Two Solitudes

Design as an Approach to Media Research[*]

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In this speech, my aim is to explore how design and media research relate and to point out ways in which these disciplines could benefit from closer contact than what they seem to have today. The paper is primarily written for researchers in communication by a sociologist who has grown increasingly familiar with design over the past decade through his work at a design school.

Whenever we discuss design, it is a good idea to start with a few conceptual remarks. "Design," of course, is an ambiguous word. Its meaning in German, as well as in the Nordic languages (and Finnish), is far more restricted than in English. The German word *Formgebung* (in East Germany, of course, the semantics were different: they spoke about *Formgestaltung*) refers to giving form to something, as is the case with the Swedish *formgivning* and its counterparts in Norwegian and Danish. The Finnish word *muotoilu* follows the Scandinavian practice. In contrast to German and Nordic usage, the English term "design" is ambiguous, referring to what others call "planning" rather than "form giving." Thus, when one reads English-language literature on, say, industrial design, one usually encounters stories of engineers (for example, Hargadon and Sutton 1997; Henderson 1999) rather than of people who have training in the arts. It goes without saying that the English usage has crept into other languages, which usually not only borrow the English term, but also follow the English practice when using older, often more accurate terms. The advertising industry in particular is turning the term into a sign – usually a sign of sophistication, as in "hair design," the high end of hairdressing or barbering, but often also into something ironic, as in a Finnish ad that sold rye bread as "Finnish design."

The shift in meaning of the term is not just semantic, but is rooted in social change. In its present form, design is a 20th Century creation, though its roots go back several centuries in architecture, crafts, and luxury goods production. However, in the modern sense in which "design" denotes the application of artistic skills in industry, the term primarily refers to glass and ceramics, furniture, interior design (previously called interior decoration or architecture), textiles and fashion design, and graphic design. More hi-tech areas of design are even more recent creations, including industrial design immediately after the war, and new media design, which is the creation of the PC, multimedia, and the

Web. The origins of the marriage of industry and art lie in Germany and the US. Perhaps the best-known early industrial designer was the architect and artist Peter Behrens, who was hired by AEG in Berlin in 1907 to give a face-lift to its products, production facilities, and the private homes of its management (Rogge 1984). With international exhibitions like World's Fairs and the Milan Art Biennale, artist-designers increasingly captured the public and, later, the industrial imagination after the war. (See Woodham 1997; Julier 2000).

Industrial design, in turn, has its origins in the United States, where designers were anonymous, building on technical training, leaving their mark on cars and other types of consumer goods from the 1930s onwards (Heskett 1997). However, similar developments were taking place in Europe as well. In many ways, Italian industrial design has its origins in Adriano Olivetti's staunch belief that it pays to invest in architecture and design (Kicherer 1990). Wally Olins, the grand old man of design management, even compares him to Lorenzo di Medici in terms of his patronage to the design culture of Italy (Olins 1978: 153). Meanwhile, Philips had built a flourishing design culture in the Netherlands well before the war (Heskett 1989), and Nordic design grew in prominence, first through architecture with names like Arne Jacobsen, Finn Juhl, Alvar Aalto, and Eliel Saarinen. Later, Nordic design continued to enjoy international success mainly with the Italians through glass, ceramics, textile design, furniture, and interiors, while French, Italian and, to a degree, British and American design dominated fashion.

Through these developments, industry has changed our material world, giving, metaphorically speaking, designers a canvas on which they have been able to paint their visions of a *vackrare vardagsvaror* [more beautiful ordinary goods], as Swedish industry put the matter in the 1930s (Kalin 1992). The terminology reflects the multitude of these industrial and design orientations; if one finds the terminology confusing, the problem lies in a lack of historical perspective rather than in the concepts as such. Unlike law or medicine, the design professions have never been strong enough to impose their conceptual schemes on society.

In addition to understanding these terminological and conceptual issues, it is also important to realize that "media" has several meanings for designers. When one talks about media research with designers, they spontaneously get images of interactive media consisting of the personal computer, the Web, mobile phones, digital TV, and computer games, and design professions based on these technologies, including new media design and interaction design. Although they are becoming more mature, these fields are still searching for an identity between technology, art and business. Mainly through these disciplines, cultural studies have gained a degree of theoretical presence in design. However, cultural studies ought to be taken in its American rather than European meaning: it is mainly theories of literary studies that have been applied to new media rather than sociology and anthropology, not to mention critical studies. In consequence, these theories have gained far less prominence in design disciplines that work on material realities. In these disciplines, professional practice is still based on materials and on industrial and artistic processes rather than on, say, semiotics. As this sketch suggests, key things in communication research, including journalism, mass media, and organizational communication, have had a small presence in the design world.

Two Solitudes

As I showed above, for a variety of reasons, design and media have lived parallel lives rather than mingled seriously. Explicit links between these disciplines are primarily based on some theoretical strains in new media (interactive media), which have had far less success in traditional design disciplines and industrial design. In universities, there are a few attempts to create overlaps, such as the Scandinavian attempt to build the discipline of *humanistisk informatik*, which combines some technology (mostly in new media) and design with a strong theoretical background in the humanities. Also, there are a very few programs in interaction design. Examples can be found from the University of Limerick in Ireland, and The Royal College of Art in London (previously termed Computer Related Design, RCA, n.d.).

Most design schools have literary scholars, philosophers, and art historians on the payroll, and they have increasingly hired a few drifters from the social sciences, mainly sociology and anthropology. Typically, these staff act as teachers and, sometimes, as researchers, but training is nevertheless in the designers' hands. A similar movement is taking place in industrial research, with major corporations such as Nokia and Intel building user research units in which the social sciences have gained a footing. Together, these small groups are pushing their own vision of science onto the design fields, from which this vision is slowly filtering into design training. No doubt there are people with a background in communication working in design, but with the major exception of Klaus Krippendorff, who was trained in design in Ulm, few have become prominent. To my knowledge the only theory from communication research that has been brought forcefully to design is product semantics, propounded mainly by Krippendorff with his designer colleague Reinhardt Butter. This tradition takes as an axiom that all design communicates, and accordingly can be studied as communication (see Vihma 1995).

With these exceptions, the relationship of the two disciplines can be formulated metaphorically as "two solitudes," borrowing the name of Canadian writer Hugh McLennan's book that described how the French- and the English-speaking Canadians related to each other in the middle of the 20th Century. Like French- and English-speaking Canadians in the 1950s, these two disciplines are aware of each other, sometimes working well together and sometimes competing. However, in general, they maintain enough barriers to keep them separate. It goes without saying that, in this metaphor, the role of the dominant majority clearly belongs to the communication disciplines.

If this state of affairs is the *explicandum*, what, then, are the reasons behind it?

Some reasons are obvious. The job markets for designers and media scholars are separate, almost regardless of the particular persuasions of the latter. Designers typically work in technological environments dominated by technical and commercial interests, while graduates from media disciplines work in a whole gamut of communications, including mass media, teaching, consulting, organizational communication, and advertising. They also have a far easier path to management than do designers, who tend to either work as independent consultants or serve as, in Andrew Abbott's (1988) telling term, a subordinate profession to engineering.

This division starts already in education. The design disciplines are a fairly recent addition to the university structure, in which their position is weak compared to more established sciences, including communications and media. While in traditional university systems, media and communication disciplines have a secure position among the social sciences, always close to business, administrative, and political elites, design is

typically located in art and design schools, schools of architecture, and sometimes in technical universities away from the mainstream university system. This divide makes it easy for the design disciplines to maintain their autonomy in the face of more theoretically versatile disciplines, but it also has several negative effects on design.

For example, theory has a different status in these disciplines. Of course, there are always students in the social sciences who loathe theory – just as there are trial lawyers who, after 20 years of practice, say that they can learn nothing from research. However, the very basis of the social sciences is typically found in theoretical debate, or at least in awareness of such debate. Anyone who studies communication learns something about how the mass media work, what information is and how one can think about it, and how power relationships are seamlessly interwoven with communication. With few exceptions, such as Krippendorff's product semantics, the design disciplines work with technology and materials rather than with words, ideas, concepts, and theories. In fact, a common complaint among engineers, managers, and other academics is that designers lack a "language" through which they can explain their intentions, work methods, and skills (Korvenmaa 1998). In consequence, trust in the abilities of designers remains low in wider academia, and at the top echelons of business and government.

I take this state as evidence of designers' reluctance to learn the theoretical basis and thus the syntax of academic language. The design world largely remains "silent": its workings can be learned by participating in it, by observing it, and by getting into its gossip, but not by reading about it. Non-theoretical disciplines do not do well in the university system – in Abbott's (1988) terms, their claim to jurisdiction remains weak, making design a less attractive partner in universities. It may also be that the "linguistic turn" that has taken place in the social and human sciences over the past four decades has made the gap even more difficult to close. The theoretical basis of much of media research has drifted away from the interests of designers, as the metaphors of language and text have gained prominence. The main exceptions are new media and, to a degree, graphic design. These two disciplines by and large work on two-dimensional surfaces (or metaphors that are two-dimensional), and benefit from theory developed in disciplines like semiotics, movie studies, and narratology. However, it is far harder to apply these theories to three-dimensional objects, machinery, services, or other objects of interest to the traditional design disciplines and to industrial design.

Of course, although it is certainly a legitimate question whether chairs can be understood merely as expressions in language – there are many other useful and perfectly justifiable ways to make sense of chairs – understanding design might not require going beyond the linguistic turn's key metaphors of "text" and "language." However, designers have opted to do otherwise. Designers' symbolic claim to respectability is based not on theory, but on art, which, again, keeps them marginal in universities in which notions like "intuition" and "gut feeling" do not fare well. Thus, it may even be that while the linguistic turn has made social scientists far more sensitive to what Clifford Geertz has called the webs of meaning (Geertz 1973), this turn has had an adverse effect on design and its position in the university system.

Evolving Boundary Objects

Of course, this is not the whole story. Several developments are constantly creating new boundary objects – in the sense proposed by Star (1995) – that bring media and design into contact. For example, at the very least, the following are constantly creating new boundary objects between design and media: technology, the economy, changes in cityscapes, the increased role of design in media, and design research. Obviously, this list is not exhaustive. Rather, I just aim to show that the same forces driving design and media and communication research not only keep them separate, but also create common areas of interest and perhaps even possibilities for cooperation.

Technology. Perhaps the most obvious thing to start with is communications technology, which has changed over the past 20 years, reshaping both fields in many ways. Beginning with the introduction of personal computers in the early 1980s, the Internet and later the Web about ten years later, and interactive – or "smart" – products, epitomized by the mobile phone, later in the 1990s, these technologies have changed our minds and societies (Katz and Aakhus 2002), prompting an area of research in which communications researchers and designers have been able to publish together (Katz and Aakhus 2002; Koskinen et al. 2002; Harper et al. 2005). Another perhaps more significant development has been the birth of a new design specialty, interaction design, which may be evolving into a new design profession. Apparently coined in the mid-1980s by Bill Moggridge of the design agency IDEO in Palo Alto, this term denotes design that combines skills in software design, electronic engineering, industrial design, and the human sciences (typically, cognitive psychology, but the disciplinary basis has been expanding into sociology and anthropology). The first academic programs in this area were developed in the 1990s, and although only a few programs exist, there are already globally used textbooks in this area (by Jenny Preece and Ben Schneiderman). Whether they are successful and stabilize a new discipline remains to be seen; in many ways, these books have reintroduced old cognitive psychology under a new name, which probably leads to similar fallacies as the early efforts to apply cognitive psychology to human-computer interaction.

The third technological development undeniably of interest to media researchers and designers alike is electronic entertainment, a roughly 7 billion USD industry worldwide. As the numbers show, its significance for the future of the economy is typically overestimated in the press, which hails game design as a major new design industry. However, for a communications scholar and someone well versed in literature, a world largely based on simple adventure narratives dramatized to an extreme (anyone who plays a computer game saves *the* world every 15 minutes or so, or is slain) provides an intriguing window on the commercial significance of mythology, not just design.

What more futuristic developments in technology – like the notions of virtual reality, and ubiquitous, ambient, embodied, and proactive technologies – will do for the relationship remains to be seen. They may pose intriguing theoretical challenges not just for designers, but also for people in communications and media. However, it is far from clear whether these technologies will ever become significant in society. It may well be that they only find relevance in research laboratories and universities.

Economy. Another area that may create boundary objects for these disciplines relates to several developments in the economy. How design works in the economy is a colossal question, well beyond the scope of this essay. However, for the sake of example, I

will analyze two developments. The first relates to what one can call the "semiotization of the economy," more commonly known as "branding." As the sociologist Harvey Molotch has noted in *Where Stuff Comes From* (2003), a study of industrial designers, as business leaders have learned to "outsource" production, often to the same few manufacturers typically located in the third world, this has led to a necessity to create brands that people can use to make distinctions between things and products. While twenty years ago in most industries, it was possible to make distinguishable products with signs, logos, and packaging, today branding is taken further into the very products and their functions as well. The "look and feel" of products provides "semiotic handles" with which consumers and other people can make sense of products and thus make decisions on consumption. As Molotch maintains, it is sometimes more important to think about the value of a company in terms of brand value rather than stocks, not to mention tangible resources such as factories or workforce.

This line of reasoning has convinced even *Business Week*, a major business weekly, which recently published a special edition on design. Of course, *Business Week* tells a story that is only partially true, but many people buy it, including the journalists and the editorial staff who put together this highly respected weekly:

> Design is fast becoming a must-have competency for corporations. It has evolved from a simple way of giving form and color to products into a powerful tool… Design methods get managers close to their customers, design research helps top execs visualize the future, and design strategies help companies innovate. (*Business Week*, July 4, 05, p. 54).

In response to the branding challenge, designers have created new design practices and forms of organization, whether internal design organization as in Philips (Heskett 1989), or on a consultant basis, which is the more typical model (Kristensen and Lojonoco 2002).

Of interest to people in communications is that new economic challenges make communication increasingly important for design. The largest design agencies are bigger and more complex in form than 30 years ago. As the design historian Anna Valtonen writes in her upcoming doctoral thesis in University of Arts and Design, the question of how to organize design has become an issue in corporations. As design practice has increasingly come into contact with management, designers face in their work many problems communication researchers have been studying in other contexts for decades. How do formal organizations – such as government and corporations – function? How do organizations communicate? How is communication organized in formal organizations? How do people in different (organizational) cultures make sense of objects, things, ideas, and concepts?

These questions are the bread and butter of many researchers in organizational communication, but designers are learning them the hard way.

In turn, designers face these problems on a practical level, which is something most students of communications can only dream of. There are certainly opportunities for theoretical elaboration, practical cooperation, and perhaps even cross-fertilization of ideas and practices.

Design and Urban Experience. Some ways in which design provides boundary objects for media and communications is through its important role in the creation of "signed" goodscapes and places we face in cities today. Designers create spaces not only through their plans and interiors, but also indirectly. A good example is Helsinki, which provides a suitable laboratory case of how design is transforming cities today.

Because Helsinki has never had a court or significant nobility (which historically lived in Stockholm or St. Petersburg), its present cultural production scene reflects the changing tastes of just those people who buy design anyway: wealthy city dwellers from students to the upper middle classes. In 2000, I calculated that, in some parts of South Helsinki, one encounters an art or design-related shop every 75 meters, and would encounter some kind of cultural business every 15 meters, if not just shops but also producers were counted (Koskinen 2005).

Several towns have noticed the existence of similar districts. For example, Helsinki advertises a "Design District," while in Stockholm, an area in Söder, "SoFo" (South of Folkungagatan), functions similarly. World cities have had similar neighborhoods for a longer time; in fact, people who only occasionally visit Manhattan may get the feeling that they encounter a new neighborhood somewhere on that island every time they go there. In terms of its size, "the Chelsea art district" must be unique globally. The astonishing concentration of art galleries in that neighborhood colors the way in which it appears in a by-passer's experience. The largest area of this kind probably exists in Tokyo's southwestern Yamanote line, extending from Ebisu in the south to Shinjuku in the north. Even when design is understood narrowly, it has become a part of urban experience, creating specific "semiotic neighborhoods" in central areas of cities. As the design historian Viviana Narotzky has noted, these areas teach people about good design and taste (Narotzky 2000), attracting sophisticated urban people to stroll around them and spend time in them (Picture 1).

Picture 1. From the Danish Design Centre in Copenhagen. This picture shows just how skilled designers are in creating objects and spaces for certain kinds of people. It is easy to do a small thought experiment to see these skills. Imagine the response of a middle-aged car mechanic to this place to see how clearly it is designed for an urban, highly educated elite. *Picture:* Ilpo Koskinen, February 2002.

Design in Media. Design is big not just in cities, but also *in* media, as anyone can notice by simply visiting any kiosk. There are about as many design weeklies and monthlies on their shelves as there are comics and women's magazines. During the past few years, there has been an increasing number of interior decoration programs on television, and stories of design appear regularly in newspapers, sometimes even in separate, periodically appearing sections. Designers have long been celebrities (Kalha 2000), but this is true today more than ever, as the following excerpt, taken from an upscale Finnish interior magazine, witnesses. The story is about design objects in the home of a designer couple. The tone of the story, extreme as it is, conceptualizes the home primarily in terms of designers, rather than in terms of functions, price, availability, or aesthetic judgments, which have traditionally dominated writing in this vein.

> When a constantly moving pair of architects set up a home in Milan, THE MAIN ROLE WENT TO DESIGN. In the apartment, there is not a single piece of furniture whose designer is unknown. The Hanahana-flowerholder is designed by Kazuyo Sejima for Driade. The blue-toned carpet is from the hands of Linda Burkhardt. The flexible Boalum-lamp was designed by Livio Castiglioni and Gianfranco Frattini in 1970. The lamp is manufactured by Artemide. Jasper Morrison's blue sofa is manufactured by Cappellini. The chair made of grass is by… (*Glorian koti*, January 2004, p. 43, capitals in original).

In brief, design and designers have become signs themselves. These signs are largely visual, and based on a cult of the creative artist. It is banal when compared to the complexities of design in the economy and culture, not to mention modern production technology, but it is alive and well in the press and electronic media.

Designers and design promotion organizations, for their part, eagerly play this game. For example, "Design Weeks" seem to pop up everywhere. Just in the fall of 2005, I learned about five such weeks without any attempt to look for them. I saw a design week in Helsinki, Copenhagen, Eindhoven, Tokyo, and heard about one in Paris. I did not bother to go to London or to New York to see their weeks, and did not even think about going to fashion weeks in Paris, Milan, London, New York, among other cities.

However, although the world of design writing may be based on romantic notions of creativity, this culture is not banal in its consequences. For one, as I pointed out above, the media are constantly shaping the design world by giving people and businesses convenient "semiotic handles," as Molotch (2003) calls them, for making sense of stuff (also Molotch), as well as for making purchasing decisions. Also, such celebrity culture works against the self-image of the profession, pushing it into a conservative, artistic direction at the expense of technology and social concerns. For example, "design for all" (or "universal design," as Americans call it) almost never enters this picture, and ecological design becomes an artistic exercise instead of becoming the joint effort of designers, ecologists and engineers.

Research in Design. Pushed by the pressures described above, the design community in some countries has started to turn to research in order to understand where the profession is going, and how to respond to changes in society. Of the Nordic countries, Denmark and Finland have been particularly in the forefront. An ability to synthesize what is going on in technology and actual design work requires higher-level conceptual thinking than what the traditional Bauhaus training model has been able to provide. To give just one example of this research, an extensive research field has developed around
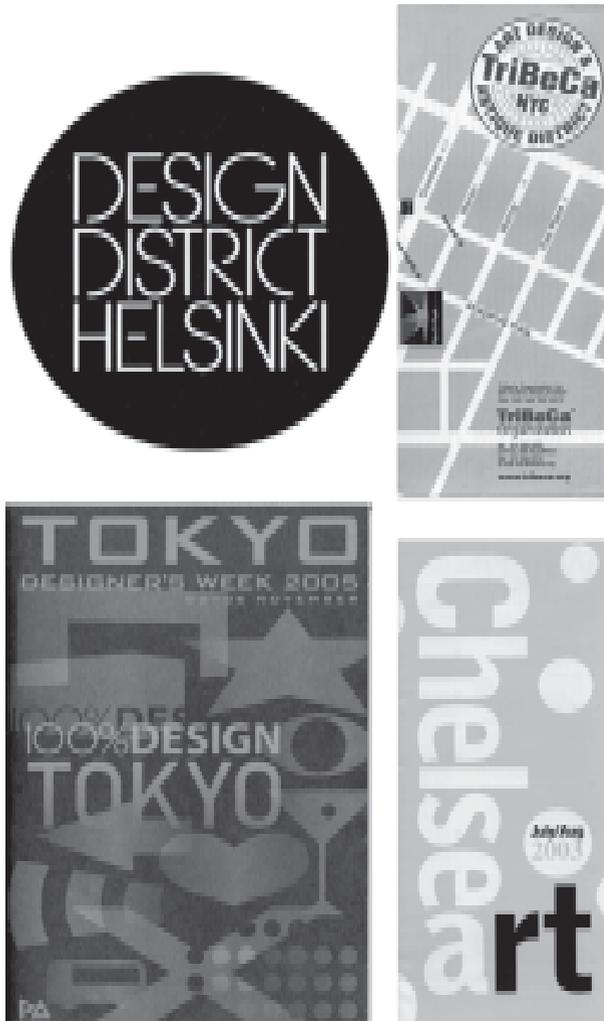
Picture 2. Design districts and design weeks are changing the face of several cities.

the notion of "user research." The first attempts in this area took place in the 1980s under the heading of "human-computer interaction," a field led by cognitive psychologists like Don Norman (1988), but soon after, the field took a more industrial turn, as industry became disappointed in the promises made by psychologists. Following Jacob Nielsen's influential book *Usability Engineering* (1993), "usability" became the new buzzword, giving rise to a widespread industrial practice, and later attempts to introduce usability methods into idea creation, not just into testing products and user interfaces. However, studying people in situ has been the traditional lot of the social sciences rather than psychology, which is increasingly reflected in the choices made not just in the academic design community, but also in the world's most advanced companies, which have begun to hire social scientists to work in their user research departments.

I have little doubts about the future of this effort in the Nordic countries. Powerful forces are at work, pushing the top end of design schools into research. For instance, all Nordic countries – save Iceland – had a design policy at work in the early years of the

millennium (see Korvenmaa 2001). Also, all four major countries had a design year in 2005. A key component in these efforts was to strengthen research particularly in industrial design. Similar programs exist, or are being created, in several countries, including the United Kingdom, most small English-speaking nations, and the Baltic countries in Europe, and countries like Korea in Asia. Chinese efforts are regional.

Design as Agency

Above, I have tried to outline how media and design relate today, and presented some reasons for that relationship. The main argument has been that, although powerful institutional forces keep these disciplines largely separate, there are things in society that are constantly creating boundary objects, common areas of interest, for these disciplines. Now I want to argue that design is not just an innocent party in changing goodscapes (this notion is taken from an ongoing doctoral study at UIAH by Paula Bello, who builds on Arjun Appadurai's anthropology in an attempt to study crafts in Mexico's countryside). Designers participate actively in society, and bring about changes in our environment through their work. They make interpretations of not only objects and technology, but also of human beings and society, and fuse these interpretations in their work. However, unlike people trained in the social sciences, their statements do not usually appear in books and articles, but in shops, exhibitions, and interiors. The point is that for someone interested in how the material world is shaped in modern societies, design provides a perspicuous, observable setting for trying to understand just how human ideas – sometimes artistic, often plainly commercial – find an expression in physical things. What happens when design is understood as reflexive agency, a part of Lash and Urry's (1994) "economy of signs" rather than just something that is driven by economic, technological or social forces?

Picture 1 visualizes the story of one of the great design icons of the 20th Century, Alvar Aalto's Savoy vase (see Alvar Aalto Foundation and Alvar Aalto Museum 2002: 145-150). The Finnish organizers for the Paris World Fair in 1937 invited a submission from the glass company Karhula-Iittala. The company sponsored a competition for tableware and glass, and invited a number of well-known young architects to participate in the competition. The first sketches by Aalto were submitted to the competition with the (admittedly odd) name of *Eskimoerindens skinnbuxa* (The Eskimo Woman's Leather Breeches). Four sketches by Aalto survive, showing that Aalto's design was heavily influenced by Jean Arp, the French artist. The final vases were exhibited at the Paris World Fair in 1937. When Aalto designed the interior for the upscale Savoy Restaurant in Helsinki, his vases were also placed there. One version of these vases had a curvier, more dramatic shape than the original series; it became particularly popular, and came to be known as the Savoy vase, which still finds its way surprisingly often onto the covers of books exhibiting the best of 20th Century design.

What this snapshot shows is that designers' work is embedded in society in many ways. Aalto created an idea for a vase, finding the original form from modern art. As his work progressed, he took this idea and sketched several variants of it, until he found a form that rung true for him. Next this form was realized by master glass-blowers in Karhula-Iittala's studios and factory. However, this was just the beginning. When the vase was taken to the Savoy restaurant, one variant was singled out, and renamed with a catchy, sophisticated name that stuck and that has dominated the perception of the vase
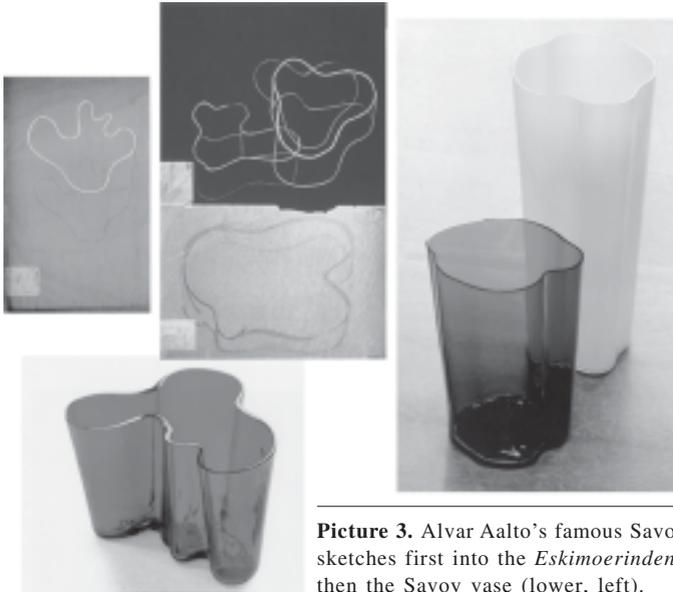
Picture 3. Alvar Aalto's famous Savoy vase developed out of early sketches first into the *Eskimoerindens skinnbuxa* vase (right), and then the Savoy vase (lower, left).
Source: Alvar Aalto Foundation and Alvar Aalto Museum 2002.

ever since. Few people today know the history of the Savoy vase, which has become a major classic of modern glass design. As it has this classic status, it shapes the design community's understanding of glass vases. Through museums and art history, it also shapes the public's understanding of glass as applied art. For Iittala, the vase is still a major seller.

When one thinks about design in reflexive rather than causal terms, one begins to understand how the design world could be used as a window for studying how physical things are made meaningful. Things around us are interpretations and statements made by humans, rather than just technical creations. Of course, there are many types of reflexive processes in design. The Savoy vase represents the high end, while toy design represents the most market-driven design in which producing more variation is the key business driver. Similarly, designers work differently. Aalto's inspiration was artistic; indeed, many designers do follow the art world closely, and think of their work as art. However, many designers distance themselves from art and artistic imagery, and consciously orient to technology or the market instead.

Of course, there is nothing specific in these processes. Technology works like this. The sciences work like this. Society works like this. What is specific to design is the playful combination of art and culture and technology, and the way in which designers' self-understanding works. They see themselves typically as mediators between technology and people, engineering and taste, science and art. In this, they differ significantly from engineering, which, as Louis Bucciarelli (1994), an engineer-turned-ethnographer notes, tends to have a mathematical cosmology in that when engineers account for their activities, they rely on the natural sciences and mathematics instead of art and the social sciences. For anyone interested in how these artistic and "soft" values get built into objects, things, and events (the face of the Olympics in Beijing is being designed by a professor who was trained in Helsinki), design provides an interesting site. For a media

and communications researcher, it gives an opportunity to study the material world as a meaningful activity.

Naturally, if a communications scholar follows my point, and starts to study design, she may have to develop research skills that are somewhat outside the ordinary baggage of a social scientist. One has to be able to pay due attention to visual thinking, materials, and to how the human body interacts with materials. Also, it might be useful to think in terms of creation of meaning instead of seeing design as "information transfer," even though designing information flows is undeniably a part of design, and media design in particular. Furthermore, it pays to develop skills in observation. It takes time and patience to see how society evolves materially. Design has proved to be a difficult thing to study ethnographically from the designers' "emic" perspective rather than using the researchers' "etic" concepts and theories.

Design as an Approach to Media Research

The section on design as agency, of course, presented some theoretical intricacies that, if followed, would take research beyond causal thinking. I believe that it is productive to understand design in agentic terms, as an activity that participates in modern world-making. Designers are active people, who scan their environment to discover potential design problems. When they spot one, they construe a design that tries to provide a solution to it. In this work, they use professional methods of design, but also imagination. As I tried to argue in the final section of this paper, designers do not use their imaginations in a void: rather, they are in dialogue with art, technology, culture and – naturally enough – previous designs. Still, design is not a purely self-reflexive process. The solution produced by a designer is typically a mixture of not just design concerns, but also business planning, analysis of technological opportunities and constraints, and a host of other things too many to be listed here. It is for these reasons that I suggest that it might be better to talk about design in terms of reflexivity and agency rather than in terms of causality.

If one accepts the notion of "two solitudes" as a description of the current relationship between design and media research, this paper can in the final instance be thought of as a call for bilingualism. For media researchers, design illuminates many theoretical issues like *semiosis,* myth, metaphor, and aesthetics, providing an observable site for studying these processes in action. At a slightly more complex level, design may provide an opportunity for studying material objects and space as communication processes. The reason why these objects are more complex to study is conceptual and theoretical: few vocabularies exist that can help us to understand three-dimensional objects. For example, semiotics provides good tools for studying narrative, language, and visual objects like packages and textiles, but it fares far worse when it comes to the semiotics of space or chairs. At an even more complex level, design provides people in communications with an opportunity to "denaturalize" technology and the material world in concrete terms. In the human world, precious few natural things exist. Herbert Simon (1980) once observed that most of our environment is artificial, and that in consequence, we need a science of the artificial. For designers, a bilingual relationship might provide the promise of a more up-to-date theory and better tools for understanding communication, which is a key aspect of designers' work. It would also provide the understanding and vocabularies needed to develop professional practice. Moreover, it would provide new areas for research, and perhaps even lead to new kinds of design practice.

For me, bilingualism refers to a deeper coexistence than two solitudes, but still shows that the two worlds can maintain their separate identities. Living bilingualism would be beneficial for both disciplines. Is it time to start learning new languages?

References

Abbott, A. (1988) *The System of Professions*. Chicago: University of Chicago Press.

Alvar Aalto Foundation and Alvar Aalto Museum (2002) *Alvar Aalto: Designer*. Vammala: Alvar Aalto Foundation and Alvar Aalto Museum.

Bucciarelli, L. (1994) *Designing Engineers*. Cambridge, MA: The MIT Press.

Geertz, C. (1973) *The Interpretation of Cultures*. New York: Basic Books.

Hargadon, A. and Sutton, R. I. (1997) Technology Brokering and Innovation in a Product Development Firm. *Administrative Science Quarterly* 42: 716 – 749.

Henderson, K. (1999) *On Line and On Paper. Visual Representations, Visual Culture, and Computer Graphics in Design Engineering*. Cambridge: The MIT Press.

Harper, R., Palen, L., and Taylor, A. (eds.) (2005) *Inside Text. Social, Cultural, and Design Perspectives on SMS*. London: Springer.

Heskett, J. (1989) *Philips. A Study of the Corporate Management of Design*. London: Trefoil.

Heskett, J. (1997) *Industrial Design*. London: Thames and Hudson.

Julier, G. (2000) *The Culture of Design*. London: Sage.

Kalha, H. (2000) Sankarien sukupolvi [The Generation of Heroes] in Sotamaa, Y. (ed.) *Ateneum Maskerad*. Helsinki: University of Art and Design UIAH

Kalin, K. (ed.) (1992) *Kaj Franck, Muotoilija-Formgivare-Designer*. [Kaj Franck, the Designer] Helsinki Museum of Applied Arts & WSOY.

Katz, J. and Aakhus, M. (2002) *Perpetual Contact*. Cambridge: Cambridge University Press.

Kicherer, S. (1990) *Olivetti. A Study of the Corporate Management of Design*. Trefoil: London.

Korvenmaa, P. (2001) Rhetorics and Action. Design Policies in Finland at the Dawn of the 3rd Millenium. *Scandinavian Journal of Design History* 11: 7-15.

Korvenmaa, P. (ed.) (1998) Muotoiltu Etu, Vol. I-II. [*The Designed Advantage I-II*] Helsinki: The National Foundation for Development and UIAH.

Koskinen, I. (2005) "Semiotic Neighborhoods". *Design Issues* 21(2): 13-27.

Koskinen, I., Kurvinen, E. and Lehtonen, T-K. (2002) *Mobile Image*. Helsinki: IT Press.

Kristensen, T. and Lojacono, G. (2002) "Commissioning Design: Evidence from the Furniture Industry." *Technology Analysis & Strategic Management* 14 (1): 107-121.

Lash, S. and Urry, J. (1994) *Economies of Sign and Space*. London: Sage.

Molotch, H. (2003) *Where Stuff Comes From*. Routledge: New York.

Narotzky, V. (2000) "A Different and New Refinement. Design in Barcelona, 1960-1990". *Journal of Design History* 13, 227 – 243.

Nielsen, J. (1993) *Usability Engineering*. San Francisco: Morgan Kaufmann.

Norman, D. (1988) *The Psychology of Everyday Things*. New York: Basic Books.

Olins, W. (1978) *The Corporate Personality. An Inquiry into the Nature of Corporate Identity*. London: Thames and Hudson.

Rogge, H. (1984) "A Motor Must Look Like a Birthday Present", in Buddensieg, T. and Rogge, H. (eds.) *Industriekultur. Peter Behrens and the AEG, 1907-1914*. Cambridge, Mass.: The MIT Press.

Royal College of Art, n.d. What is Interaction Design? Available at www.rca.ac.uk. Accessed 7/4/2005.

Simon, H. A. (1980) *The Sciences of the Artificial*. Cambridge, MA: The MIT Press.

Star, S. Leigh (ed.) (1995) *The Cultures of Computing*. Oxford: Blackwell.

Vihma, S. (1995) *Products as Representations. A Semiotic and Aesthetic Study of Design Products*. UIAH: Helsinki.

Woodham, J. M. (1997) *Twentieth-Century Design*. Oxford: Oxford University Press.