

# 6

## The object of service design

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### 6.1 Introduction

At a party a woman introduces herself as a designer. The person she is talking to then asks her what she designs. Today's designer may well answer in abstractions, talking about the application of design thinking to organizational strategies, policies or social problems. She may avoid giving a direct answer, or at least one that is comprehensible to the person who asked the question. She might describe how she produces all sorts of things using a range of methods, tools and techniques from PowerPoint presentations to value stream mapping to participatory workshops. Yes, yes, we can imagine the party companion asking impatiently, but what do you actually design?

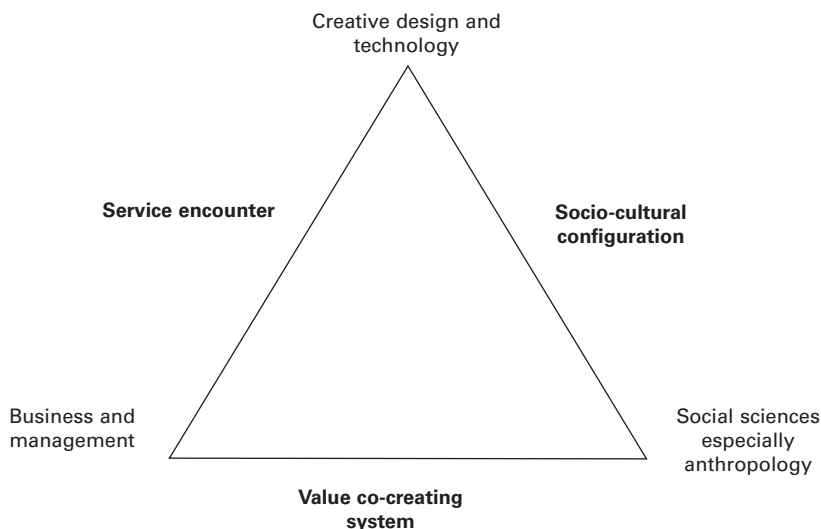
Design, as often construed in conversations at parties, water coolers or airports, is tied up with the production and use of material and digital objects, yet these days it is no longer defined by them. Buchanan's (1992, 2001) division of the objects of design into signs, interactions, places and systems continues to be influential. But over the past two decades the emergence of practitioner and research fields associated with the design of interactions, services, experiences and systems has opened up anew the question of the object of design. It is this cosmological question we seek to contribute to.

Shaping this emergence, we note a very wide range of activities in developed, industrialized economies that fit within the economic category of 'services' from transport to education to digital software to healthcare. In addition, there is a renewed interest in the production of objects through small-scale manufacturing, craft and the maker movement. There are new kinds of technologically mediated objects with built-in micro-controllers programmed to behave in particular ways such as prototypes made with Arduino<sup>1</sup>. Adding to the expansion of design objects is a long-standing interest in systems within IT practice and management information literatures, including recognizing the dynamic interactions between people, organizations and technologies. Finally, developments in other academic fields

have resulted in new perspectives on the object. For example, the material turn in sociology led to attention being paid to the ways that objects come into having agency (Barad 2003). In philosophy, proponents of 'speculative realism' have challenged the field's human-centric orientation, arguing that objects have hidden depths (Kimbell 2013).

Against this background the aim of this chapter is to enhance understanding of the object of service design and consider the implications of deploying different ways of thinking about this topic. To do this, we turn to several literatures that have been grappling with similar questions faced by the designer and her companion at the party. As long-standing researchers and practitioners in fields shaping this discussion, in anthropology and participatory design (Blomberg) and in digital services and design studies (Kimbell), we note that the field known as service design is emergent and heterogeneous. In this chapter we will borrow concepts from systems design, science and technology studies and participatory design as well as services marketing and management disciplines.

The chapter aims to guide researchers and students of design through contemporary discussions and open up new ways of thinking by identifying three approaches to understanding the object of service design: the service encounter, the value co-creating system and the socio-material configuration. Figure 6.1 shows how design and technology, the social sciences especially anthropology, and business and management inform these three objects of service design. By so doing we aim to help practitioners and researchers see how different ways of conceptualizing the object of service design changes what is involved in designing a service.



**FIGURE 6.1** *Perspectives on the object of service design*

## 6.2 A platform to surface the complexities

To enable this discussion, we will make use of one particularly successful contemporary service business, Airbnb. In the space of only a few years this service-based start-up has grown from being the idea of a couple of college graduates trying to make some spare cash into a global business valued at \$24 billion (Fortune 2015) having serviced over 60 million guests by early 2016 (Airbnb 2016). We might have chosen Airbnb because two of its co-founders are designers (although in their accounts of the start-up of this business, they do not call what they were doing 'service design'). Choosing Airbnb allows us to surface some of the complexities and nuances of the contemporary environment in which as designers and researchers, and as service users and providers, people reading this book are implicated.

As a digital business that connects people who want to rent out a spare room or property on a short-term basis to people who need a place to stay who are able to pay for it, Airbnb has transformed the hotel and hospitality industry. It also touches on many other aspects of contemporary life and in so doing provides a multifaceted case through which to discuss the object of service design, including:

- 1 *Technological mediation.* Airbnb is a web-based platform using digital data and algorithms to match 'guests' (people looking for a room or property to rent) and 'hosts' (people with one to rent out).
- 2 *Global/local.* First launched in the US, Airbnb now operates in 191 countries allowing people to look for a place to stay in over 34,000 cities (Airbnb 2016).
- 3 *Platform businesses.* Unlike the traditional model in the hospitality industry, Airbnb does not offer a service to travellers. It offers a platform enabling providers and users to connect with each other.
- 4 *Collaborative consumption.* Airbnb is an exemplar of an economic model that connects people with a scarce resource that might otherwise not find a market (e.g. a spare room in London) with people who will pay for it.
- 5 *Authentic experience.* Airbnb emphasizes how it enables people to have temporary access to someone else's world, not just a place to stay. For example, Airbnb helps hosts open up aspects of their lives to guests in the form of favourite coffee shops or other local knowledge.

## 6.3 Three perspectives on the object of service design

Reviewing and synthesizing the literature, we see three lenses to describe the object of service design. They draw on different research traditions and do different things for students and practitioners of service design. The three conceptualizations of the

object of service design are made up of different constituents (or actors) and order them in different ways. They are:

- 1 *The service encounter.* A focus on the experiences people have as they engage in interactions with touchpoints provided by others, often organizations but possibly by other individuals.
- 2 *The value co-creating system.* A focus on the dynamic exchanges of resources and processes that achieve outcomes for the actors involved, typically organizations but possibly individuals.
- 3 *The socio-material configuration.* An assemblage of constituents which emerges through the dynamic unfolding of practice, providing interfaces through which actors engage with resources.

### 6.3.1 The service encounter

The first perspective on the object of service design combines research in services marketing as well as practice and research in design fields. The service encounter emphasizes the *experiences* of users and customers, and other people involved directly or indirectly in constituting that experience such as staff or volunteers. In particular, the work of Shostack is widely recognized as providing for the first time an underpinning to the design of services. In presenting her arguments for ‘breaking free of product marketing’ (1977) and subsequent work, Shostack introduced a focus on the service encounter understood as what happens in the interactions between providers and customers. She highlighted the tangible constituents of an otherwise intangible service, which she called service evidence, now often termed *touchpoints*. This enables direct links with traditions within design including (digital) user experience design and visual communication design (e.g. Buxton 2007; Garrett 2011).

Later researchers such as Bitner (1990) also highlighted the artefactual and experiential nature of service encounters including the environment or ‘serviscapes’ (Bitner 1992) in which they happened. Czepiel et al. (1985) emphasized the essentially social nature of service encounters and the need to acknowledge both user and provider contributions. Methods such as service blueprinting helped service design teams map out the constituent elements within a desired service encounter (Bitner et al. 2008). Growing recognition of the role, skills and knowledge and behaviours of both customers and service staff in enabling and supporting the service encounter hinted at the wider system resources on which services rely (e.g. Bitner 1997; Czepiel 1990).

Exploring Airbnb through the lens of the service encounter emphasizes formal design qualities of the digital and material artefacts that are part of shaping or constituting the experience. The homepage for Airbnb viewed in the UK in May 2016 showed a photograph of someone sleeping in the kind of space that is bookable via the platform. A bunch of flowers by the bed, tartan blanket, clean-looking white sheets and female figure lying in the bed invite in the viewer’s gaze and emphasize

the sensory aspects of experience. Even tiny details can form part of the experience offered to guests. For example, Airbnb hosts are prompted to think about the tangible elements of the service experience they are about to render to guests. This builds directly on the early prototype of Airbnb by two of its co-founders, Joe Gebbia and Brian Chesky, when they first set up a temporary 'air bed and breakfast' to service visitors to a conference in San Francisco in 2007. Gebbia describes how they tried to design a whole journey for their guests.

As we were thinking of the experience of what we wanted to do for our guests ... We're standing in the living room and looking at these airbeds on the floor and going okay, that doesn't look too exciting. What else can we do that makes this an experience ... to make it more than sleeping on the floor in our living room? ... You come to the airport so why don't we come up with a guide to get from the airport to our apartment and once they get to the apartment we'll come up with a way for them to learn about the neighbourhood ... Then we kept thinking through the experience ... they're going to walk outside the door ... and probably trip over somebody ... out on the sidewalk ... they're always asking for change so why don't we make it easy for them, we'll give them spare change to give out ... So it's thinking through the entire journey of our three guests before they arrive. (First Round Capital 2013)

As illustrated by this account of the first Airbnb prototype, the service encounter perspective focuses on people's interactions with digital and material touchpoints that shape the experiences of service users. The analysis zooms in close to the people and foregrounds their interactions with other people or in relation to artefacts, places and technological systems. But it pays little attention to what shapes the social practices in which such experiences are embedded or to their politics.

### **6.3.2 The value co-creating system**

The second perspective on the object of service design is rooted in research in services marketing which focuses on the exchange relations between actors in a service system. The orientation of this approach is towards actors achieving *outcomes* through the dynamic bundling of resources and *competences* in particular arrangements known as service ecosystems or value constellations (Normann and Ramírez 1993; Ramírez 1999; Normann 2001; Prahalad and Ramaswamy 2004; Vargo and Lusch 2004, 2008; Kimbell 2011, 2014). The focus here is on the parties within a service being able to negotiate and account for the achievement of outcomes. Outcomes-based contracting is an example of the legal devices and processes that make firms within a value constellation accountable to one another (Ng et al. 2009; 2011). In this perspective there is less focus on users and their experiences and more on the boundaries between entities exchanging resources within the system. Where

there is interest in customer experiences, these are viewed in relation to the system, operations and exchanges within which they are performed and assessed (e.g. Fitzsimmons and Fitzsimmons 2000; Grönroos 2011).

Using this perspective to discuss Airbnb highlights the way the platform integrates resources, enabling other actors to exchange competences to achieve outcomes and the backstage processes that shape the operational delivery of a service. For those with a property to rent out it emphasizes the competences and resources required to be a host within the Airbnb, including being able to set up a listing, manage reservation and information requests from people looking for a place to stay (possibly in languages you don't speak or write) and respond within the times Airbnb suggests, and be able to accept payment online. For those wanting to find a place to stay, the resources required to be a guest within the Airbnb value constellation include being able to search and order listings on the website, make reservation and information requests (again, possibly in languages you don't speak or write), respond within the times Airbnb suggests, and be able to make payment online. As a platform connecting guests and hosts, Airbnb requires both parties within the transaction to have access to resources enabling the planning, constitution and evaluation of the service. Airbnb's role is to be a generative platform that matches resources and monitors and rates performance in near real-time.

An aspect of the Airbnb platform design is how it accounts for the successful achievement of outcomes. For example, as is common with other web-based exchange and social media platforms, Airbnb requires users to perform assessments of one another and makes these accounts partially visible on the website. Shortly after a visit is completed, Airbnb emails both parties to ask for a review of the visit. The review includes star ratings (quantitative) and comments (qualitative), some of which is made public and some of which is retained by Airbnb. The shareable parts of the reviews are made public on the website when both parties have submitted their evaluations. In their dashboard, hosts are able to see how guests rated the overall experience, categorized in terms of cleanliness, accuracy, value, communication, arrival and location. Hosts also assess guests including for communication, arrival and leaving the place clean on departure. Through the lens of the value co-creation system, an analysis of Airbnb highlights the processes that enable actors to exchange resources and to achieve and assess outcomes brought into view by the platform.

### **6.3.3 The socio-material configuration**

The third perspective on the object of service design draws on anthropological research as well as literatures in systems and participatory design. This approach opens up for inquiry consideration of the constituents of a service and explores how they are assembled dynamically through practice, emphasizing the sociality and messiness of the worlds in which services exist. For example, Blomberg and Darrah (2015) develop a grounded approach to show how services are experienced

and co-production is achieved through the situated, local participation of a range of actors. Whereas the service encounter perspective privileges human actors as having agency, the socio-material approach argues that constituents become agential through their inter-relating (Barad 1998, 2003; Suchman 2002; Suchman et al. 2002; Blomberg 2009). This lens proposes that together the constituents ‘co-articulate’ a service as it unfolds in practice, connecting material and digital touchpoints and people’s experiences to participation in social practices, organizational routines and narratives about value and valuing.

Table 6.1 Perspectives on the object of service design

	Service encounter	Value co-creating system	Socio-material configuration
<b>Contributing fields</b>	<ul style="list-style-type: none"> <li>• product design</li> <li>• communication design</li> <li>• interaction design</li> <li>• services marketing</li> </ul>	<ul style="list-style-type: none"> <li>• strategy</li> <li>• services marketing</li> <li>• service operations</li> <li>• economics</li> <li>• open innovation</li> </ul>	<ul style="list-style-type: none"> <li>• sociology</li> <li>• anthropology</li> <li>• computer supported co-operative work</li> <li>• participatory design</li> </ul>
<b>Emblematic concepts</b>	<ul style="list-style-type: none"> <li>• touchpoints</li> <li>• interactions</li> <li>• customer experience</li> <li>• service evidence</li> <li>• experience design</li> </ul>	<ul style="list-style-type: none"> <li>• outcomes</li> <li>• competences</li> <li>• value constellation</li> <li>• multi-actor platform</li> <li>• exchange of resources</li> <li>• process design</li> </ul>	<ul style="list-style-type: none"> <li>• participation</li> <li>• practice</li> <li>• interfacing</li> <li>• infrastructuring</li> <li>• systems design</li> <li>• local</li> </ul>
<b>Key actors</b>	<ul style="list-style-type: none"> <li>• users</li> <li>• customers</li> <li>• service staff</li> </ul>	<ul style="list-style-type: none"> <li>• resource integrators</li> <li>• platforms</li> </ul>	<ul style="list-style-type: none"> <li>• human actors</li> <li>• non-human actors</li> </ul>
<b>Value results from ...</b>	<ul style="list-style-type: none"> <li>• interactions with touchpoints</li> </ul>	<ul style="list-style-type: none"> <li>• co-creation within value constellation</li> </ul>	<ul style="list-style-type: none"> <li>• co-articulation of practices and institutions</li> </ul>
<b>Example methods and tools</b>	<ul style="list-style-type: none"> <li>• user scenarios</li> <li>• customer journey maps</li> <li>• stakeholder maps</li> <li>• experience models</li> <li>• blueprints</li> </ul>	<ul style="list-style-type: none"> <li>• value streams</li> <li>• process maps</li> <li>• service models</li> <li>• blueprints</li> <li>• stakeholder maps</li> <li>• business models</li> </ul>	<ul style="list-style-type: none"> <li>• participatory design techniques</li> <li>• design games</li> <li>• ethnographic approaches</li> </ul>

Like the service encounter perspective, this lens emphasizes how interfaces such as digital apps or performances of service scripts actualize a service for users and providers (Secomandi and Snelders 2011; Lury 2014). The sociocultural view of interfaces argues that ‘exchange relations between providers and clients require the mobilization of infrastructure resources but ultimately are realized through the interface’ (Secomandi and Snelders 2011: 30). In this lens, the *interface* is a key site for the service. But in contrast to the service encounter perspective discussed earlier, this lens also brings into view the constituents, processes and activities associated with *infrastructuring* a service and enabling participation in co-articulating it (Ehn 2008; Ehn et al. 2015). Further, this lens emphasizes *service as local accomplishment* achieved in practice rather than experiences, competences and outcomes de-coupled from the social practices and institutions through which they are articulated.

Returning to the case of Airbnb enables us to see what this perspective on the object of service design brings into view. A day before their guests arrive, hosts in the UK receive an email from Airbnb reminding them to get the property ready, suggesting activities to do and qualities to achieve in order to deliver a preferred guest experience. The email sent out to Airbnb hosts in the UK includes a checklist, which suggests that the host provide fresh sheets and pillowcases and tidy the house. Airbnb suggests that hosts ‘fill the fridge with a few breakfast goods (OJ, bagels, fruit)’. This terminology and these breakfast items are typically North American although of course they are available in many other places including much of the UK. The socio-material approach highlights how Airbnb scripts particular ways to be a host and to be a guest within this set of cultural references – even in a global business promoting the idea of travellers having authentic, *local* experiences (Frankin-Wallace 2013). This example poses questions about what is involved in being a host or being a guest and how these states are accomplished in practice. Through the breakfast instructions and other kinds of scripts, the Airbnb platform shapes guesting and hosting practices.

## 6.4 Implications for design

The three lenses on the object of service design are summarized in Table 6.1. We now turn to exploring how these different ways of conceptualizing the object of service design impact on the work of designing. Using the lenses introduced in this chapter helps designers think through what it is they are designing and what consequences of their designs and designing.

### 6.4.1 Cosmologies

Each of the three objects of design privileges different ways of thinking about how a service is constituted. Using the first lens, service encounters are seen as ‘moments of truth’ where the experiences of participants are the focus as they encounter



organizational touchpoints organized into a service offering. Here designers pay close attention to the arrangement of and interactions with artefacts making up a service encounter. Using the second lens of value creating systems zooms out from the experiences of participants and looks at how particular processes and arrangements enable outcomes that they deem as producing value. Put another way what matters for designers using this lens is the result of the experience, rather than the experience itself. This requires paying attention to how outcomes are defined, monitored, assessed and made sense of during the service process or afterwards. The third lens highlighting socio-material configurations zooms in and out at the same time. It places an emphasis on the situated, local enactment of service in practice but also attends to the specific cultural, economic and political practices and institutions that co-articulate service. This requires a designer to shift between these two positions – combining the operational focus on how a service is realized as well as the strategic and sociocultural context shaping the experiences. Designers must decide which of these different lenses they want to deploy, why and when. Will they stay close to the service encounter and the experiences the mixture of people and objects affords? Or will they also zoom out and engage stakeholders in thinking about the conditions that inform and shape particular kinds of encounters? They must also decide where they choose to position themselves. Are they in the cosmology with a stake in the service and its outcomes, or outside of it?

### **6.4.2 Accountabilities**

Given the range of concerns that are implicated in realizing a service, designers must work out to whom or what a design is accountable and the nature of these accountabilities, while at the same time locating themselves in relation to the design activities. The service encounter lens engages a reduced set of accountabilities, emphasizing users and others directly benefitting from, enabling or providing a service experience. The value constellation lens shifts attention from individuals to organizations (depending on the nature of the service) and the competences required and outcomes that may be formally agreed or not and the operational processes through which value is co-created. Organizational routines, rules and legal regulations may shape what counts as outcomes and how it is possible to assess to what extent they have been achieved. The sociocultural configuration lens recognizes accountabilities that are local, others involved in supporting or shaping a service, as well accountabilities to interests that lie beyond the immediate service. This might include invisible workers or reliance on particular kinds of infrastructuring that enables particular ways of doing things.

### **6.4.3 Temporalities**

Because services involve performances, their designing continues every time a service is enacted and a transformation occurs – what some design scholars call design ‘at use time’. Furthermore, how the designed elements interact with an always dynamic and changing world cannot be predicted. This leads Akama and Prendiville (2013: 31) to suggest that service designers should ‘re-situate services as an organic, co-created process and see co-designing as a journey and process of transformation in how we design our world, and ourselves, with others’. This raises questions regarding how to design for change and for the time when the designer is no longer an active participant in either enacting the service or being accountable for its outcomes. With the service encounter lens, the focus is on the duration of the experience. But the value co-creating system lens and socio-material configuration lens pose temporality as a problematic to be investigated (cf. Tonkinwise 2005). The implication for designers is to develop approaches and skills in making temporalities enacted in projects explicit and negotiable, rather than hidden or assumed.

### **6.4.4 Politics**

Politics play out differently across the three lenses. With the service encounter lens, designers can bracket out as externalities things that are not directly concerned with the delivery of people’s experiences. For example, this lens focuses on a positive, ‘desirable’ user experience which enables someone to achieve their goals such as book an Airbnb accommodation or find an informal taxi via Uber. With the value constellation lens, being attentive to politics highlights the exchange of resources between actors involved and whether such exchanges are equitable or reasonable. With the socio-material lens, politics emerges as posing questions about what makes something ‘desirable’ and for who, and the consequences of particular designs and ways of doing design. For example, it highlights the way that platform businesses result in people – who might otherwise do similar tasks with access to the legal and economic benefits that come with employment – being pushed into being self-sufficient entrepreneurs within a neo-liberal economic model. In their discussion of service encounters Penin and Tonkinwise (n.d.) point to the emotional labour done by service workers and suggest ways for designers of services to gain a sense of the work done in providing service. The question for designers is how to reveal the politics within a particular service, and recognize that with some lenses, political questions can easily be marginalized.

### **6.4.5 Expertise**

These lenses have different implications for the kinds of expertise required to design services. The service encounter lens is congruent with the usual focus of

design practice where designers remain close to people and their interactions with artefacts and other people which are seen to shape experiences of a service. It requires expertise in sketching, modelling and prototyping touchpoints familiar from user interface design, informed by research into people's ways of doing things, capabilities and needs and the organizational capabilities and processes required. The value co-creating system requires expertise more usually associated with managers such as organizational strategy, business modelling, operational process design and data analysis. It establishes what kinds of resources are available to combine into offerings (possibly as platform businesses), and how to gather and assess data to see if outcomes have been achieved. The socio-material configuration lens requires expertise in sociological and anthropological analysis that inquires into, rather than taking as given, the conditions which shape particular ways of doing things, knowing and being. The second two perspectives may seem to complicate and unreasonably expand the contemporary designer's role beyond areas in which he/she is comfortable or feels empowered. So designers will need to decide which lens they want to deploy and which expertise is required to design a service.

## 6.5 Conclusion

This chapter started with a casual inquiry at a party which – based on our own experiences – highlights many of the complexities and uncertainties of contemporary design practice, in particular service design. We offered three ways of grappling with the object of service design, none of which is definitive or exclusive.

The first, the service encounter, originates in services marketing and user experience design. Its analytical gaze zooms in close to the experiences of the users of a service and also those involved in delivering it such as employees but also others in their worlds. With its emphasis on the material and digital touchpoints and scripts within which experiences come into existence, the service encounter is familiar to designers. The second, the value co-creating system, is also shaped by management fields especially strategy, marketing and operations. This approach emphasizes the exchanges through which actors in a service value constellation co-create value together by combining bundles of resources into offerings. The object of design here is less easy to grasp, as it involves multiple actors in multiple locations whose mutual interactions dynamically constitute a service. The third approach, the socio-material configuration, adds further complexity by attending to the ways that actors are mutually constituted and through their co-articulation with social practices and institutions come to have agency and capabilities. Here the emphasis is on acknowledging the messy realities shaping service encounters and how outcomes are achieved.

Through a discussion of Airbnb, we brought these different perspectives to life to highlight what comes into view when applying these different analytical lenses. Although the resulting triad is of course a simplification, it offers a provisional answer

to the question of what is the object of service design. With each lens on the object of service design comes particular ways of thinking about what a service is made up of. Each has a different range of accountabilities within its cosmology. Time is constructed in different ways through each lens and the politics of what matters and to whom is also distinct. Finally, the three lenses require different kinds of expertise in doing the work of service design. In short, each lens on the object of service design constitutes a different kind of service design. Our analysis suggests it's no longer enough to say 'I design services'. Instead, a designer should articulate what kind of object she is designing, a conceptualization which then shapes how she goes about her work. Our arguments might be a bit long winded to use at parties, but we hope they have helped readers understand why a simple answer is so difficult to provide.

## Note

- 1 Arduino is an open source toolkit and software and hardware platform that people can use to integrate computation into objects for example by programming micro-controllers that control sensors or actuators.

## References

- Airbnb, (2016), Available online: <https://www.airbnb.co.uk/about/about-us> (accessed 15 May 2016).
- Akama, Y. and Prendville, A. (2013), 'Embodying, Enacting and Entangling design: A Phenomenological View to Co-designing Services', *Swedish Design Research Journal* 1 (13): 29–40.
- Barad, K. (1998), 'Getting Real: Technoscientific Practices and the Materialization of Reality', *Differences: A Journal of Feminist Cultural Studies* 10 (2): 88–128.
- Barad, K. (2003), 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter', *Signs* 28 (3): 801–31.
- Bitner, M. J., Boons, B. and Tereault, M. S. (1990), 'The Service Encounter: Diagnosing Favourable and Unfavourable Incidents', *Journal of Marketing* 54 (1): 71–84.
- Bitner, M. J. (1992), 'Servicescapes: The Impact of Physical Surroundings on Customers and Employees', *Journal of Marketing* 56 (2): 57–71.
- Bitner, M. J., Faranda, W. T., Hubbert, A. R. and Zeithaml, V. A. (1997), 'Customer Contributions and Roles in Service Delivery', *International Journal of Service Industry Management* 8 (3): 193–205.
- Bitner, M.J., Ostrom, A. and Morgan, F. (2008), 'Service Blueprinting: A Practical Technique for Service Innovation', *California Management Review* 50 (3): 66–94.
- Blomberg, J. (2009), 'On Participation and Service Innovation', in T. Binder, J. Löwgren, and L. Malmberg, (eds), *(Re-)Searching a Digital Bauhaus*, 121–44. Springer.
- Blomberg, J. and Darrah, C. (2015), 'Toward an Anthropology of Services', *The Design Journal* 18 (2): 171–92.
- Blomberg, J. and Darrah, C. (2015), *An Anthropology of Services: Toward a Practice Approach to Designing Services*. San Rafael: Morgan and Claypool.

- Buchanan, R. (1992), 'Wicked Problems in Design Thinking', *Design Issues* 8 (2): 5–21.
- Buchanan, R. (2001), 'Design Research and the New Learning', *Design Issues* 17 (4): 3–23.
- Buxton, B. (2007). *Sketching User Experiences: Getting the Design Right and the Right Design*. Burlington, MA: Morgan Kaufman.
- Clatworthy, S. (2011), 'Service Innovation through Touch-Points: Development of an Innovation Toolkit for the First Stages of New Service Development', *International Journal of Design* 5 (2): 15–28.
- Czepiel J. A., Solomon M. R. and Surprenant C. F. (1985), *The Service Encounter: Managing Employee/Customer Interaction in Service Business*. Lexington, MA: Lexington Books,.
- Czepiel, J. (1990), 'Service Encounters and Service relationships: Implications for Research', *Journal of Business Research* 20 (1): 13–21.
- Ehn, P. (2008), 'Participation in Design Things'. *Proceedings of Participatory Design Conference*. Bloomington, IN: ACM: 92–101.
- First Round Capital (2013), 'How design thinking transformed Airbnb from failing startup to billion-dollar business'. Available online: <https://www.youtube.com/watch?v=RUEjYswWwWPY> (accessed 21 July 2015).
- Fitzsimmons, J. and Fitzsimmons, M. (2000), *New Service Development: Creating Memorable Experiences*. Thousand Oaks, CA: Sage.
- Fortune (2015), 'Here's how Airbnb justifies its eye-popping \$24 billion valuation'. Available online: <http://fortune.com/2015/06/17/airbnb-valuation-revenue/> (accessed 21 July 2015).
- Frankin-Wallace, O. (2013), 'First the Spare Room, Then the World: The Rise of Airbnb', *GQ*, 4 July. Available online: <http://www.gq-magazine.co.uk/entertainment/articles/2013-07/04/airbnb-joe-gebbia-interview> (accessed 20 July 2015).
- Garrett, J. J. (2011). *The Elements of User Experience: User-Centred Design for the Web and Beyond*. Berkley: New Riders.
- Grönroos, C. (2011), 'A Service Perspective on Business Relationships: The Value Creation, Interaction and Marketing Interface', *Industrial Marketing Management* 40 (3): 240–7.
- Kimbell, L. (2011), 'Designing for Service as One Way of Designing Services', *International Journal of Design*, 5 (2).
- Kimbell, L. (2013), 'The Object Fights Back: An interview with Graham Harman', *Design and Culture* 5 (1): 103–17.
- Kimbell, L. (2014), *The Service Innovation Handbook*. Amsterdam: BIS Publishers.
- Lury, C. (2014). 'Interfaces: The Mediation of Things and the Distribution of Behaviours', in P. Harvey (ed) *Objects and Materials: A Routledge Companion*. Routledge.
- Meroni, A. and Sangiorgi, D. (2011), 'A New Discipline', in *Design for Services*. Aldershot: Gower.
- Ng, I. C., Maull, R. and Yip, N. (2009), 'Outcome-based Contracts as a Driver for Systems Thinking and Service-dominant Logic in Service Science: Evidence from the Defence Industry', *European Management Journal* 27 (6): 377–87.
- Ng, I., Maull, R. and Smith, L. (2011), 'Embedding the New Discipline of Service Science', in *The Science of Service Systems*, 13–35. Springer.
- Normann, R. (2001), *Reframing Business: When the Map Changes the Landscape*. Chichester: John Wiley and Sons Ltd.
- Normann, R. and Ramírez, R. (1993), 'From Value Chain to Value Constellation: Designing Interactive Strategy', *Harvard Business Review* (July/August): 65–77.
- Penin, L. and Tonkinwise, C. (n.d.), *The Politics and Theatre of Service Design*. Parsons The New School for Design.

- Prahalad, C. K. and Ramaswamy, V. (2004), *The Future of Competition: Co-Creating Unique Value with Customers*. Boston: Harvard Business School Press.
- Ramírez, R. (1999), 'Value Co-production: Intellectual Origins and Implications for Practice and Research', *Strategic Management Journal* 20 (1): 49–65.
- Secomandi, F. and Snelders, D. (2011), 'The Object of Service Design', *Design Issues* 27 (3): 20–34.
- Shostack, G. L. (1977), 'Breaking Free from Product Marketing', *Journal of Marketing*: 76–80.
- Shostack, G. L. (1982), 'How to Design a Service'. *European Journal of Marketing* 16 (1): 49–63.
- Shostack, G. L. (1984), 'Designing Services that Deliver', *Harvard Business Review* 62 (1): 133–9.
- Suchman, L., Trigg, R. and Blomberg, J. (2002), 'Working Artefacts: Ethnomethods of the Prototype', *The British Journal of Sociology* 53 (2): 163–79.
- Suchman, L. (2002), 'Located Accountabilities in Technology Production', *Scandinavian Journal of Information Systems* 14 (2): 91–105.
- Tonkinwise, C. (2005), 'Is Design Finished? Dematerialisation and Changing Things', *Design Philosophy Papers* 3 (2): 99–117.
- Vargo, S. L. and Lusch, R. F. (2004), 'Evolving to a New Dominant Logic for Marketing', *Journal of Marketing* 68 (January): 1–17.
- Vargo, S. L. and Lusch, R. F. (2008), 'Service-dominant Logic: Continuing the Evolution', *Journal of the Academy of Marketing Science* 36 (1): 1–10.