Chapter XIII
A Spatial Environment for Design Dialogue

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ABSTRACT

This chapter offers a spatial concept of the way virtual design team work. It is concerned with two problems that face creative teams today: (1) that the design process is carried out through a diverse range of digital media, which are not or only poorly integrated and (2) that the digital tools used by virtual teams are not designed for virtual team work but used in a very pragmatic way, which often limits the creative efficiency. The chapter argues that space has a structure and that we can use that structure to navigate and place information in space and thereby create a design space with the virtuality and creativity of an open 'reflection-in-action.' Further, it argues that we have to develop concepts of team setting, team solving, substituted process paths, and supplemented process paths to expand our understanding of these issues. This will be demonstrated through two constructions for virtual teams: virtual platform and topos.

INTRODUCTION

In 1990, the First International Conference on Cyberspace was held at The University of Texas in Austin. At the conference, a small group of people was standing in front of the unknown frontier to what later turned out to be an entirely new reality. The architect Michael Benedikt (1991) described this vast landscape, while emphasizing the potential of space:

In cyberspace, information-intensive institutions and businesses have a form, identity, and working reality—in a word and quite literally, an architecture—that is counterpart and different to the form, identity, and working reality they have in the physical world. The ordinary physical reality of these institutions, businesses, etc., are seen as surface phenomena, as husks, their true energy coursing in architectures unseen except in cyberspace. (p. 123)

Benedikt saw then, what we see today. That the potential of institutions and businesses is determined by their ability to work together and prosper in the virtual space, which has been devel-

oped parallel to the physical reality. He described how the inhabitants of this space made sense of their surroundings by mapping the space from within—as isovists (Benedikt, 1979). They gained the ability to navigate through and manipulate a space filled by information—and in the end to construct a spatial architecture that served their specific needs. What Benedikt and others in 1990 saw in the distance, has now formed a new spatial reality with the potential to become a new virtual workspace side by side the 'brick and mortar' reality of traditional organizations.

This potential of parallel realities in space is also one of the key issues of virtual teams as described by Kimble, Li and Barlow in their paper from 2000:

An essential aspect of virtual teams is to exploit the features of electronic space. ... To survive in the information economy organizations must not only exploit geographical differences and overcome geographical constraints in the physical world, but they also have to exploit opportunities and face threats in the new electronic space. (p. 4)

There should be a realization of the great opportunity and tool at our disposal. It is a tool for more than just bridging geographical differences in an effort to prosper and develop new markets. It is also a way to create new spatial environments and define the new identities and energies needed to progress as creative cultures. It is a new way to control space and time, substitute the lack of presence or supplement the presence already shared with new layers of reality.

The thesis presented here is that to fully understand virtual teams, there must be a more explicit acknowledgement that they operate in both real and virtual spaces, and that these spaces do have a structure and architecture, which need to be understood even further. Virtual teams are much more than just a clever way to optimize the distribution of resources—it is the creation of a new reality, where the focus must be the construction of new informed spaces for working and how these define and support the progress of virtual teams and creativity.

In the following, an examination is presented of how designers act in virtual teams and how they may benefit from an active approach to the space they work in. Three constructions of the integration of virtual teams in spatial environments for creative success are presented. These constructions are essentially specification elements for virtual environments, where virtuality, as a tool for bridging degrees of separation, has become an integrated part of current design methods and practices. In the first construction the argument presented is that team setting is just as important as problem solving in the case of virtual teams (Schön, 1983). The second construction argues that the process paths of virtual teams can either substitute the lack of presence or supplement the traditional tools of the designer. In the third and last construction the point put forward is that virtual teams can be situated in a design space together with a representation of the design problem for greater creative success.

SPACE AND VIRTUALITY

The space that Michael Benedikt described above clearly had a structure—even an architecture. It was an environment that a designer could enter and move across in an instant without much effort—where he or she could construct spatial relations, meet other people, exchange information, and leave again. Nevertheless, how do people operate in such informed virtual spaces?

One way is to address how they are put to use—their performative character—as a metaphorical model for spatial organization of information (Fabrikant, 2000) or as a perceptual model (Bois, 1991) that mimes the way we perceive physical space. Space as a metaphorical model has often been used to organize information, from simple spatial diagrams that show numeric trends to very