Strategic design: where are we now? Reflection around the foundations of a recent discipline

Design estratégico: onde estamos agora? Reflexão em torno dos alicerces de uma disciplina recente

Anna Meroni

anna.meroni@polimi.it

PhD, Assistant Professor of Service Design and Strategic Design at Politecnico di Milano, Dipartimento INDACO (Industrial Design). Research Unit DIS, Design and Innovation for Sustainability. Via Durando 38/a, 20158, Milano, Italy.

Abstract

The term Strategic Design is increasingly adopted in order to define approaches and methods to develop research and projects at a company or academic level. What do we mean when we say Strategic Design? After more than a decade of reflections, teaching and professional activities around this topic, the foundations of the discipline are established. Basically, we assert that Strategic Design is about conferring to social and market bodies a system of rules, beliefs, values and tools to deal with the external environment, thus being able to evolve (and so to survive successfully) as well as maintaining and developing one's own identity. And, in doing so, influencing and changing the environment too. This paper intends to present a theoretical analysis of Strategic Design by pointing out some of the key points of this discipline, moving from the recent reflections and developments within the Italian and the international scientific community.

Keywords: strategy, service design, sustainability.

Resumo

O termo Design Estratégico é cada vez mais utilizado a fim de definir as abordagens e os métodos para desenvolver pesquisas e projetos em empresas ou em um nível acadêmico. O que queremos dizer com Design Estratégico? Após mais de uma década de reflexões, de ensino e atividades profissionais em torno deste tema, as bases da disciplina estão estabelecidas. Basicamente, podemos afirmar que Design Estratégico confere aos órgãos sociais e de mercado um sistema de normas, crenças, valores e ferramentas para lidar com o ambiente externo, sendo capaz de evoluir (e, assim, sobreviver com sucesso), bem como manutenção e desenvolvimento de uma identidade própria. Ao fazê-lo, influencia e altera o ambiente. Este trabalho pretende apresentar uma análise teórica do Design Estratégico, destacando alguns dos pontos-chave desta disciplina, a partir de reflexões e recentes desenvolvimentos da comunidade científica italiana e internacional.

Palavras-chave: estratégia, design de serviço, sustentabilidade.

Foreword note: A brief historical background

A decade went by since the beginning of the Master in Strategic Design (MDS) at Poli.design, Politecnico di Milano: more than 200 participants have made this training experience and are now working around the world. There are also hundreds who come from similar academic courses and master's programs spread all over Europe and North and South America. We also believe that there are hundreds of people who, although not academically qualified as strategic designers, are actually working that way. Which way? What is strategic design, today?

In the MDS presentation (2008), we read:

"Strategic Design is a design activity concerning the product-system; the integrated body of products, services and communication strategies that either an actor or networks of actors (be they companies, institutions or non-profit organizations etc.) conceive and develop so as to obtain a set of specific strategic results.

The Master in Strategic Design prepares professionals who are able to carry out a design and/or managerial role within the innovation process of the product system, with a clear sense of integration between the products, services and communication components, and a special sensibility towards social and environmental sustainability, local identity, and cultural values" (MDS presentation, 2008).

We can argue that there is a clear focus on the Product Service System (PSS) dimension, an orientation toward different kinds of social and market actors, a clear intention to produce innovation, and an emphasis on a systemic interpretation of sustainable development.

From a historical perspective, as far as the Italian scientific community is concerned, we can surely affirm that the initial strong emphasis (Zurlo, 1999) on the "company" as the main subject of the strategic design culture is now over: it is becoming more and more evident that the Strategic Design approach is not only welcome but needed by a broader spectrum of social bodies and enterprises, from companies to consultancy firms, from institutions to governments, from territories to associations. Ultimately, it is needed by all those who have to deal with design decisions in a turbulent and uncertain context (Landry 2000; Manzini and Meroni, 2007). That is to say, in the contemporary world.

Basically, strategic design is about conferring to social and market bodies a system of rules, beliefs, values and tools to deal with the external environment, thus being able to evolve (and so to survive successfully), as well as maintaining and developing one's own identity. And, in doing so, influencing and changing the environment too.

Considering this, this paper intends to present a theoretical analysis of strategic design.

Product Service System Design and Strategic Design

Strategic design is about Product Service Systems (PSS).

What do we mean by PSS and what are the reasons for talking about PSS in the contemporary context? This is not the place for a long dissertation on this issue, but, in the words of Manzini (Manzini and Meroni, 2004), we can say that contemporary society is changing rapidly and profoundly and, as part of this change, we can see a demand for new solutions which differ in many ways from those formulated up to now. For example, when considering society in recently industrialised or as yet unindustrialised countries: how do we create solutions capable of meeting the social demands they express without resorting to the socially destructive and environmentally unsustainable models of industrialisation hitherto put forward? When addressing these kinds of demands and the nature of the solutions they require, it becomes apparent that in most cases what is needed are complex and contextualised product-service-systems and that these require the collaboration of various players: private firms, public institutions, voluntary associations and, directly or indirectly, the end users themselves.

To respond to these demands, companies have to become systems organisers and solution providers, organising themselves to provide and deliver an integrated and consistent array of local and global products and services designed to be jointly used and whose combination is specifically suited to the customer's needs and context.

This shift in this direction is now evident in the majority of enterprises, but it is not easy. In fact, it means that a company must relate with clients, other companies (often even competitors) and other stakeholders in a completely new way. It means looking at clients in their specific context of use and considering other companies and stakeholders as partners in the process of generating, providing and delivering sustainable solutions (Manzini *in* Manzini *et al.*, 2004).

A PSS is a mix of products, services, communication and people; when conceived to answer a specific need, it is what we call a *solution*. The strategic design of Product Service Systems shifts the innovation focus from product or service design to an integrated product-service design strategy, orientated to produce solutions.

Products and services have always been connected, but this connection has often been ephemeral, casual, and left to the individual initiative of whoever sells or purchases a product.

The novelty is that this connection is now conceived and designed from the very beginning, according to a strategy of optimisation and integration (Mont, 2000).

In one word, this change fits under the umbrella of what we call "complexity", which, for contemporary enterprises, means segmentation, just in time, personalisation, unpredictability, globalization and demand turbulence. These issues call for strategies which involve the whole organization (Zurlo, 1999).

The service aspect is beginning to prevail over the product dimension in the majority of offers (Pacenti, 1998; Sangiorgi, 2004) as added value is increasingly generated by intangible service elements. This is due to 3 main points (Brezet and Ehrenfeld, 2001):

(i) The increase in demand for customised solutions.
(ii) The development of the ICT industry, which greatly extends possibilities for dematerialisation.
(iii) Increased specialisation in companies, which are focusing on their core business and outsourcing everything else. This has caused an explosion of new service companies.

This tangible increase of the service dimension in every kind of market offer calls for an appropriate service design approach, but above all it calls for coordination and a vision to orient an enterprise in decision making, so as to maintain coherence in its offer. Definitely, it calls for a strategy.

Today, it is basically the product service system offer that provides the enterprise with an identity and distinguishes it from its competitors. It is the only way to really differentiate oneself, both in the market and in society, thanks to its combination of product, services and communication. Moreover, we can say that *social innovation* (innovation that moves from the observation of emerging behaviours in society – Manzini and Meroni, 2007) is probably one of the key factors to orient a PSS strategy towards a distinctive identity, as will be further discussed in this paper.

What is clear is that "value" increasingly comes from the "values" that a product-service-system can carry through its constituent factors, productive processes,

history and service dimension. This means that it lies as much, or maybe even more, in the process and in the experience as in the final outcome; in the story rather than in its performance and meaning. The emphasis is more on the social, ethical and communal issues and needs than on individual ones (Green, 2008).

This perspective leads us to think Strategic Design as focussing on values, so as to orient the PSS offer in a direction that makes these values tangible (Burns *et al.*, 2006). We can probably talk about a shift from *user centred design* to *community centred design*, where the emphasis is on understanding social behaviours and needs and then on collaborating with the most active social communities in conceiving solutions, adopting an inductive approach (Ogilvy, 2002).

This focus on PSS legitimizes us to ask whether every PSS design activity is a strategic design activity.

Once again a historical perspective is important: If at the beginning of the reflections of the Italian scientific community (Mauri, 1996; Zurlo, 2004b) it seemed that PSS design was by definition strategic design, today, after years of experience, reflections and projects, we can distinguish them more precisely.

Yes, definitely every strategic design project is also a PSS project, but not every PSS project is also and necessarily a strategic design project. The major distinction lies in the innovation developed in the project: We have a strategic design action when it results in a breakthrough which causes a system to evolve, rather than simply develop. In other words, it presupposes a radical innovation.

When we have the development of a PSS in line with an already defined orientation (or strategy), we are looking at a PSS design action which produces an incremental innovation. In the words of Larry Kelley (founder of the Doblin Group), the strategic approach is the one capable of proposing breakthrough ideas, generating a *discontinuity* in the system.

This leads to the concept of evolution that Gregory Bateson proposes in his *Mind and Nature* (1979): Evolution is different from epigenesis (or tautology), and by epigenesis we mean the morphogenesis and development of an organism connected to a pre-existent condition. Epigenesis is the development of a system from a previous condition using the capabilities it already possesses. The essence of epigenesis is predictable repetition; the essence of learning and evolution is exploration and change. Evolution is exploration and change.

We will come back later to Bates' fundamental contribution he gave to the understanding of change in complex contexts.

So far, we can conclude that we have strategic design when it results in a breakthrough that allows a system (a company, an enterprise or a social body) to evolve.

But why are the issues of evolution, of change, of radical innovation so important?

Evolving and being sustainable

Strategic design is about *evolution*.

To formulate a possible answer to the previous question we have to reflect about the meaning of the word *strategy*.

This is not the context to carry out an extended dissertation around this concept, and so we want to assume Morin's definition, where strategy is not a pre-defined program, but a series of successive actions driven by a set of scenarios that could be selected, modified and refined over time, according to environmental responses and inputs.

Ultimately, any action that takes a direction and moves, making a system evolve with success, according to some flexible but clear rules, and adapting to changes in the environment is a strategy.

And so, having Morin and Bates in the background, we can adopt the position of Zurlo (1999, 2004a), who takes the game theory to define strategic design as an approach that has the goal of interpreting ongoing situations; where problems are open and ill-defined, tasks unclear, processes experimental and where knowledge is something that emerges step by step, by continuous interactions with other players.

What emerges is that the behaviour of players, even when orientated to win the game, can be driven not only by egoistic reasons, but also by the understanding that, favouring the interests of the community can be strategic to favouring one's own interests. This means that any strategic decision is the consequence of an interaction with the environment, its actors, constraints and opportunities. And that strategy can result also in *win-win* solutions, where the interests of the individual (a person, a company, an enterprise) can converge with those of the environment and of the collectivity.

Therefore, if we want to foster sustainable development, we must systematically conceive and implement exactly this kind of win-win strategy, in compliance with Bateson's concept of *ecology* (Bateson, 1979), affirming that the minimum unit of survival in evolution is never simply an individual organism, not even a species, but always species-plus-environment. Evolution is the learning of a species, and learning is a process of adaptation to one's environment, a process of trial and error, of perpetual innovation, followed by the selection of what is most fitting to a particular environmental niche and by the reproduction of those innovations which the niche can best afford. Paraphrasing the words of James Ogilvy, it is the job of strategic planners to facilitate this process of evolutionary learning through strategic conversations among many members of a community and between the community and the whole society (Ogilvy, 2002; Meroni *in* Jegou and Manzini, 2008).

According to Bates, to be real, *evolution* must be successful and therefore sustainable from all perspectives. Assuming the principles of the so called *revolutions of efficiency* and *sufficiency* (Manzini and Vezzoli, 2002; Vezzoli, 2007; Brezet and Ehrenfeld, 2001), it is very clear that the transition toward sustainability involves both eco-efficiency strategies and changes in social behaviour. A strategic approach to PSS design, acting on the different components of a solution, can achieve much more when proposing effective environmental and social improvements.

Eco-efficient services could fulfill functions now carried out by unsustainable PSS, and solutions can be designed in such a way that optimal eco-efficiency can

be established while creating the maximum value for the different stakeholders and value for the social community. Eco-efficiency, without a paradigmatic change in the way actions are conceived and performed, is not enough to foster sustainable development (Manzini, 2008).

To summarise, we can conclude so far that strategic design is an activity which:

• must consider the collective interest and values;

• defines its actions step by step after establishing an orientation through a set of scenarios;

• is more about learning to deal with the environment than learning a procedure. It is about where to go and not only how to go.

In what way is Strategic Design about where to go and how to change?

Setting and solving

Strategic design is about both problem setting (*what*) and solving (*how*).

What is emerging increasingly clearly is that strategic design is not only (or no longer) problem solving: it is actually problem setting; its role is primarily to open new issues before trying to understand how to solve them. It is about *knowing what* and not only *knowing how* (Zurlo, 1999): it is about what to do with what is available. It is the strategic designer himself who formulates the design brief and is part of the work. Strategy is even more problem setting than problem solving; a strategic decision is needed when the question is "where to go", when not all data are clear and given.

The definition of a problem, and consequently of the design brief, is not a neutral act. A strategic designer works upstream of the traditional brief. The so called practice of the counter-brief is, actually, a way for him to reshape the tasks he receives. From here to the solution, strategic design usually utilises scenarios as tools to envision the direction "where to go".

How do scenarios work and what feeds them?

Exploring, understanding and designing

Strategic design is about social innovation.

Given the importance of values in the strategic design approach, the main impact of the innovations resulting from it is in the socio-cultural sphere: social innovation, determining changes both in the way people act to obtain results (to solve a problem or to generate new opportunities) and in organisational structures (Manzini and Meroni, 2007; definitions from: SIX (2007) and The Young Foundation (2006), is what today mostly affects and is affected by a strategic design action.

Innovations driven by behavioural changes (more than by technology or market changes), which typically emerge from bottom-up processes (more than from top-down ones), are of great interest for the contemporary designer: Some kinds of social innovation can actually be seen as drivers for technological and production innovation, with a view to sustainability. The reason for this is that what we can recognise as positive changes (i.e. promising in terms of sustainability) are prototypes of potential future innovations that strategic design can

foster and propose. By analysing them and pinpointing the demand for products, services and solutions that such cases and communities express, it is possible to define research lines that could lead to improved efficiency, accessibility and diffusion.

The key point is to identify what appears to be positive in society and to investigate how it works and why, in order to use it as a source of inspiration and competence in designing future scenarios.

With this aim, the EMUDE project (Emerging user demands for sustainable solutions. European Union, VI FP, 2004-2006) has systematically explored the concept and the potentiality of social innovation as a driver for technological and system innovation. Thanks to EMUDE (coordinated by the INDACO Department of the Politecnico di Milano and involving nine European partners plus eight design schools) we have been able to formulate and develop the potentialities of the concept of Creative Communities in Strategic Innovation (Meroni, 2007). The aim of the research project was to explore the potential of social innovation as a driver for technological and production innovation, with a view to sustainability, starting from the hypothesis that groups of Creative Communities (groups of people that organise themselves to obtain a result in ways that are promising concrete steps towards sustainable ways of living and producing) all around Europe are developing innovative solutions to solve problems of everyday life.

After collecting a considerable number of cases (Meroni, 2007), a set of scenarios of product-service-system innovations has been drawn up to inform and inspire the decision-makers and to influence the perception and demands of future end-users (Jegou and Manzini, 2008).

If we consider these phenomena from a quantitative perspective, they are not worth taking into account as a market segment. But this is not the point, because strategic design is not strategic marketing: What is important is the idea, the vision these groups propose and put in place. Even if today they are, and remain, limited phenomena, they can feed our idea about the future. How can they be transformed into scenarios?

Creating and envisioning

Strategic design is about building scenarios.

Observing the kind of social innovation we consider to be promising and interesting, we can see minority phenomena emerging from the chaos of contemporary society and of the contemporary market: How relevant are these cases of social innovation for strategic innovation? Once again, Gregory Bateson (Bateson, 1979) seems to offer a fundamental interpretation key: Strategic innovation, as well as evolution, comes from *chaos*, "the new can be drawn only from disorder and chaos". Actually, what matters in an evolutionary perspective is the power of an idea and the fact that it can work, not its current relevance in terms of numbers. No matter how few people are doing something today, if we are good enough to make it appealing and potentially feasible, it can shape the future. According to Bateson, a small accidental fact emerging from *chaos* (of the natural environment of contemporary society) can create a discontinuity and becomes, if it fits into a particular environment, the driver of the system's evolution. Small

phenomena can be successful and grow large and important in the future, if they are capable of creating a dynamic equilibrium between a species and its environment, just as the Creative Communities' solutions seem to be able to do (Meroni *in* Jegou and Manzini, 2008).

Having a vision in mind, driven by any promising fact we can detect in society, strategic design is making a bet, a hypothesis, that this vision can become part of the shape of the future: a hypothesis built on competence and experience and supported by a project, setting the conditions for it to become likely. Paraphrasing the words of Manzini (Manzini and Jegou, 2003), the future cannot be predicted, but we can find in the present the premises for any possible future: tomorrow will be the result of what we produce from now onwards. So, imagining the future means selecting and giving coherence to the signals of the present that we consider most favourable and defining an image of the world as it would be "if" one of the possible futures were realised, even when this "what if" seems to be a leap taken from very fragile foundations.

The way a strategic designer transforms visions into a plausible hypothesis is by building scenarios: Scenarios are sharable visions that translate information and intuitions into perceivable knowledge.

Using a phrase of Kees van der Heijden (2005), scenarios are the best available language for the *strategic conversation*, allowing differentiation in views, but also bringing people together toward a shared understanding of the situation, making decisions.

One of the most strategic approaches and definitions of the concept of scenario comes from James Ogilvy, one of the founders of the Global Business Network: He proposes a *relational worldview* (a worldview that shifts its focus from things and substances to relationships and structures) and *ethical pluralism* (a change in the way we think about values, considering the differences in a global world without opening the way to relativistic amorality) as the basis for any attempt to design the future (Ogilvy, 2002). The way to design the future, according to Ogilvy, is scenario planning, which he considers one of the best tools for drawing out the social creativity of communities. Scenarios are stories about what *ought* to happen: The future is not predictable, but it is not enough to create a set of scenarios for what *might* happen, altogether independently of our will.

> "Once we see that we're part of the picture, [...], then it is incumbent upon us to conceive at least some scenarios of what ought to happen. And at this point ethical pluralism is essential... [...] Scenario planning is a technique for steering ourselves and our institutions toward better futures – not the best future, not a single utopia, but one of several possible futures suggested by a pluralistic ethic. Scenario planning is based on the assumption that the future cannot be predicted and that belief in the possibility of total control is a dangerous delusion. [...] It tries to control things well enough to win in that future" (Ogilvy, 2002).

To give a structure to the way of developing and communicating the stories of the future, he suggests the scenario framework model, a conceptual tool created from the combination of critical uncertainties and usually resulting in a set of scenarios in a two-by-two framework.

To conclude, scenario building is strategic design's inductive way of tackling problem solving: By giving structure and motivations to visions, using experience and tools, they are transformed into sharable and debatable perceptions.

Key points in this assumption are the following:
- Scenarios resulting from this design activity must be conceptual artefacts capable of adapting to the changing environment, just like adaptive systems, which are open and interactive, capable of learning from events that happen and, on the basis of what they learn, of finding inner resources to organise or re-organise themselves. Adaptation is the condition for any successful evolution (Bateson, 1979; Ogilvy, 2002);
- As individuals, but mainly as designers, we need to assume responsibility for the degree to which our acts can influence the environment: "We are part of the picture". However, non-designers are also part of it.

How can a strategic design approach benefit from the skill, the creativity and the will to contribute to the future that are diffused in society?

Co-designing and personalising

Strategic design is about co-designing.

To benefit from social creativity and to generate scenarios that can adapt to the changing environment and be managed with competence by the different social actors (companies, communities...), the design process must be shared and participative. This means that it requires the systematic involvement of the different stakeholders in a collaborative way, whether they are clients, users, colleagues or actors involved in the project in some way. Basically, Strategic Design is an approach and a process to enable a wide range of disciplines and stakeholders to collaborate: By definition a PSS is produced and delivered in partnership, consisting of several different elements, produced or delivered by different stakeholders, conceived and united by a similar strategy (Manzini *et al.*, 2004).

When looking at the public sphere, it is also vital to bridge divisions between disciplines, institutions and public, private and voluntary sector approaches. In the words of Charles Landry (2000), "new forms of alliances have to be set up".

The basic principle of a co-designing approach is the involvement of those affected by a problem in conceiving and implementing the solutions: This is both a need and an opportunity for benefitting from the experience and problem solving capability of others. Designers are not the only ones entitled to be creative: even if not by profession, everybody is entitled to be creative and can design. Thinking strategically means to understand how to take advantage of this, gaining a sense of involvement, activation, shared ideas and social welfare.

With the expression "democratisation of innovation" Eric Von Hippel refers to the increasing aptitude of users of products and services to innovate by themselves: It is becoming easier for many users to get exactly what they want by designing it for themselves (Von Hippel, 2005).

Participating in designing and innovating brings enjoyment and a sense of sharing of the objectives: The social efficiency of the system increases if users somehow convey what they have developed to others, in an economy of reciprocity. Strategic design can contribute in this.

If we shift these observations from the individual to Creative Communities (which are an example of how users can engage in a form of cooperation-orientated problem solving), we can further articulate the previously introduced concept of *community centred design*: through a deep understanding of how such a community works, a close collaboration with it and a systematic co-designing attitude it is possible to start processes of strategic change with a good chance of success. One of the reasons why the community, or the dimension of "some", is the dimension of change comes from social philosophy: Elective communities (defined by interest, geography, profession or other criteria) are sufficiently larger than the individual to impose moral restraints that transcend the individual will, but still small enough to be recognised as representative of individual interests. Through communities, even radical changes are legitimised and implemented by the individual. And this is what currently happens in the Creative Community dynamic, where a group of people breaks with the old order and moves toward the unprecedented (De Bono, 1970) by setting up some alternative anticipation of a possible future (Meroni *in* Jegou and Manzini, 2008).

A new enterprise model is emerging, in which it is not products or services that are of highest value, but it is "the support" that helps people to lead their own lives as they wish and to navigate a complex world (Parker and Heapy, 2006).

How can Strategic Design contribute to these issues of collaborative networking and dialoguing with social bodies?

Dialoguing and converging

Strategic design is about strategic dialogue.
Strategic design is about building capacities.

The operational logic of strategic therapy in psychology is: "knowing the problems through their resolution". Translated into design terms, this sounds like "learning by doing".

It is enlightening for our purposes of understanding the foundations of strategic design to refer to the meaning of the term "dialogue" and particularly to the use of strategic therapy in psychology: A dialogue is a common path for two interlocutors that leads to a shared state of knowledge about a certain topic (or problem). From this perspective the therapy is seen as a "discovery". With the expression "strategic dialogue" we are referring to the evolved technique of producing radical changes in the interlocutor during therapy (Nardone and Salvini, 2004). The dialogue is a succession of changes that are redefined step by step by the therapist and the patient, so as to arrive at a certain optimal state, reducing the resistance that every human system opposes against change. In a strategic perspective, the key is to make the patient feel different, not just understand differently. The key point is

to change the perception of things in order to change the emotional and behavioral reaction, ultimately in order to change the understanding of a problem.

To do so, that therapy adopts the techniques of "re-organising paraphrase" and the "illusion of alternatives". In the first one, the therapist seems to leave the role of the expert to the patient and, using the phrase "Please, correct me if I'm wrong" asks him to check the correctness of the formulations of the problem. It is a way to make the patient feel respected and to see himself as a protagonist of the dialogue. The second one, the "illusion of alternatives", is a technique used to elegantly induce answers and decisions toward a certain strategic goal: a series of questions presenting apparent alternatives during the dialogue, just like in a funnel, help the interlocutors converge on a vision (the strategic goal of therapy). To conclude this hint of strategic therapy, we want to quote Nardone and Salvini (2004) when they say that "in order to induce any changes in the interlocutor, it is necessary to adopt an evocative language, which must be in tune with both the therapist and the patient".

Well, this description, with minor changes, is a possible way of explaining how strategic design works. Strategic dialogue, brought into the field of strategic design, is the constant factor in the whole project, from problem setting to problem solving. Counter-briefing is a matter of strategic dialogue, co-designing is a matter of strategic dialogue, sharing visions is a matter of strategic dialogue, all of them precisely in the way that was described here. The strategic designer is not just a "facilitator", he is somehow a "therapist": to consider him as a mere facilitator is reductive, because it means to fail to take into account his capabilities of imagining and influencing behaviours, conceiving visions, and bringing a professional viewpoint and experience. Actually it is more appropriate to see him as able to catalyse and orient the collective sensibility toward a shared interpretation of how the future might look like, taking and elaborating the best from the present and transforming it into a paradigmatic shift for the future.

Contributing to change (in a collectivity, a community, an enterprise) the understanding of a problem, to work out a new perception and vision, to build capacity to implement it, creating a platform of tools and knowledge, enabling and empowering people to do things and deal with a changing context, is the real and profound meaning of any strategic design project. It is an interpretative process (Zurlo, 2004a), an action of making sense out of chaos.

Conclusions

This paper presented strategic design as a discipline built on eight main pillars, which, in our experience and approach, constitute its foundations:
• Strategic design is about Product Service Systems: the strategic design of PSS shifts the innovation focus from mainly product or mainly service design to an integrated product-service design strategy, orientated to produce solutions, which provides the enterprise with an identity and distinguishes it from its competitors. Strategic design focuses on values, so as to orient the PSS offer in a direction that makes these values tangible. Not every PSS project is a strategic design project, unless it results in a

radical innovation.

• Strategic design is about evolution: according to Gregory Bateson, the essence of evolution is exploration and change. We have strategic design when it results in a breakthrough that allows a system to evolve. Successful evolution has to deal with sustainability: Strategic design can contribute in the transition toward sustainability by promoting both eco-efficiency strategies and changes in social behaviour.

• Strategic design is about both problem setting (what) and solving (how): strategic design is not only problem solving; it is actually problem setting. Its role is primarily to raise new issues before trying to understand how to solve them. It is about *knowing what* and not only *knowing how*.

• Strategic design is about social innovation: it is one of the key factors to orient a PSS strategy towards a distinctive identity. Innovations driven by behavioural changes, which typically emerge from bottom-up processes, are of great interest, because some of them can actually be seen as drivers for technological and production innovation, in with a view to sustainability. The reason for this is that what we can recognise that positive changes are prototypes of potential future innovations that strategic design can foster and propose. Actually, what matters in an evolutionary perspective is the power of an idea: Starting from this, strategic design makes a bet, a hypothesis, that this vision can become part of the shape of the future.

• Strategic design is about building scenarios: the way a strategic designer transforms visions into a plausible hypothesis is by building scenarios, which are sharable visions translating information and intuitions into perceivable knowledge. Scenario building is strategic design's inductive way of tackling problem solving: By giving structure and motivations to visions, using experience and tools, they are transformed into sharable and debatable perceptions.

• Strategic design is about co-designing: Designing and creativity is increasingly a diffuse attitude and capability. We can argue that a new enterprise model is emerging, in which it is not products or services that are of highest value, but it is "the support" that helps people to design their own lives as they wish. From a theoretical perspective, we can talk about a shift from *user centred design* to *community centred design*, where the emphasis is on understanding social behaviours and needs and then to collaborate with the most active social communities in conceiving solutions. By a deep understanding of how such a community works, a close collaboration with it and a systematic co-designing attitude it is possible to start processes of strategic change with a good chance of success.

• Strategic design is about strategic dialogue: it is a constant factor in the whole project, from problem setting to problem solving, in every strategic design activity. Thus, if one makes a comparison with the strategic therapy in psychology, one may say the strategic designer is not just a "facilitator"; he is somehow a "therapist", because of his capabilities of imagining and influencing behaviours, conceiving visions, and bringing a professional viewpoint and experience. Actually it is more appropriate to see him as able to catalyse and orient the collective sensibility

toward a shared interpretation of how the future might look like, taking and working out the best from the present and transforming it into a paradigmatic shift for the future.

• Strategic design is about building capacities: contributing to change (in a collectivity, a community, an enterprise) the understanding of a problem, to work out a new perception and vision, to build capacity to implement it, creating platform of tools and knowledge, enabling and empowering people to do things and deal with a changing context is the real and profound meaning of any strategic design project. It is an interpretative process, an action of making sense out of chaos.

Having discussed these foundations, we can conclude that strategic design is an approach to problem setting and solving and thus to design decisions in turbulent and uncertain contexts: No longer can only companies actually benefit from it, but a broader spectrum of social bodies and enterprises, from companies to consultancy firms, from institutions to governments, from territories to associations.

References

BATESON, G. 1979. *Mind and Nature: A Necessary Unity*. New York, Bantam Books.

BREZET, B.; EHRENFELD, S. 2001. *The development of eco-efficient services*. Working paper, Delft, SusProNet research project.

BURNS, C.; COTTAM, H.; VANSTONE, C.; WINHALL, J. 2006. Transformation Design. *RED paper 02*, Design Council, London, 33 p. Available at: http://www.designcouncil.org.uk/mt/red/. Access on: 08/08/2008.

DE BONO, E. 1970. *Lateral thinking: A textbook of creativity*. London, Penguin Books, 260 p.

GREEN J. 2008. Changing the change: A good idea! *In:* Changing the Change Conference, Torino, 2008. *Changing the Change Conference Newsletter*, 8. Available at: www.changingthechange.org. Access on: 08/08/2008.

JEGOU, F.; MANZINI, E. 2008. *Collaborative services*. Milano, Edizioni Polidesign.

LANDRY, C. 2000. *The creative city: A toolkit for urban innovators*. London, Earthscan, 349 p.

MANZINI, E.; JEGOU, F. 2003. *Sustainable everyday: Scenarios of urban life*. Milano, Edizioni Ambiente, 270 p.

MANZINI, E.; COLLINA, L.; EVANS, S. (eds.). 2004. *Solution oriented partnership: How to design industrialised sustainable solutions*. Cranfield, Cranfield University.

MANZINI, E.; MERONI, A. 2004. Strategic design of sustainable solutions. *Design*, **5**:18-21.

MANZINI, E.; MERONI, A. 2007. Emerging User Demands for Sustainable Solutions, EMUDE. *In:* R. MICHEL (ed.), *Design research now: Essays and selected projects*. Basel, Birkhäuser Basel, p. 157-179.

MANZINI, E.; VEZZOLI, C. 2002. *Product-Service Systems and sustainability*. Paris, UNEP. Available at: http://www.uneptie.org/pc/sustain/reports/pss/pss-imp-7.pdf. Access on: 08/08/2008.

MANZINI, E. 2008. Changing the change: Design Research Agenda for Sustainability *In:* Changing the Change Conference, Torino, 2008. *Working Document*. Available at: www.changingthechange.org. Access on: 08/08/2008.

MAURI, F. 1996. *Progettare progettando strategia: Il design del sistema prodotto*. Milano, Dunod, 256 p.

MDS PRESENTATION. 2008. Available at: www.polidesign. net/MDS. Access on: 08/08/2008.

MERONI, A. 2007. *Creative Communities: People inventing sustainable ways of living*. Milano, Edizioni Polidesign, 182 p. Available at: www.sustainable-everyday.net. Access on: 08/08/2008.

MONT, O. 2000. *Product-Service Systems: Final report*. Lund, The International Institute of Industrial Environmental Economics, Swedish Environmental Protection Agency.

NARDONE, G.; SALVINI, A. 2004. *Il dialogo strategico*. Milano, Ponte alle Grazie, 141 p.

OGILVY, J.A. 2002. *Creating better futures: Scenario planning as a tool for a better tomorrow*. New York , Oxford University Press, 256 p.

PACENTI, E. 1998. *La progettazione dei servizi tra qualità ambientale e qualità sociale*. Milano, Italy. Doctorate Thesis. Dipartimento INDACO, Politecnico di Milano.

PARKER, S.; HEAPY, J. 2006. *The journey to the interface: How public service design can connect users to reform*. London, Demos, 117 p. Available at: www.demos.co.uk. Access on: 08/08/2008.

SANGIORGI, D. 2004. *Design dei servizi come design dei sistemi di attività: La teoria dell'attività applicata alla progettazione dei servizi (Service design as the design of activity system: The activity theory applied to service planning)*. Milano, Italy. Doctorate Thesis. Dipartimento INDACO, Politecnico di Milano.

SIX. 2007. Social Innovation Exchange. Available at: www. socialinnovationexchange.org. Access on: 08/08/2008.

THE YOUNG FOUNDATION. 2006. Available at: www. youngfoundation.org. Access on: 08/08/2008

VON HIPPEL, E. 2005. *Democratising innovation*. Cambridge/ London, The MIT Press, 204 p. Available at: http://web. mit.edu/evhippel/www/. Access on: 08/08/2008

VAN DER HEIJDEN, K. 2005. *Scenarios, the art of strategic conversation*. New York, Wiley, 380 p.

VEZZOLI, C. 2007. *System design for sustainability*. Rimini, Maggioli Editore, 282 p.

ZURLO, F. 1999. *Un modello di lettura per il Design Strategico: La relazione tra design e strategia nell'impresa contemporanea*. Milano, Italy. Doctorate Thesis. Dipartimento INDACO, Politecnico di Milano.

ZURLO, F. 2004a. Della relazione fra strategia e design: note critiche. *In:* P. BERTOLA; E. MANZINI (eds.), *Design multiverso*. Milano, Edizioni Polidesign, p. 89-98.

ZURLO, F. 2004b. Il Design del sistema prodotto. *In:* P. BERTOLA; E. MANZINI (eds.), *Design multiverso*. Milano, Edizioni Polidesign, p. 141-150.