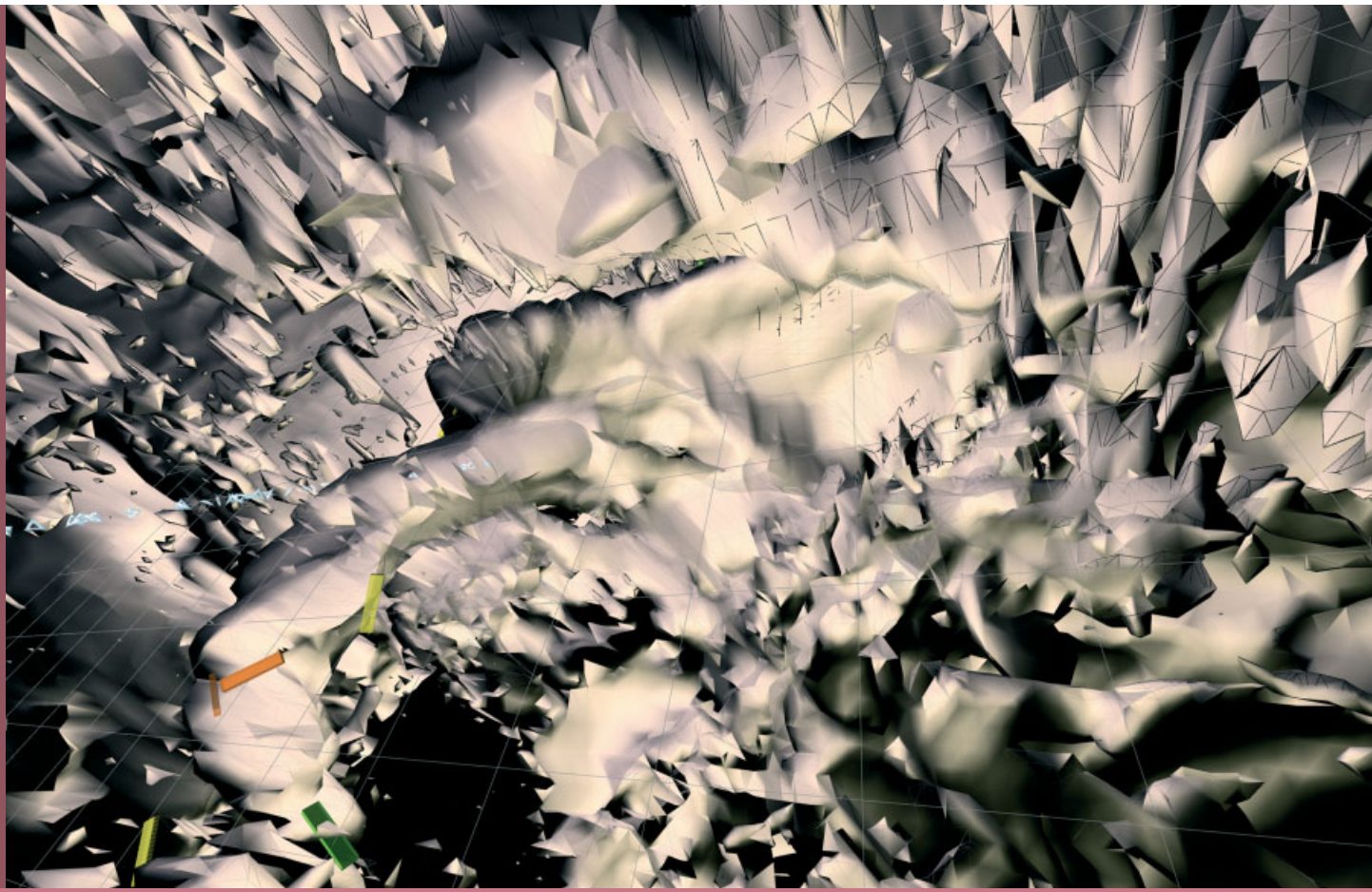
It's All Inside My Head

The physical manifestations of built architecture are often discussed in terms of a single architect's inspiration, overemphasising and romanticising the intellectual contribution of the signature architect. Here Neil Spiller describes the extraordinary departure that Marcos Novak is undertaking at the University of California's Santa Barbara campus, where Novak's own scanned brain becomes a literal, reflexive generating force in the formation of a spatial environment.

In the early 1990s a few architects, including myself, started to think out of the box in relation to what might happen to architecture in the wake of digital technology. Nowadays things seem to have settled down: funny-shaped buildings, unreadable diagrams and non-orthogonal cladding seem to be the current, but fading, fetishism. One of the small number of architects not attempting to put lipstick on the gorilla of rampant global capitalism seems to be Marcos Novak.

Novak was at the coalface of the architectural digital right from the near beginning, learning from computer scriptwriters and musicians simultaneously. His new work, AlloBrain@AlloSphere, really strikes at the centre of what a 'personal' architecture might be. The AlloSphere, a building currently in the throes of construction at the University of California's Santa Barbara campus, is in principle one of those 'cave' things in which you can be visually engulfed as it wraps itself around your cone of vision and plays you virtual environments. The technology is funky, but the important thing is how Novak is using it. His brain is being scanned while he is viewing and interacting with his own virtual creations. He then views his brain and the spaces within and around it as a fluxing complex architecture conditioned by external stimuli. The brain then becomes another of Novak's self-generated environments which are then re-viewed, and a feedback cycle is formed, a reflexive system – biological yet digital, 'transverged' as Novak would say. The feedback loop between brain, experience, pattern and form thus creates an ongoing digital ecology.



The brain and its complexity of support networks can be modelled in numerous ways, for example blood flows and volumes can be used by Novak to create other ways of viewing his own responses to aesthetics, vicariously creating aesthetics themselves. Virtually he can change void into mass and therefore 'inhabit' his own brain or extrapolate interesting pieces of it as architectural models – a limitless store of inspirations. This is an original piece of architectural research and will set the scene for much of what might be considered to legitimate architectural practices and processes of the near future.

The Surrealist can start to imagine all manner of weird products, spaces and architectures based on this premise: lung-shaped ashtrays that contract or darken like the owner's smoke-filled lungs used as an aid to giving up smoking; the geometry of fear as a useful shape for dentists' chairs, or finding a way out of the lacuna when creatively blocked by taking inspiration from the shape of your own block – a 'chip off the old block'.

Novak likens his creation to the ongoing virtuality of Boulée's Cenotaph for Newton, indeed the AlloSphere built form is not dissimilar. And with Novak's, and perhaps mine or your brain inside, his creation might well have more impact on architecture than Boulée's paper sphere. Novak has opened up a new seam in architecture and its relationship with the body. He describes his creation thus: 'This history of art is replete with instances of the portrait, and, especially, the artist's own self-portrait. Likewise architecture has a long history of drawing upon the human body as a model for its organisation. Here the two are combined as one – a living self-portrait not of the surface but of the inner fact and function of the architect as artist, used as both the source and content of an architecture never before possible, both virtually and actually.'

Makes you think, doesn't it? Δ+

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Marcos Novak, AlloSphere, Santa Barbara campus, University of California, 2007
Spaces and terrains are formed by the creation of a feedback loop, between the virtual and the actual. As Novak's brain is scanned, he perceives those scans (his brain is rescanned ad infinitum) and a virtual shifting landscape is produced. The illustrations here show different stages in the evolution of the terrain.