

# A New Design Space

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Keywords: creative, everyday, experience, design, dreams, participatory, people, research, scaffold

Advances in technology and in user-centered design practices are working together to change the relationship between designers and users. The first wave of change brought experts from the biological and the social sciences into the design process. Their contributions have included user-centered practices such as ergonomics, contextual inquiry and applied ethnography. The evolution of the user/designer relationship is now pointing toward the emergence of a new design space for the 21<sup>st</sup> century.

The next wave of change is shifting the focus away from domains of expertise and back toward everyday people. In the new design space we can see a participatory approach to the development of a truly human-centered technology. Participatory design makes everyday people, such as users, an integral part of the design process, especially at the early front end.

Participatory design demands from the designer a new respect for ordinary people and is based on the belief that all people are creative and can express their unmet needs and dreams when given the appropriate tools. Thus, the participatory approach requires new methods and tools for design. The new tools give ordinary people the language with which to create and express their own ideas and dreams.

What will be the role of designers in the new design space? They will be the creators of scaffolds or infrastructures upon which non-designers (such as users) can express their creativity. Designers will learn how to access and to understand the dreams of ordinary people in order to create scaffolds on which everyday people will come to experience their dreams.

## **1. Changes in the landscape**

Changes in the business landscape are pointing to a new design space. The landscape is in a state of turbulence and we are nearing the limits of a technologically-driven and marketing-pushed era. Companies can no longer assume that “if we build it, they will come.” Companies cannot even assume that “if we build it and then market it really well, they will come.” *They* are smarter now.

Companies are beginning to realize that they need to find ways to get into the hearts and minds of their customers in order to stay in business. The power is shifting from the company to the customer. Ordinary people can have a voice now in the creation of the goods and services that they buy and use. Through information and communication technology, ordinary people can form connected networks. And through their connected networks, they become a collective force. Ordinary people have the ability to say what they think and to demand what they want, when they want it. And they are beginning to speak up.

## **2. Changes in the practice of design**

Changes in the practice of design are pointing to a new design space. The scope of the “user’s” role in design has been getting bigger. Experts from the biological and social sciences have infiltrated to serve the design process, each time enlarging our understanding of the user’s experience.

- *Fit to the body* was emphasized in the field of ergonomics or human factors.
- *Fit to the mind* was seen in the introduction of cognitive ergonomics, leading to new fields such as information design and interaction design in the 1980’s.
- *Fit to the social* aspects of human behavior came with the advent of applied ethnography and contextual inquiry in the 1990’s.
- *Fit to the emotional* domain is just now receiving attention, as seen in interest areas such as “affective human factors.”
- *Fit to the dreams* and aspirations of the people who will buy and use the goods and services that we design is the next step.

Fitting to the emotional domain and to the dreams of consumers and users is a challenge. How can you know what someone else is feeling? And how can you know what someone else is dreaming? Expertise in the social sciences is no longer enough to provide all the answers.

Attention is shifting to the fuzzy front end of the design development process where the discussion is centered around questions such as “what should we make?” instead of “what should it look like?”

or “how should it work?” We have too many products and services in the marketplace that do not address the real needs or fulfill the dreams of people.

*Experience design* has emerged recently as a new discipline in response to the new information and communication technologies. But I will argue that there is no such thing as experience design. Experiencing is in people and you can't design it for someone else. You can, however, *design for experiencing*.

### **3. A new design space**

In the new design space, we will learn to design for experiencing. Design for experiencing is design that puts experience first and builds to support and enhance it. It starts with real people and their needs and dreams, not with technology. It is about designing *with* people and not just for them. It is participatory. Design for experiencing addresses the whole user experience, which includes not only the current experience (*the moment*), but also past experiences (*memories*) and future experiences (*dreams*).

I was inspired by Rolf Jensen's (1999) book, *The Dream Society*. In it he states “Dreams are the stuff the future is made of.” But the world we live in today is still being made of the dreams of a technologically elite, predominantly male audience. I ask you to imagine a world whose future is made of the dreams of everyday people (Sanders, 2000). This is the essence of the new design space.

In the new design space we must rethink our attitude about the user, starting with the label *user*. The language we use to describe the people we design for puts them into roles with limited and very clearly defined boundaries. *Consumers* shop. *Customers* purchase. *Users* use products and services. By putting people in narrow categories, we limit their ability to contribute creatively. And we forget that they are real people, just like us, who play many different roles every day.

We must also rethink our attitude about the creativity of the people we design with and for. Creativity is not the exclusive domain of designers. All people are creative. They create their own experiences and design their lives everyday. If we tap into the dreams of ordinary people, we can see relevant creativity. Their creativity might be the direct source of new ideas or it might provide inspirational seeds for designers.

#### 4. New tools and methods

I have been exploring for many years a new language for participatory design. It is a “design language” for ordinary people, not just for designers. It is a language built upon an aesthetics of experience rather than an aesthetics of form. It is based on the following beliefs about people:

- All people are naturally creative.
- People will fill in what is unseen and they will fill in what is unsaid based on their own experience and imagination (McCloud, 1994).
- People project their needs onto ambiguous stimuli because they are driven to make meaning.

The components of the language are a mixture of visual and verbal, of concrete and abstract, of positive and negative, of male and female. Ambiguity plays a very important role in the language.



**Figure 1:** ICSID2001Seoul Conference, A selection of the design language components that can be used by ordinary people for expressing memories, feelings, dreams and ideas.

We put the language components together into sets we call participatory toolkits. We have two- and three-dimensional toolkits, as well as toolkits for interaction design. We invite ordinary people to

make things, to express themselves around a given experience situation using the toolkit components. For example, “make a collage about your home experience - past, present and future - by using these images and words.” Only when the people have finished with the “making” do we ask them to tell us a story about what they have made.

We use these toolkits to understand the experiences of the people we are attempting to serve through design. We make different kinds of toolkits for different purposes. Some toolkits train people to be observers of their own lives, i.e., to bring into awareness those aspects of their everyday lives that they normally take for granted. Other toolkits are designed to evoke memories or their experiences of the past. Such memories usually carry with them a whole range of emotions. Other toolkits are particularly good for accessing people’s unspoken feelings and dreams for the future. Yet other toolkits are designed to elicit ideas for new products or services from ordinary people.



**Figure 2:** ICSID2001Seoul Conference, Pictures of participatory toolkits (left), people using the toolkits (middle) and people telling stories about their creative efforts (right).

Here are some examples of ways ordinary people have expressed themselves using the participatory tools. Keep in mind that in the design development process, these methods are used together with other methods in a converging perspectives approach (Sanders, 1992) that draws simultaneously from marketing research (“*what people say*”), applied anthropology (“*what people do*”) and participatory design (“*what people make*”).



**Figure 3:** ICSID2001Seoul Conference, Some of the “artifacts” people have made using the participatory design toolkits.

### 5. The role of designers in the new design space

The emergence of a participatory culture will affect *what* companies design and produce in the future, with results more meaningful to people’s lives. Where do designers fit in this new design space? If ordinary people have the ability to create their own experiences, then what will designers contribute? Designers will use participatory tools and methods to access and understand the experiences and dreams of ordinary people. In doing so, they will contribute significantly to the growth and evolution of participatory design languages.

Designers will also use their knowledge of participatory design languages to build scaffolds where ordinary people can make their own experiences. You can think of a scaffold as a design environment in which ordinary people can explore and express ideas and create their own experiences. Serious attempts at building scaffolds for experiencing can be seen today in architecture (e.g., Alexander, C., 2001; Pyatok, M., 2001) and in software design (Gabriel and Goldman, 2001). It is only a matter of time before integrated hardware/software scaffolds become the products and services of the 21<sup>st</sup> century.

The participatory culture of the future will influence the quality and quantity of what we design and produce. The design community is in the position to lead the participatory evolution and help to guide the discovery of a requisite variety of designed things that can be combined creatively by ordinary people to satisfy a culturally diverse range of human experiences.

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