaches Operations Management at the Saïd Business School, University of Oxford, and is a Fellow of Hertford College. Before becoming an academic, he worked in aerospace, the automotive industry, and management consulting.

Lucy Kimbell

Lucy is Associate Fellow at Saïd Business School, University of Oxford, where she has been teaching a version of design thinking to MBA students since 2005. She has also been known to play with rats.