

The Vitruvian World

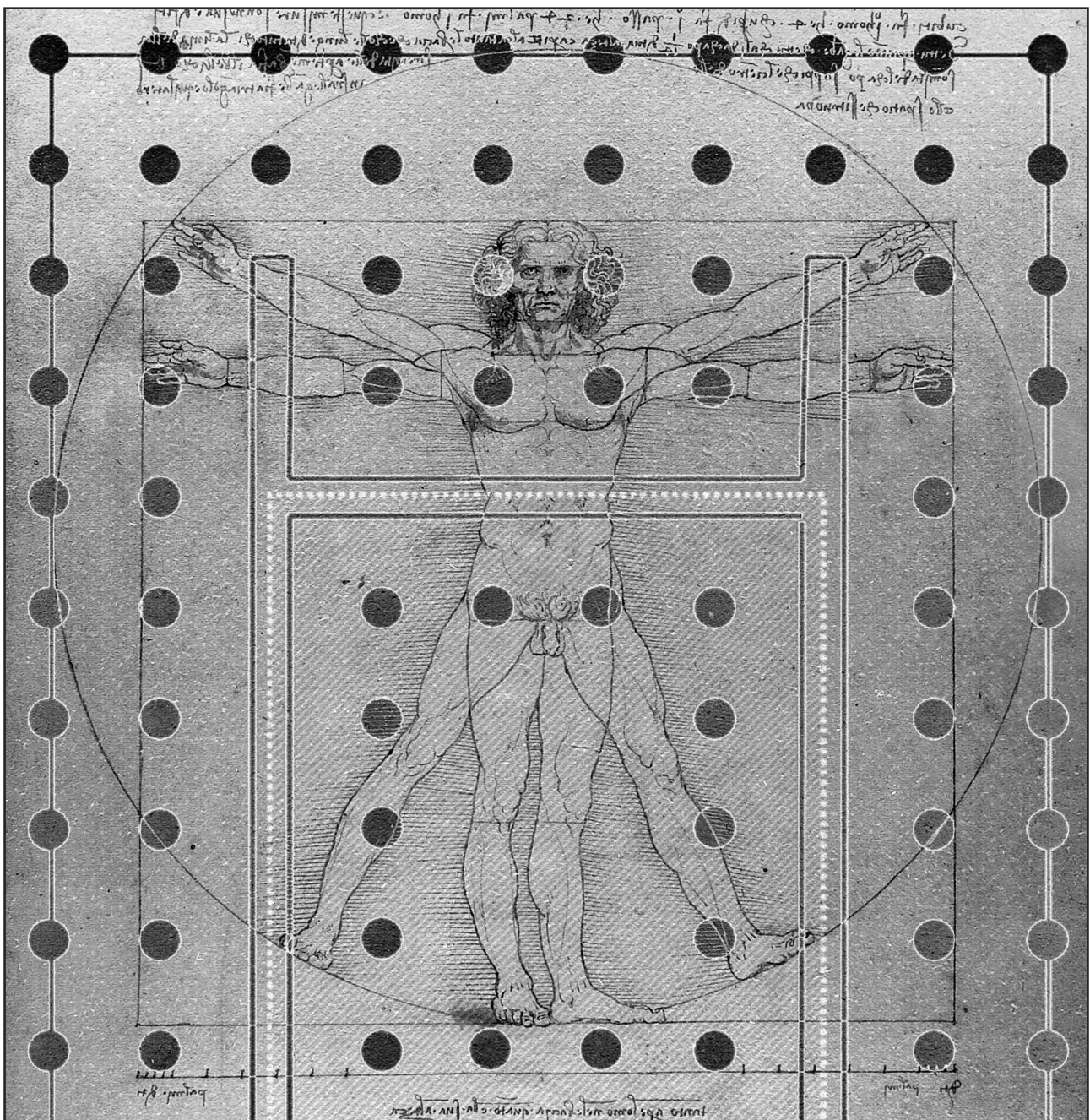
by: Michael Takeo Magruder . Drew Baker . David Steele - 2008

CONTEXT:

In the 1st century BC, Roman writer, architect and engineer Vitruvius codified specific building formulae based on the guiding principles of strength, utility and beauty. He believed that architecture was intrinsically linked to nature and was a human imitation of cosmic order. The most well-known interpretation of this postulate is the *Vitruvian Man* by Leonardo da Vinci in which the male form is depicted in unity with the square and circle - representing material and spiritual existence respectively.

This tripartite union of human body, material form and spiritual essence maintains relevance within the current climate of distributed presences, mixed realities and internet cultures. The proliferation of synthetic worlds and virtual constructs engendered by our ubiquitous technology provides new realms for both actual existence and creative exploration.

The Vitruvian World is a multi-nodal and recursive artwork that embodies the principles of Vitruvius within this context. Existing in three distinct yet interconnected spaces, the work simultaneously embraces the virtual, the physical, and the network connecting them.



VIRTUAL: realm of the avatar

Within the metaverse of Second Life there exists a dynamic world constructed in perfect accordance with ideals of math and proportion that have existed since antiquity. Order and design are the fundamental principles of this environment in which no component of the greater whole is detached from the hierarchy of structure and perfection.

Although absolute in nature, this utopian manifestation of space is in constant flux. The world is open and accessible to all residents of Second Life. As the environment becomes populated by these distributed presences, it senses them and transforms according to their interventions. Each avatar that roams within the metaverse is a unique personification of a virtual self, and as such, maintains autonomy and instrumentality. Even the perception of the environment's ambient qualities resides within the realm of individual agency - synthetic wind and virtual light are informed by personalized schema, not through inherent laws of the system. The world is governed according to its own design, but as in any reality, its essence is dictated by a dialogue with the individuals that dwell within its bounds.

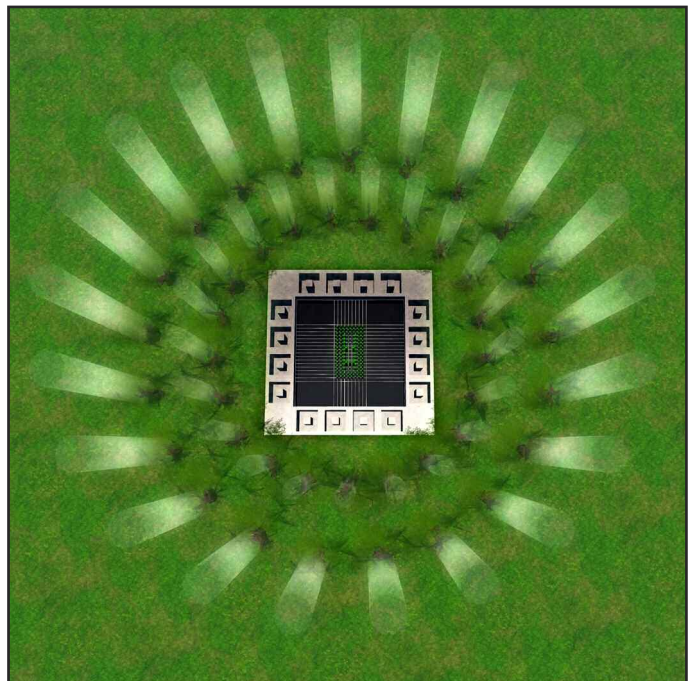
A dynamic public SL environment

Requirements:

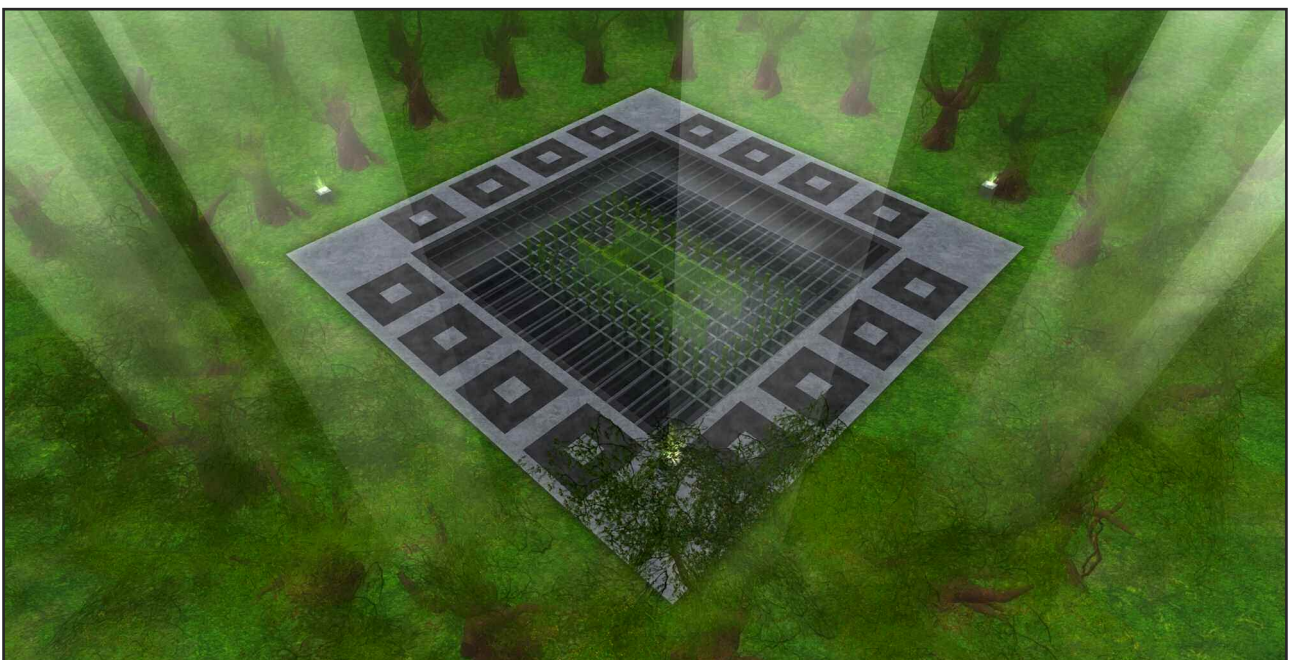
Computer system (high-specification CPU and GPU recommended) with current Second Life client (WindLight version recommended) and QuickTime, color display with 1024x768 resolution and 5.1 audio.

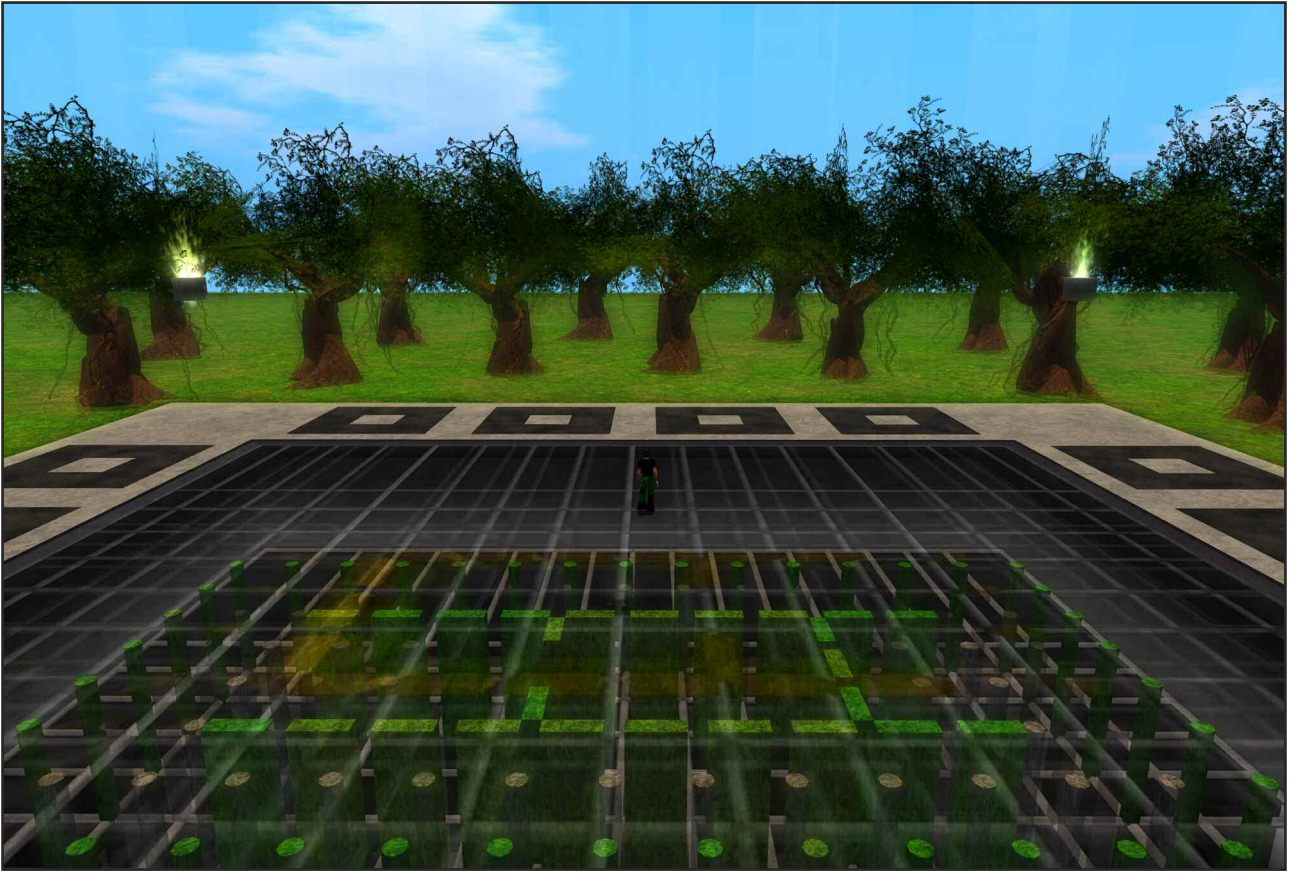
Permanent SLURL:

<http://slurl.com/secondlife/Digital%20Humanities/128/128/701>



[aerial views of *The Vitruvian World*]





[daytime and nighttime views of an Avatar exploring *The Vitruvian World*]

PHYSICAL: realm of the puppet

There is a small domain within the virtual world where avatars may not venture. Although the environment appears undivided, it is apportioned into two symbiotic realms. The greater world for the avatars surrounds an isolated space - a finite microcosm that is enveloped by the endless metaverse. This domain is home to a single entity that has been created as a generic vessel for human agency. Intrinsicly linked to the realm that contains it, this being often appears suspended as if it exists without an eternal soul. It is a puppet waiting to be brought to life.

Spanning countless nodes across vast data networks, the confined virtual realm is bridged to a remote physical space. In this environment, visitors are confronted by the puppet's senses and become immersed in its visual and aural surroundings. Passive spectators become active participants, as individuals assume control of the puppet and instill their will into its lifeless shell. The intentions of creator and user intertwine as the actions of the Puppet are sensed by the environment, and as with the avatars above, initiate transformations within the world. A dialogue ensues, as each realm exerts different influences upon the world.

An immersive installation

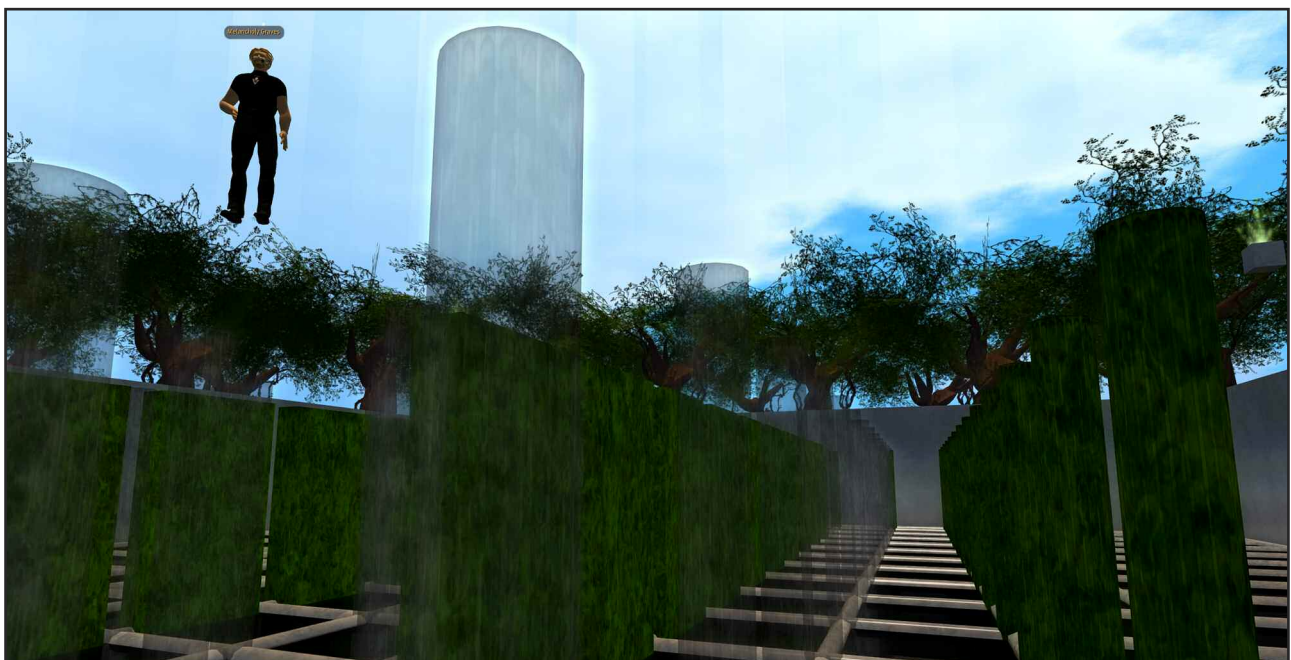
Installation Setup:

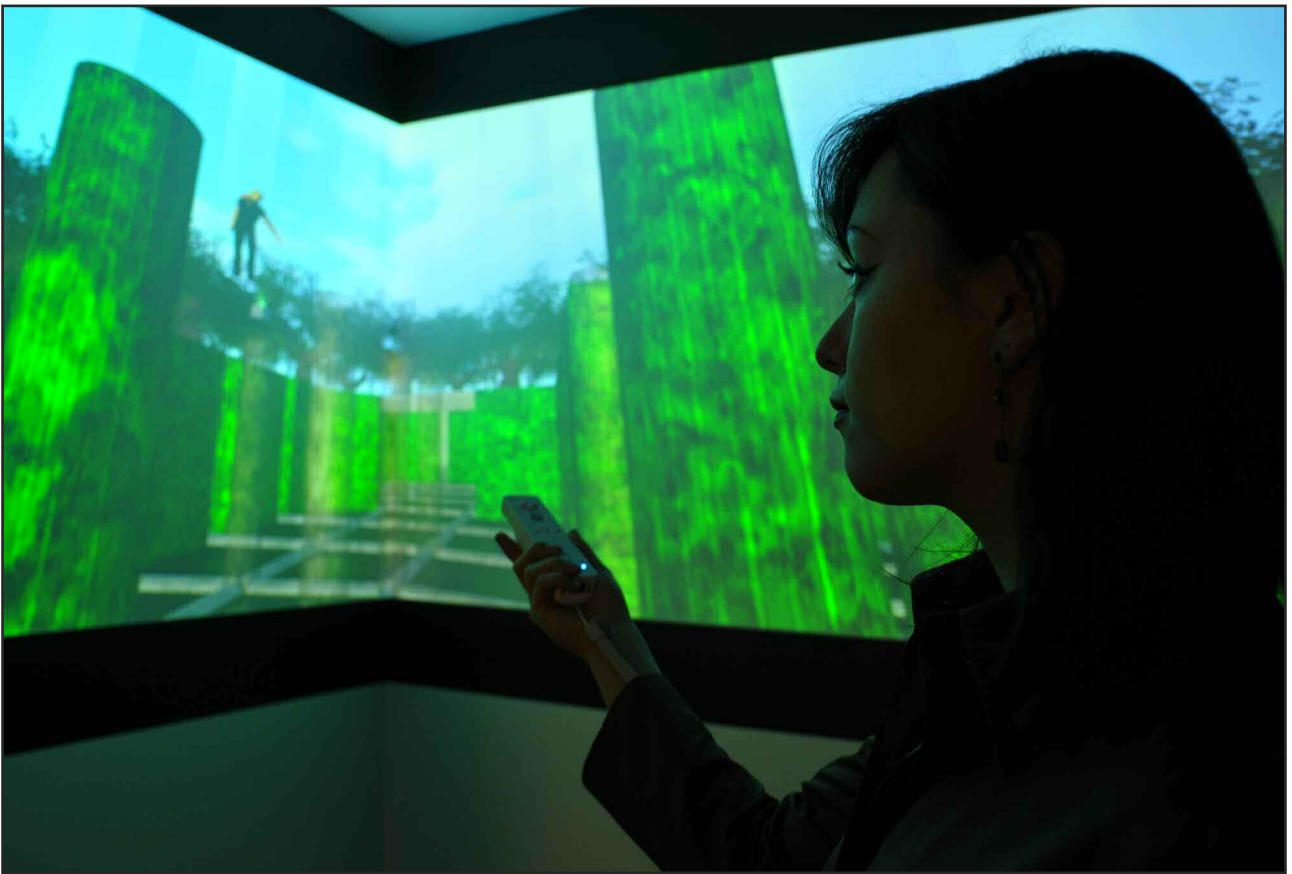
(hardware) Custom-built PC linked to dual HD projectors and a 2.1 audio system. (software) Current versions of SL WindLight client and QuickTime. (user) Six degrees of freedom control via a Wii-mote.



[portrait of the Puppet (right)]

[view from the Puppet's eyes (below)]





[installation views: controlling the Puppet]

NETWORK: realm of the doll

The fundamental barrier defining the two distinct realms within the world is more than just a division of space. Traces of the world's history linger on its surface as time unfolds within the virtual expanse. It is a living boundary that reflects the dialogue between the visiting avatars and the puppet's masters. These memories are not aggregated by the barrier; it is only a receptacle for data streams and information flow.

The agent of this process is yet another entity that exists within the surrounding world. Residing in a space hidden from avatar and puppet alike, a figure rests atop a simple cube as if in contemplation. Its body, stripped of all human essence and free from any influence, contains no consciousness. It is a doll within the world - an object within the metaverse. It serves as the collector of memories and the recorder of histories. All that venture within its encompassing view are captured and remembered. Fragments of time are overlaid into the world while a recursive mechanism echoes and reinforces moments from the recent past. These recollections, like the network that transmits them, are never constant and forever shifting.

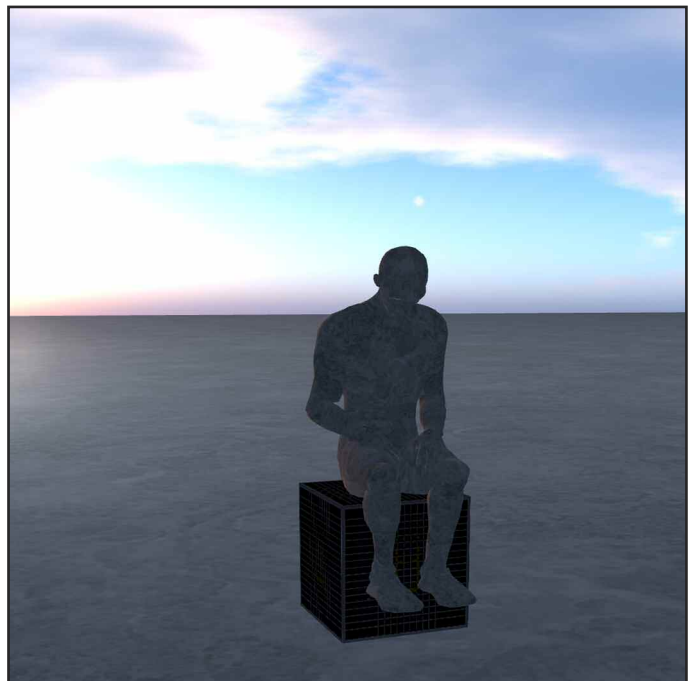
A real-time Internet artwork

Requirements:

Computer system with Internet browser (Internet Explorer 7 and Firefox 2 recommended), Flash 8+ plug-in, color display with $\geq 1024 \times 768$ resolution and stereo audio.

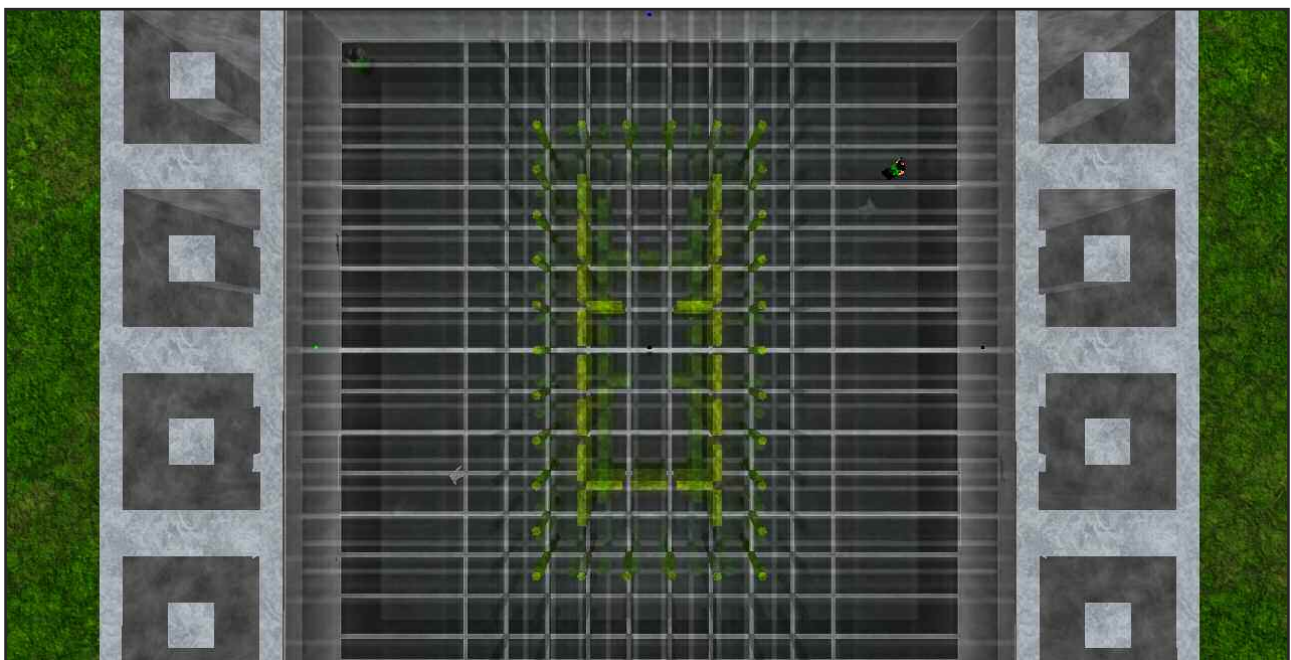
Permanent URL:

<http://www.turbulence.org/Works/vitruvianworld/vw.htm>



[portrait of the Doll (right)]

[view from the Doll's eyes (below)]



The Vitruvian World

<http://www.turbulence.org/Works/vitruvianworld/>

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[academic research, SL modeling and programming]

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[network design, server-side programming]

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