

# Exploring Overlaps and Differences in Service Dominant Logic and Design Thinking

Katarina Wetter Edman

Katarina Wetter Edman

*PhD Candidate, MFA Industrial Design*

*Business and Design Lab*

HDK/School of Business, Economics and Law

University of Gothenburg

*e-mail:* [Katarina.w.edman@gri.gu.se](mailto:Katarina.w.edman@gri.gu.se)

<http://www.handels.gu.se/design>

## Abstract

Design tradition takes the user as a starting point and focuses on his or her needs, wants and expectations. Recently, within the service marketing/management area, the user has been highlighted not only as “the king”, but as the only one to determine value. This new logic is termed Service Dominant Logic.

Some of the key principles underlying Service Dominant Logic (SDL) and Design Thinking (DT) are strikingly similar. Even if the two concepts stem from different backgrounds, both are deeply concerned with the creation of value and the importance of understanding the users/customers. This similarity could be a fruitful ground for further intellectual discussion concerning the development of the service concept. This paper presents the characteristics of SDL to the design community and compares SDL with the central characteristics of DT. The aim of this paper is to explore possible connections and overlaps between SDL and DT. The paper suggests the connections to be complementary, and some practical implications of the use of SDL for design thinking and service design practice are proposed.

## Introduction

Everything is service! That is the bottom line of the service dominant logic paradigm that was launched by Vargo and Lusch in 2004. The underlying thought behind SDL - to reduce or even erase the distinction between products/goods and services - was not new (Normann & Ramirez, 1993). Value is determined in and by the customers' use situation and not accumulated by refining raw material in a production process. Normann and Ramirez (1993) called this the 'company's offering' and proposed that the value arises from a "value constellation" rather than accumulates in a value chain. In SDL, the service (in the singular) provided by a company/organization may, and often does, include both goods and services, which makes the distinction between material and immaterial products obsolete. The idea that the value is determined in use – value-in use – changes the business logic and enhances the importance of understanding the use situation and the user. However, SDL lacks processes for the construction and implementation of service.

The SDL perspective has strong implications for design and the position that design has within the company. Industrial design has been a victim of the value chain perspective because the holistic customer perspective is difficult to integrate into the sequential logic of the value chain. Design has often been added at the end and has thus been difficult to integrate into the management of the companies (Johansson & Woodilla, 2008). The SDL perspective that takes the customer's position throughout may seem simple at first, but the managerial implications are quite large from a provider perspective. SDL demands that more people throughout the organization are involved and understand the customer. Designers, who take the customer as their starting point and are trained in understanding and solving "wicked problems" (Buchanan, 1992), might be a valuable resource for making this transition.

Designers in a service context constantly move between the design of a service and the business model, seeing the design of the service as intertwined with the business strategy (Kimbell, 2008). Designers then need to be aware that different design decisions impact the organisational differently.

Because service design is concerned with the design of services, in practice and in research, it makes sense to compare the design discipline with SDL. In this paper, however, I have chosen to explore SDL and design thinking (DT) rather than SDL and service design. The main argument for this is that SDL includes both services and goods in the notion of service. This entails that several design disciplines are involved in the design of service, e.g. service design, interaction design and industrial design. Design thinking is what the different design disciplines have in common, i.e. the characteristics mentioned below. Therefore, I find it relevant to explore the main characteristics of DT and SDL rather than one design discipline per se.

Design thinking – how designers go about thinking and doing things (Kimbell, 2009) is on its way to becoming a hype (Rylander, 2009). Two directions can be traced in design thinking: one quite recent within the business and management field, and the other rooted in the practice and theories of design going back to the 60's. The first consists largely of the arguments about the effects of design thinking that have been observed outside the design arena. Mainly, these arguments treat design thinking as valuable for innovation and how design thinking affects management and organisations (Boland & Collopy, 2004; Brown, 2008; Buchanan, 1992; Kelley, 2001; Martin, 2004). The second direction highlights the

characteristics of diverse design practices. This includes framing/reframing on abstract level, visual skills, people-focused and iterative processes that attempt to envision possible futures (Kelley, 2001; Lawson, 2006)

Given these diverse notions of design thinking, in this paper design thinking (DT) is defined as an approach based in design practice and designerly ways of thinking (Cross, 2006; Rowe, 1987). The thoughts behind SDL and DT have similarities, the main one being the user's experience of value. The need to understand how use value is created is crucial in both DT and SDL. However, while DT stems from practice, SDL lacks practical methods and techniques, which has implications if the desired paradigm shift from goods dominant logic to service dominant logic is to happen.

Can methods from design/service design be applied here? Is the concept 'value-in-use' the same within the two? Another concept is the movement away from a traditional value chain perspective to new more complex suggestions on how value is created and by whom. How do these concepts affect the possible impact of design? Co-creation is yet another concept that is strong within both SDL and DT, but the understanding of co-creation is different within the two discourses. Of course, different disciplines and discourses develop their respective languages – which is part of the building and framing of the specific area. Due to this there is an apparent risk that they stay unconnected because the separate vocabularies risk creating distances instead of bridges.

This paper addresses the following questions:

- » How is the concept of co-creation and value-in-use understood in Service Dominant Logic and Design Thinking?
- » DT as well as SDL focus on the customer/user /human involvement and his/her role in the process. Are there implications for practice based on the different understandings in these traditions?
- » The notion of *service* as the overall offering from the company, including both products and services as the foundation of SDL resembles Simon's (1996) broad approach to design. Are these similarities illusionary or do they rest on a common understanding?

The paper is divided into five sections: The first two trace the background and characteristics of service dominant logic and design thinking, respectively. The third section compares their key concepts, followed by reflections on this comparison. The final section discusses Service Dominant Logic and Design Thinking as complementary and implications for research and practice.

## Service Dominant Logic – background and characteristics

### Background

Service marketing is often considered to have started with Shostack's (Shostack, 1977) article arguing that Kotler's marketing logic with its product focus was not suitable for service companies. During the following decade the goods and services dichotomy was the academic focus (Matthing 2004) and IHIP emerged as the best known model to define and describe services (Zeithaml, Parasuraman, & Berry, 1985).

IHIP stands for **I**ntangibility – services are not tangible, therefore they cannot be judged before consumption, for example, compare a sweater with a bus trip; **H**eterogeneity – the people that take part in the service delivery process, provider and consumer, are unique at each occasion, therefore it is not possible to reproduce a service; **I**nseparability of production and consumption – services are consumed and produced at the same moment, hence the planning and development process must be different; **P**erishability – service cannot be stored or saved (ibid.).

The IHIP model is widely accepted and used. But the model has been critiqued, and the main critique concerns services being described in relation to products, which means the focus easily becomes what services are not which might block important aspects. Another critique is the fact that the IHIP model does not account for what services are in practice. Many services are a) dependent upon tangible products – sms on mobile phone, b) homogenous – internet services, c) are produced and consumed at different occasions – educational programs, d) are storable – many software. (Examples from Kristensson (2009) author's translation) From this critique, new ideas of how to describe the nature of services emerged (Matthing, 2004), where emphasises were on service as a perspective rather than a replacement of products, the role of the customer and how the value creation processes were constructed.

The consumer as the definer of the value of the proposition/offering from the company/organisation, and the offering as a whole being viewed as service(s) were both widely acknowledged (Grönroos, 2000; Gummesson, 1995), before Vargo and Lusch (2004) launched what they called “Service Dominant Logic” in the Journal of Marketing.

### **The central characteristics of SDL**

Service Dominant Logic is aimed at solving the dichotomy between service and product with knowledge instead of products being the core, and where value is realised by consumers, not the producing company. The position that the value of a service (or product) is realized at the moment it is consumed is now established, in contrast to the traditional view that value is accumulated in a production process (Vargo & Lusch, 2004).

### **The development of the Foundational Premises in SDL**

The foundational premises (FP) of SDL have been developed and elaborated since they were first described in 2004. In the first article on SDL by Vargo & Lusch there were 7 FP's. These were then developed to 9 and a 10<sup>th</sup> was added in 2008. Some of the foundational premises overlap and to some extent they are at different levels.

The emphasis of the foundational premises is to clarify how value is created and to stress the important role of the actors as co-creators involved in these processes. With the appearance of FP10 in 2008 there is an additional focus on the contextual nature of the creation of value in use (Vargo & Lusch, 2004). Vargo & Lusch are also moving towards a more pure “service” perspective, as seen below in Table 1 describing the development from the original foundational premises with their comments.

**Table 1** Service-dominant logic foundational premise modifications and additions

FPs	Original foundational premise	Modified/new foundational premise	Comment/explanation
FP1	The application of specialized skill(s) and knowledge is the fundamental unit of exchange	<b>Service</b> is the fundamental basis of exchange	The application of operant resources (knowledge and skills), “service,” as defined in S-D logic, is the basis for all exchange. Service is exchanged for service
FP2	Indirect exchange masks the fundamental unit of exchange	Indirect exchange masks the fundamental basis of exchange	Because service is provided through complex combinations of goods, money, and institutions, the service basis of exchange is not always apparent
FP3	Goods are a distribution mechanism for service provision	Goods are a distribution mechanism for service provision	Goods (both durable and non-durable) derive their value through use – the service they provide
FP4	Knowledge is the fundamental source of competitive advantage	<b>Operant resources</b> are the fundamental source of competitive advantage	The comparative ability to cause desired change drives competition
FP5	All economies are services economies	All economies are <b>service</b> economies	Service (singular) is only now becoming more apparent with increased specialization and outsourcing
FP6	The customer is always a co-producer	The customer is always a <b>co-creator</b> of value	Implies value creation is interactional
FP7	The enterprise can only make value propositions	The enterprise <b>cannot deliver value, but only offer value propositions</b>	Enterprises can offer their applied resources for value creation and collaboratively (interactively) create value following acceptance of value propositions, but can not create and/or deliver value independently
FP8	A service-centered view is customer oriented and relational	A service-centered view is <b>inherently</b> customer oriented and relational	Because service is defined in terms of customer-determined benefit and co-created it is inherently customer oriented and relational
FP9	Organizations exist to integrate and transform microspecialized competences into complex services that are demanded in the marketplace	<b>All social and economic actors are resource integrators</b>	Implies the context of value creation is networks of networks (resource integrators)
FP10		<b>Value is always uniquely and phenomenologically determined by the beneficiary</b>	Value is idiosyncratic, experiential, contextual, and meaning laden

Words in bold type represent changes in wording from the original FPs (Vargo and Lusch 2004a, 2006).

Table 1: Development of SDL Foundational Premises and Comment from Vargo & Lusch, Continuing the Evolution in Journal of the Academic Marketing Science (2008) 36:1-10

## Design thinking – background and characteristics

### Background

During recent years an increasing interest for design in the context of innovation has developed. There is currently almost a hype around the concept of Design Thinking (Johansson & Woodilla, 2009; Rylander, 2009). There seem to be different understandings of the term ‘design thinking’ depending on contexts. The practice-based understanding of DT

goes back to Shöön's (1983) thoughts about reflection-in-action and emphasises the tools and methods used by designers. In this context specifics for design thinking are empathy, intuition and iterative processes between the whole/the detail and practice/theory (Rosell, 1990; Rowe, 1987; Wetter, 2007). Different kinds of visual thinking and presentation skills used to describe possible future solutions are highlighted as especially important (Brown, 2008; Lawson, 2006; Rosell, 1990). Buchanan (1992; 2001) argues for four orders of design based in the designed object. In a very simplified description these are: 1) symbols, 2) things, 3) action and 4) thought. These orders roughly correspond to the disciplines graphic design, industrial design, interaction design and system design, but Buchanan explicitly points out that the disciplines should not be seen as separate, but as design thinking, and this connects very well with the foundation in SDL.

*In fact, signs, things, actions, and thoughts are not only interconnected, they also interpenetrate and merge in contemporary design thinking with surprising consequences for innovation. (Buchanan 1992)*

The current hype is constructed from “an outside in” perspective, and describes the possibilities when design tools or methods are used by non-designers (Dunne & Martin, 2006). With its roots in Simon's definition of design presented in the “Science of the Artificial”: *‘Everyone designs who devises courses of action aimed at changing existing situations into preferred ones’* (1996, p. 111) DT is most often used in superficial and undefined ways *‘approaching managerial problems as designers approach design problems’* (Dunne & Martin, 2006, p. 512). In effect this means taking designers ways of thinking and acting into another context. This construction is mainly highlighted in the management and business literature. (Boland & Collopy, 2004; Martin, 2004) Even if the user is in focus, the capabilities to work with wicked problems and an iterative process are pointed out as key features. The hype discourse of “design thinking” in management does not take into account the true complexity and benefits of Design Thinking. I agree with Jahnke (2009) that this notion rarely takes into account “design's more critical, subversive and visionary track record,” which reduces the possible impact of design.

## Comparison of key concepts and notions of SDL and DT

The aim of this comparison is to understand SDL from a design perspective so it may be used within the design discourse and so that design might align some vocabulary and processes in order to achieve greater synergy. The overlaps are intertwined on a conceptual level and circle around value, the user and co-creation. In order to make sense of these, a brief description of how they are treated in SDL and DT respectively is presented.

### How value is described and understood

In SDL, value is defined by the beneficiary (see FP10) at the moment of use, which is called value-in-use. This notion of value creation is differentiated from the notion of value creation as a sequential process, value in exchange. Value in exchange, according to Vargo and Akaka (2009), is based in goods dominant logic, and the value is thus destroyed when consumed. If the value is defined by the user in use, the actual physical situation of the person is of importance. This is called value-in-context and highlights the time and place dimensions and network relationships as key variables. Vargo and Akaka (2009) thus treat three different

ideas of how and where value is created, but only accepts value-in-use and value-in-context as valid concepts.

Value as a stand alone concept is rarely treated explicitly in the design literature. Design has instead focused on generating solutions that are clear, meaningful and effective for the user (Ramírez & Mannervik, 2008), which could be interpreted as valuable. Further, the temporal aspect and the importance of the physical environment are treated (Holmlid, 2007). A definition of service from a design perspective is *"Experiences that reach people through many different touch-points, and that happen over time"* (Moggridge, 2007), which emphasizes the temporal aspect and puts focus on the touch points. This definition connects well to the concept of value-in-context.

### How co-creation is described and understood

In SDL value is co-created through the combined efforts of firms, employees, customers, stockholders, government agencies and other entities related to any given exchange, but is always determined by the beneficiary (user) (Vargo & Lusch, 2008). Co-creation is then considered as co-creation of value and the user is always involved in this co-creation.

The concept of co-creation is used within DT, but it is most often used to refer to the co-creation of ideas and concepts in early phases in order to understand what user needs, wants and expectations create value. This process is also often known as co-design. The process often, but not necessarily, involves users; it may as well be a co-design project with two or more designers or other stakeholders involved in the service delivery process.

### How experience is described and understood

In SDL, Vargo & Lusch have deliberately chosen the word phenomenological instead of experiential when defining FP10 (Vargo & Lusch, 2008). The reason for this is that they claim that 'experience' is often understood as a "Disneyworld event" (ibid.), especially in the experience economy (Pine II & Gilmore, 1998). Instead they stress the notion of a more subtle understanding of experiences departing for the first-person point of view. This view of experience connects to the traditional designerly view on users and the methods developed to understand their needs and desires by taking as starting point the use situation. These views are expressed in the ideas of participatory design (Ehn, 1992), empathic design (Leonard & Rayport, 1997) or experience prototyping (Buchenau, 2000). Battarbee, (2004) points at the social interaction in the creation of experiences, which in SDL terms would be defined as co-creation.

### Actors, systems and people

In FP 9, it is stated that all actors are resource integrators. This is further developed by Vargo and Akaka (2009) and implies that neither the firm nor the customer has adequate resources to create value either independently or interactively in isolation. These resource-integration networks are called service ecosystems. A similar vocabulary is used to name a method - *Service ecologies mapping* technique developed by British service design consultants livework, to *"...create sustainable service ecologies, where the actors involved exchange value in ways that are mutually beneficial over time"* (Moggridge, 2007, p. 412). The relational aspect is treated in the service design discourse by Holmlid (2007), and Sangiorgi uses activity theory to describe the systematic and complex nature of service design. (Sangiorgi, 2009) In addition Morelli (2009)

describes different kinds of techniques for visualizing the system, the actors and the situations.

## Reflections on overlaps and differences

As mentioned earlier, the concepts and ideas in SDL and DT are intertwined. In the following reflections I attempt to sort them and describe the overlaps on three levels; 1) no overlap, 2) somewhat overlapping and 3) full overlap, as illustrated in Table 2 below. Overlaps are considered when meanings overlap, even though the vocabulary differs.

### Ideas of value, experience and networks somewhat overlap

The basic idea of value-in-use overlaps, even though explicit ideas on value are not expressed, are clear in DT as in SDL. DT has traditionally focused on the user experience as such, where the notion of value is implied. The SDL concept of value-in-context is equivalent to the focus of design on touch-points and different visualization techniques developed to communicate temporal and intangible aspects. I nevertheless position them as somewhat overlapping since they treat the ideas of value in different ways.


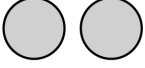

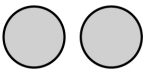

The idea of experience as denominated of value is present in the two theories, but explored and expressed to different degrees, whereas the focus on experience as subtle and departing from the user overlaps.

The most consistent overlap is found in the understanding of networks. Both SDL and DT acknowledge complexity and treat it extensively. The common metaphor of service ecology is in SDL used for conceptual descriptions whereas designers name a specific tool used to interpret and visualize these complexities.

### Meanings of co-creation and vocabulary about people differ

SDL talks about customers, beneficiaries, actors and operant resources denoting people and their knowledge from a top down perspective. DT talks about users as human beings and customers in their context, with the starting point in the user's individual situation. Further the concept of co-creation is used within the two, but denotes different things.

**Table 1 Degree of overlap SDL/DT**

CONCEPT	DEGREE OF OVERLAP SDL/DT	COMMENTS
Value		The concept of 'value' is not explicitly treated in the design literature, the focus is rather on if the output is perceived as meaningful by the user. As such there is an overlap in meaning but not in vocabulary
Co-creation		Used with different meanings and at different stages.
Actors & Systems		The most prominent overlap is found in the understanding of complexity and networks.
People		SDL defines customers and beneficiaries. DT defines users as humans in context.
Experience		The subtle experience is emphasized in both SDL and DT. Within DT the understanding of the experience is explored to a higher degree

 Full overlap

 Somewhat overlapping

 No-overlap

## Discussion and implications

Whereas SDL was formulated and “launched” by Vargo and Lusch in 2004 as a new way of understanding value creation, the understanding of what DT is has grown from descriptions of practice and accounts of success when this approach is used in managerial settings. The backgrounds of SDL and DT are different not only in regard of the discourses in which they are rooted, but also from what perspective they are articulated. This probably partly explains the lack of full overlap in the above comparison.

SDL as a conceptual framework has difficulties achieving implementation. Conversely, Design Thinking is rooted in practice and experience-based descriptions and has difficulties reaching managerial and strategic levels. With the hype of DT in the business literature in recent years some doors are being opened wider than before, resulting in the risk that some of the main characteristics of design become dispersed in the transition phase.

This overview of Service Dominant Logic and Design Thinking identifies a lack of a full overlap of terminology; however, it also shows several overlapping key characteristics. Thus it may be more fruitful to discuss their complementary nature rather than overlaps and differences.

### SDL describes and prescribes; DT interprets and visualises

The main focus of SDL is to describe how value is created, where in the process, and by whom. SDL also prescribes a new logic for organisations to look at their business offerings, eliminating the distinction between the material and immaterial.

One of the main critiques of SDL is that as a mindset it provides few guidelines on concrete development and implementation of service. It has proven difficult to fully integrate this holistic view of service in service-providing companies and organisations. DT and design practice may offer tools and methods that facilitate the development of service.

Design thinking based in practice has developed methods and tools to understand the user's situations, i.e. the users experience, by posing questions on how, why and what trigger these experiences (Holmlid & Evenson, 2008; Morelli, 2009). Trying to capture the users 'true' wants, needs, attitudes and desires in early stages by, for example, probes (Mattelmäki, 2006) or different types of prototyping (Leonard-Barton, 1991). The prototyping is not used for validating, but for developing the value propositions as such, the prototyping is then a tool for evoking and stimulating the user to express the perceived value (Jones & Samalioniis, 2008). The findings are visualized and interpreted by the use of diverse visualization techniques (Segelström & Holmlid, 2009).

Following this reasoning, my recommendation is that DT should acknowledge the basic foundations of SDL and attempt to align some of its vocabulary to get the ideas across.

### Implications for research and practice

Taking the argument to its conclusion, the SDL model of thinking makes the distinction between tangible and intangible products obsolete. This suggests that the distinction between tangible and intangible design also may become obsolete. This idea is to some extent supported by Kimbell (2008), who notes the practice of the service designers observed is similar to that of other designers, and the designers themselves easily move between the tangibles and intangibles. Is it important to distinguish yet another design discipline? I

question the need to classify service design as does Buchanan in his keynote at the Emergence conference of 2007:

*"I want to ask you, throughout the conference, did you find a definition of service design? [...] I didn't find much, and I'll tell you, I wasn't bothered by that. I think we're making a big mistake if we're anxious to define service design. I'm been troubled by efforts to define graphic design, to define industrial design, to define systems design even. I'm troubled by those efforts. I'm interested in design. A definition of design itself ...that I like. But the definition of the sub-branches, to me is of less value. Precisely because of the cross-overs and the boundary ambiguities."*

Both researchers and practitioners have an increasing interest in understanding how the business/management perspective of service and design disciplines perspective of service are related and possibly could merge. At a recent conference Cautela, Rizzo, & Zurlo (2009) presented a paper proposing a 'service design logic', drawing on a more extended definition of service dominant logic than I draw on in this paper using exclusively Vargo & Lush's definitions. Also, the service design consultant livework has developed a framework called Service Thinking, based on experiences from years of practice, which they presented in a keynote at the NORDES conference in Oslo 2009, and on their webpage (<http://www.livework.co.uk/articles/service-thinking>, 2009). This framework combines the founding ideas of SDL and Service design.

My contribution to the discourse of service design is to understand how the foundational characteristics of Service Dominant Logic and Design Thinking overlap. Finding the key characteristics complementary, rather than overlapping, this paper points at a gap and shows potential for mutual development.

## References

- Battarbee, K., Soronen, A., & M, F. (2004). *Living in a zoo: bringing user experiences with technology to life*. Paper presented at the Proceedings of the third Nordic conference on Human-computer interaction.
- Boland, R. J., & Collopy, F. (2004). *Managing as designing*. Stanford, California: Stanford University Press.
- Brown, T. (2008). Design Thinking. *Harvard Business Review*(June), 1-11.
- 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.
- Buchenau, M., Fulton Suri, J. (2000). Experience prototyping. In *DIS '00: Proceedings of the 3rd conference on Designing interactive systems* (pp. 424--433). New York City, New York, United States, ACM
- Cautela, Rizzo, & Zurlo. (2009). *Service design logic: An approach based on the different service categories*. Paper presented at the IASDR 2009.
- Cross, N. (2006). *Designerly Ways of Knowing*. London: Springer Verlag London Ltd.
- Dunne, D., & Martin, R. (2006). Design Thinking and How It Will Change Management Education: An Interview and Discussion, *Academy of Management Learning & Education* (Vol. 5, pp. 512-523): Academy of Management.
- Ehn, P. (1992). Setting the Stage for Design as Action : artifacts for participatory design in theory and practice. In *Nordisk arkitekturforskning* (Vol. 1992 (5:4), s. 49-59): Nordisk arkitekturforskning Aarhus : Nordisk förening för arkitekturforskning, 1992-.

- Grönroos, C. (2000). *Service Management and Marketing. A Customer Relationship Management Approach*. Chichester: John Wiley & Sons Ltd.
- Gummesson, E. (1995). Relationship Marketing: Its Role in the Service Economy. In W. I. Glynn & J. G. Barnes (Eds.), *Understanding Services Management*. New York, USA: John Wiley & Sons.
- Holmlid, S. (2007). *Interaction design and service design: Expanding a comparison of design disciplines*. Paper presented at the NORDES 2007.
- Holmlid, S., & Evenson, S. (2008). Bringing Service Design to Service Sciences, Management and Engineering. In *Service Science, Management and Engineering Education for the 21st Century* (pp. 341-345): Springer US.
- <http://www.livework.co.uk/articles/service-thinking>. (2009). Service Thinking. Retrieved 2009-10-22, 2009
- Jahnke, M. (2009). *Innovation through design thinking*. : Business & Design Lab, GRI.
- Johansson, U., & Woodilla, J. (2008). *Towards a better paradigmatic partnership between design and management*. Paper presented at the International DMI Education Conference.
- Johansson, U., & Woodilla, J. (2009). *Towards an epistemological merger of design thinking, strategy and innovation*. Paper presented at the 8th European Academy of Design Conference.
- Jones, M., & Samalionis, F. (2008). From Small Ideas to Radical Service Innovation. *Design Management Review*, 19(1), 8.
- Kelley, T. (2001). *The Art of Innovation: Lessons in creativity from IDEO, America's leading design firm* (first ed.). New York: Doubleday.
- Kimbell, L. (2008). Service design: a 21st century interdisciplinary? In L. Kimbell & V. Seidel (Eds.), *Designing for Services - Multidisciplinary Perspectives*: (pp. 53-54). Oxford: University of Oxford, Said Business School.
- Kimbell, L. (2009). *Design as practice in design thinking*. Paper presented at the European Academy of Management.
- Kristensson, P. (2009). *Den tjänstedominant logiken - Innebörd och implikationer för policy*. Stockholm.
- Lawson, B. (2006). *How Designers Think: The design process demystified* (4th ed.). Oxford, UK: Architectural Press.
- Leonard-Barton, D. (1991). Inanimate Integrators: A Block of Wood Speaks. *Design Management Journal*, 2(3), 61-67.
- Leonard, D., & Rayport, J. F. (1997). Spark innovation through empathic design. *Harvard Business Review*, 75(6), 102-113.
- Martin, R. (2004). The design of Business. *Rotman Magazine*.
- Mattelmäki, T. (2006). *Design Probes*. University of Art and Design, Helsinki.
- Matthing, J. (2004). *Customer Involvement in New Service Development*. Unpublished Ph.D. diss., Service Research Center - Karlstad University.
- Moggridge, B. (2007). *Designing interactions* Cambridge, Mass.: MIT Press.
- Morelli, N. (2009). Service as Value co-production: reframing the service design process. *Journal of Manufacturing Technology Management*, 20(5), 568-590.
- Normann, R., & Ramirez, R. (1993). From Value Chain to Value Constellation: Designing Interactive Strategy. *Harvard Business Review*, 71(4), 65-77.
- Pine II, J. B., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review* (July-August), 97-105.
- Ramírez, R., & Mannervik, U. (2008). Designing value-creating systems. In L. Kimbell & V. Seidel (Eds.), *Designing for Services - Multidisciplinary Perspectives*: (pp. 35-36). Oxford: University of Oxford, Said Business School.

- Rosell, G. (1990). *Anteckningar om designprocessen*. Stockholm: Kungliga Tekniska Högskolan.
- Rowe, P. G. (1987). *Design thinking*. Cambridge, Mass.: MIT Press.
- Rylander, A. (2009). Bortom Hajpen - designtänkande som epistemologiskt perspektiv. *Research Design Journal*, 1(1), 20-27.
- Sangiorgi, D. (2009). *Building up a framework for service design research*. Paper presented at the 8th European Academy of Design Conference.
- Schön, A. D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. London: Basic Books Inc.
- Segelström, F., & Holmlid, S. (2009). *Visualizations as tools for research: Service Designers on visualizations* Paper presented at the Engaging Artefacts 2009, NORDES.
- Shostack, L. G. (1977). Breaking Free from Product Marketing. *Journal of Marketing*, 41(2), 73-80.
- Simon, H. (1996). *The Sciences of the Artificial* (3rd ed.): MIT Press.
- Vargo, & Akaka, M. (2009). Service-Dominant Logic as a Foundation for Service Science: Clarifications. *Service Science*, 1(1), 32-41.
- Vargo, & Lusch. (2008). Service-dominant logic: continuing the evolution. *Journal of Academic Marketing Science*, 36(1), 1-10.
- Vargo, S., & Lusch, R. (2004). Evolving to a new dominant logic of marketing. *Journal of Marketing*, 68(1), 1-17.
- Wetter, K. (2007). *Industridesign i Multidisplinära team, problem & möjligheter*. Business & Design Lab.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1985). Problems and Strategies in Services Marketing. *Journal of Marketing*, 49(2), 33-46.