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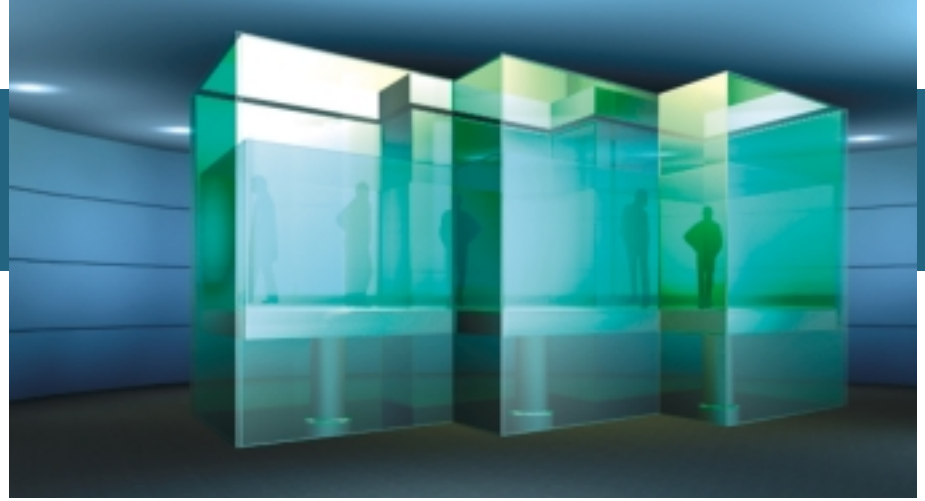
Pixelspaces 2002

Transplanted Interactions



Pixelspaces at Ars Electronica 2001 was dedicated generally to know-how in the area of computer-interactive art as applied to the design of spaces in which to experience virtual reality (VR). *Pixelspaces* 2002, in turn, casts a more tightly focused light on this domain. The 2002 *Pixelspaces* symposium theme, which constitutes the segment binding together the fields of architecture, game development and augmented reality (AR), focuses attention within the spectrum of the conceptualization and design of environments whereby, in the broadest sense, interaction as the guiding principle and ultimate aim lies at the basis of its methodology. The point of departure of these considerations and extrapolations with respect to operating procedures widely shared by practitioners is the elaboration of possibilities and examples—in particular, those provided by exhibition architectures—of an intertwining and blending of the three fields.

Even as architecture and game development have heretofore come up with parallel procedures for the solution of their respective specific problems, the recent recognition of parallels among the tasks and issues themselves—primarily those having to do with crowd management as well as the narrative structure of the context of utilization and function—is yet another factor that makes interdisciplinary approaches even more urgently necessary.

It is above all so-called experience architectures that borrow elements from the narrative structure of games and share with them psychological aspects like motivation, role definition and attraction. Game designers, in turn, utilize the knowledge of architects when, for example, the task at hand is a matter of implementing creative as well as realistic spatial concepts, a prerequisite of which is, as a rule, education in a particular field.

Neither is the principle of interaction restricted to integration of the “new media.” Roughly speaking, it effectively manifests itself both in a mode of behavior (characterized by conventions and prior experience) toward a door (and its technical properties and function as a swinging or automatic sliding door) or when confronted by particular spatial dimensions (the connotations of which lie somewhere on a spectrum between intimate and public), as well as in the context of a semantically overdone environment expanded into the realm of virtuality. Whether in the case of a game or in the case of a real constructed architecture, interaction is thus always—though, of course, differentiated as to degree—so interconnected to the environment that the form in which it physically manifests itself is for the most part based upon it. (If a public building is to be used by a large number of people, wide doors are necessary; a Quest-based game necessitates strongly structured, physical environments, etc.) It can be seen that the primary difference is in the ergonomics (ease in figuring it out/user-friendliness) and predictability (semantic reliability) of the functional entities they have in common. (A door in a real space as a rule conforms to the dictates of its inherent function—namely, linking two spaces to each other; in a game, however, this convention is not binding, but merely statistically probable. For example, in this case an unreal surprise like a waterfall can be lurking behind a door, whereas in the other case this is improbable.)

Beyond interdisciplinary approaches, the availability of interdisciplinary technologies like AR constitutes only one close commonality between architecture and game design, whereby their methodologically overlapping aspects do indeed give rise to reciprocities, but also, and above all, to expectations of consequences with respect to both form and function for (more conservative) architecture. And even if this only means getting architects to think more topologically and relativistically in the future.

After all, the implementation of AR applications in real space is not just a matter of expanding the context of their function and interaction (making it more comprehensible and transparent); rather, even if the current technological state-of-the-art does not yet permit a complete erasure of the boundary between VR architecture and constructed architecture, then the objective should at least be to make the transition as fluid as possible. Whereas for instance, in a public building, a real, unclosed door merely allows a user of the building to conclude that a publicly relevant space lies behind it, its function—that of a waiting room, for example—as well as the current situation within it could be made known to potential users via AR in the form of information on the number of people presently waiting inside it.

Whereas level or map designers, like architects, generate (virtual) interactive spaces, mixed reality implements (new) rules for playing the game in a real setting. A city’s traffic grid can thus become a Pacman level.

From this perspective, architecture could define itself even in the absence of that which is built—to wit situationally, as, for example, when the waiting room can be de-localized and experienced as a situation of people waiting their turn, and the time in it can be spent in activities that are interactively animated by a virtual inventory.

The symposium thus investigates those nexuses at which these fields intersect, and where—evidently independently of one another—the same implementation methodologies have developed. In the creation of interaction—from storybook to environment, from architectonic concept to reconstructed space, from the implementation to the transplantation—the artistic know-how of interactive art will most certainly play a major role once again.

Translated from the German by Mel Greenwald