

**Designing for Services - Multidisciplinary Perspectives:**  
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'MOSAIC THINKING' INTERGRATING STRATEGY

WHAT ARE DESIGN METHODS

PRODUCT TO SYSTEM SHIFT  
5<sup>TH</sup> WAVE TECHNOLOGY  
MULTI DISCIPLINARY DESIGN



CRITICISMA OF CENTRIC APPROACHES

ANYTHING  
ORGANIC MODELS

- ARTEFACT CENTRED RATHER THAN HUMAN
- OR ECO
- TOO BUSINESS CENTRED
- TENSION BETWEEN HUMAN SERVICE VS. BUSINESS STRATEGY MANAGEMENT



# A perspective on design theory and service design practice

Robert Young

This essay discusses the discipline of service design from the perspective of design method and theory. It follows an argument about the role of method in support of design practice, as advanced by Hugentobler, an academic at the University of Bremen. Hugentobler, along with his colleague Wolfgang Jonas, has written various insightful papers concerning the development of design methods theory (Hugentobler 2004). Further, I use references to Jones to illustrate standpoints (Jones 1977, 1992). Jones is widely recognized as a progenitor of design methods thinking in the early 1960s.

In his reassessment of the nature and utility of design methods in the late 1970s, Jones asked what design methods were and proposed they were “anything one does while designing... any action whatever that the designer(s) may decide is appropriate”, emphasizing the relevance and utility of methods to the practice of design (Jones 2003). In his consideration of the usefulness or purpose of design methods and processes, which consisted of several methods in a chosen sequence or in parallel, Jones wanted to provide an adequate way of “listening to the users and to the world in such a way that the new design becomes well fitted to people and to circumstances” (Jones 1977).

Jones elaborated: “I sometimes think of designing as a meta-process, occurring before the product exists, that can predict enough of the future to ensure that the design can have the same quality of rightness that we see in natural organisms that have evolved naturally, without design.”

We may ask whether this analogy is appropriate for the design of services, as opposed to products and artefacts. Jones was perhaps one of the first design researchers to model the different levels of complexity of design beyond components and products, to encompass systems, services and communities. For a graphical representation of Jones’ levels of complexity, see Bull 2003, p. 38. In the opening of his book *Design methods, seeds of human futures* is a passage exhorting the deficiencies of existing design, which are manifested in the appalling problems exhibited in our society (Jones 1970). Design theory highlights the important role that design plays in our lives. The design methods movement first addressed these issues over 40 years ago (Cross 1984; Heskett 2002).

Since then, design research has largely concentrated on the formulation and successive refinement of design process models. Various models have been developed over the years in the fields of architecture, engineering design, product design and industrial design. Whilst these devices have proved useful for describing and explaining design as a phenomenon of human social interaction, they have not had an instrumental effect on the way design is carried out. Nor have they revealed, in a scientific sense, to design practitioners the essential structure of the design process, either what it is, or should be.

More recently there has been much criticism of design’s focus on products and artefacts. One example is that there

has been more of an “artefact-centred” focus, which is concerned with function, technology and aesthetics, rather than a “human-centred” focus concerned with user experience and well-being (Hugentobler 2004; Marzano 2003). Or else on design that is eco-centred and concerned with sustainability (Jegou 2004; Thackara 2005). Similarly there is criticism that design is too business-centred. At some of the events in the D4S research project there were at times palpable tensions when the relative merits of human-centred service design thinking and business-centred strategic management consultancy were discussed, flowing from rivalry between disciplines, and contributors’ anxiety to be heard.

An interesting observation may be made about the development of doctoral studies programmes in the field of service design at Northumbria’s Centre for Design Research. Here, the intentions and proclivity of the design and business management professions have been considered in terms of the nature of the philosophical base supporting the respective disciplines, compared to the locus of their activity.

The nature of conspicuous consumption in service of product and artefact creation in the world of global business, as opposed to inconspicuous consumption in the context of service transformation in the world of public sector services, polarizes the debate. It has raised questions as to the relationship and natural leaning of business to private sector contexts, and design to public sector service development. The growth of service design thinking and practice may or may not find a natural host in the emergence of the need for improvements in the design of public services. The other research questions running parallel to this debate concern learning from public service explorations that include diverse communities of interest. The vectors of inquiry here are the instructive nature of “edge services”, based on inconspicuous consumption, and the connection of people to policy through service design methods on behalf of communities of interest.

However, there is also potential to criticize the nature of design that is self-centred: where the expression of self is advanced; rather than an approach based upon responsible service for a communal good being adopted in place of self-gratification. Hugentobler terms this “author-centredness” (Hugentobler 2004). The rise of service design thinking and practice may also reflect a shift in thinking from design as a tool to promote consumption, to becoming a tool for the construction of new relationships between people in society (Manzini 2007).

The shift in focus from product- and artefact-centred design theory to system- and service-oriented thinking has followed the advent and growth of services in our economy and society, accompanied by corresponding changes in technology. We are now into the 5<sup>th</sup> wave of new technologies,<sup>1</sup> focusing on a new generation of integrated sensor and monitoring systems (Castellacci 2006). These combined changes have integrated

design more into strategic processes, where more reflective, projective and systemic methods and processes are required, based on knowledge routines complementing former intuitive approaches. Ironically, as design has moved in this direction, the emergent generation of “Mosaic thinkers” in society has been increasingly adopting what may appear as a non-rational thinking style, more in keeping with “designerly” modes of thinking and doing (Sharp 2007).

In the context of the de-materialization of technology and evanescent products in our lives (Marzano 2003), examples of poorly executed product systems and service development based on inexplicit design process and methods prevail. Experience-based approaches are inadequate for the current rate of contextual change. These methods may support the development of a conceptual idea, but they do not provide the tools and techniques required to analyze complex service ecologies, or to develop more human-centred solutions while dealing with multidisciplinary design situations (Hugentobler 2004).

I met Jonathan Ive, Vice President of Apple, in the US in July 2007. We discussed rigour in the extended design and innovation process, which had become a burning issue for Jonathan. He believes that conventional product design is demanding and many appear to be jumping onto the bandwagon of service design, because they cannot contend with the rigour and craft of product design. Yet service design methods are formative and largely unproven. This author has noted a potential corollary here with the sociologist Richard Sennet on craftsmanship in society (Sennet 2008), who argues that the global economy makes conventional notions of craftsmanship redundant.

Design researchers are asking how we make the shift from designers-as-executants to designers-as-executives in the context of designing services. Hugentobler foresees that this cannot be done without the introduction of systems thinking. Most designers involved in service development projects have adopted and adapted interaction design methods to contend with the complexities of the duality of problem-framing and solution-finding (Moggridge 2006).

Designers mainly work as executants in the role of corporate and social value creation, where interaction with other disciplines is typically poor. Herbert Simon proposed in *The sciences of the artificial* that design could be the model for emulation by other future-shaping disciplines (Simon 1969). But, according to Donald Schon (1983), the opportunity for design resulting from the “decay of expert cultures” since the 1970s is difficult to realize. There have been doubts and reversals of thinking on the part of the protagonists of the design methods movement (Archer 1985; Alexander 1964). However design research still labours under the belief that theory and method, or a rational knowledge-supported approach, are able to improve the quality of the design process and its outcomes, together with a capacity to connect with other disciplines. Herein lies the dichotomy of theory and method with design practice. More recent work, which sets out to conceptualize and visualize the content and context of complex designing, rather than concentrating exclusively on the rationalization of its process, has gained much ground (Young 2001).

My work in the education of design practitioners indicates that there is better understanding of this kind of thinking,

and connection with its portrayal of design. In the world of design research, reasoning may yet catch up with conceptualization. Meanwhile, service design practice will continue, or not, regardless. Exhortation by design researchers will continue to be made (Young 2001).

## Notes

1. 5<sup>th</sup> wave technologies include: sensors cameras, microphones, motion detectors, accelerometers, electrical resistance monitors and geo-positioning devices. The previous four waves have included: computer processing, miniaturization-distribution, networking and web-based services.

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