## ORIGINAL ARTICLE

## **Design frictions**

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Received: 25 May 2010/Accepted: 17 June 2011/Published online: 4 October 2011 © Springer-Verlag London Limited 2011

**Abstract** A fusion of architecture and media technology, video-mediated spaces facilitate collaborative practices across spatial extensions. This paper contributes an architectural perspective on presence design, exploring its potential to create architectural extensions that facilitate knowledge sharing and remote presence. With the example of a mediated therapist, taken from the author's design-led research (Gullström 2010), the paper illustrates spatial design concepts (e.g. mediated gaze, spatial montage, shared mediated space), which, unaddressed, may be said to impose friction and thus impact negatively on the experience of witnessed mediated presence (Nevejan 2007). Mediated presence cannot be ensured by design; however, by acknowledging that certain features are related to spatial design, a presence designer can monitor them and, in effect, seek to reduce the 'design friction' that otherwise may inhibit, e.g., trust and knowledge sharing. It concludes that a presence-in-person paradigm prevails in our society, founded on the expectations of trust and knowledge sharing between individuals, and hereby addresses the contribution from presence design to architectural practice—as well as the reciprocal contribution from architecture to presence design—given that mediated spaces currently provide viable alternatives for meetings and interactions, hence with a fundamental impact on all human practices.

**Keywords** Presence design · Architecture · Mediated gaze · Spatial montage · Shared mediated space · Trust · Knowledge-sharing · Design frictions

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## 1 Introduction

Whether a frescoed wall, a cave mural, a digital projection or an Italian Renaissance perspective, virtual spaces are representations of space that we encounter on a surface. Throughout history, a broad range of practitioners—architects, artists, writers and filmmakers—have contributed hybrid design artefacts from a juxtaposition of real space and virtual space: *mediated spaces*. We may find ourselves immersed, by looking onto a surface in order to explore a three-dimensional reality, a vast panorama, a furious battle, a busy workplace or the fictional space of a book. Arguably, these are architectural extensions. As we encounter a *virtual space*, we always find ourselves inside a *real space*, which is the space we share with other people and things (Summers 2003: 43).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> This paper draws upon research presented in my doctoral thesis, where I apply the concepts of virtual and mediated space to architecture, proposing an extended architectural practice (Gullström 2010). I discuss architectural extensions that facilitate collaborative practices and explore the boundaries of architecture as a discipline by observing its assimilation of other media practices. As an extended practice also calls for an extended discourse, a preliminary conceptual toolbox is proposed, consisting of design concepts, some of which are presented in this article. The concepts are adapted from related visual practices and tested on design prototypes, which arise from my design-led research and experience in designing work and learning spaces.

<sup>&</sup>lt;sup>2</sup> Following this simple distinction between of 'virtual' and 'real' spaces, David Summers divides 'real space' into *social space*, for which architects are the principal designers and *personal space*, for which sculptors are responsible—while *virtual space* is the mastery of painting and the graphic arts (Summers 2003: 43). While it is easy to disagree with Summers' division of labour and to characterize his definition as simplistic, its benefit is to make a spectator part of the activity on the scene: the spectator becomes an *active user* of mediated spaces.