

## William Blake and the Study of Virtual Space

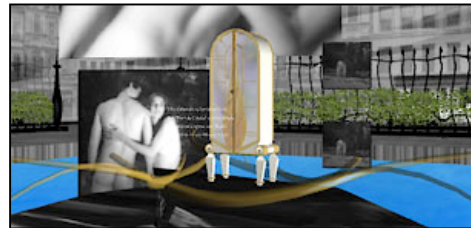
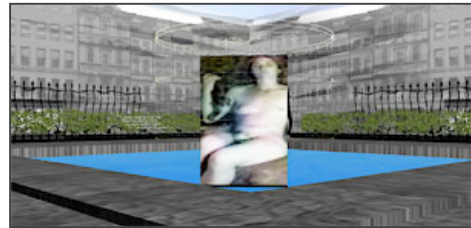
### *Adapting the Crystal Cabinet into a New Media*

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**Key Words** – Virtual Reality, Web3D, William Blake, Crystal Cabinet

#### **Blake and the Cabinet**

The Virtual Crystal Cabinet could be described as a series of three-dimensional, digital installations, as works of virtual sculpture that blends poetry and architecture, or as a single immersively illustrated page. Its simple goal is to tell a story and to share wisdom. Like traditional stories it, on the surface, follows a single narrative thread and no amount of mouse clicking changes the outcome. Users typically do find new relationships, new philosophic truths when they revisit the Virtual Crystal Cabinet. Like traditional stories, this ability comes from the conceptual density of the work. Credit for the deep philosophical undertones and for the effective merger of multiple modalities comes from the Crystal Cabinet's author, 18<sup>th</sup> century romantic poet, William Blake.



*(all images are from the Virtual Crystal Cabinet)*

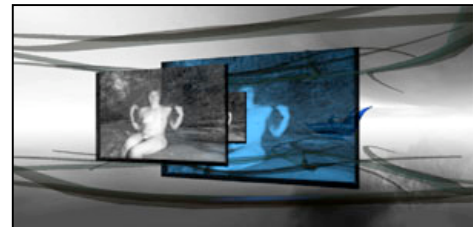
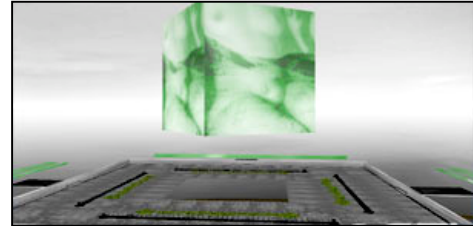
More than anyone before or since, William Blake merged poetry, illuminated images and philosophy into a unified vision of the world. His books, each written, illustrated and published by Blake himself are harbingers of the dynamic multimedia expressions we, two hundred years later are just beginning to explore. To look on one of his works and to view, read and attempt to comprehend it, one must accept Blake's invitation to see the pages as an immersive environment and be able to process it on many levels simultaneously. In this sense, the multimedia poetry of William Blake forms an effective beachhead for the exploration of virtual space.

#### **Adapting the Illustrated Page to Illustrated Space**

The process of adapting Blake's poetry into three dimensions begins with film theory. Film theory holds that the filmmaker is, within the boundaries of the screen, in complete control of time and space. This allows the filmmaker considerable power to deliver a narrative story. In contrast, the designer of virtual space is in complete control of only space. Through the use of space, the virtual designer negotiates time with the user. Because of this, every element within the virtual space has a direct or indirect association with time. In realistic looking spaces, pathways and walls directly imprint the designer's concept of time upon a space. As in game theory, color, sound and animation lure the viewer through space. The break

from game theory stems from the fact the underlying game narrative is more often than naught is a narrow goal of salvation achievable by the correct series of mouse clicks. Unlike game theories tightly programmed use of time, Blake's work demands a more open way of thinking about spatializing narrative.

Blake pushes us further, beyond realistic looking space and into a visionary landscape of his four-folded space. Creating this effect requires more than a single expansive environment of realistic space can deliver. To break space and guide time we turn to literary tradition. The narrative of Blake's Crystal Cabinet is arranged by stanza. Extruding this into the Virtual Crystal Cabinet, its seven stanzas operate in parallel as individual conceptually focused environments as well as building blocks within the larger philosophic structure. The navigation structure is two-fold. For ease of reading, a simple set of forward and back buttons appear after the manual navigation mode is selected. The default setting however, is based on Blake's own philosophy that a persons actions shape their environment in ways beyond their own comprehension.



To accomplish this and still ensure a coherent narrative, the Virtual Crystal Cabinet employs a series of sensors that track the viewer's motion and direction of viewpoint. The primary narrative content is located in the center of the virtual space. After the viewer has entered the center, explored the narrative installation and exited does the next virtual environment emerge and replaces the earlier one. Subtle changes in sensor combinations keep this effect from being obvious. Were it obvious, the viewer would comprehend a level of control over the space that is, in terms of the narrative, unwanted. Space that is under the control of the user becomes dependent on the user for its rationale for existence. Space that is deemed an environment exists by definition beyond the control of the user.

The Crystal Cabinet's seven stanzas forms a superstructure upon which the story elements can be interwoven, imagery can be overlaid and deeper themes of Blake's philosophy can be embedded. Modalities mix and merge. Virtual text, imagery and animation meet classic graphic design techniques such as the effective use of screen real estate and the moderating tones of Japanese color theory. Hidden images and religious symbols run throughout each stanza producing effects both subtle and dramatic: apples and gardens invoke Adam's fall, a flame transmutes into a leaf then into a wave and passions ebb and flow from a pleasant Surrey Bower to the cityscapes of Blake's London.



## In Conclusion

Virtual space offers a unique opportunity to fold meaning and metaphor inside an explorable environment. As this is not what most people are accustomed to, we have pulled our content from an earlier artist, poet, and visionary in order to help set the stage for a greater understanding of the medium. The Virtual Crystal Cabinet is not a game; it is poetry that surrounds, a painting become journey, a realization of the philosophy of William Blake.

## Technology

The work shown is created in VRML, Virtual Reality Modeling Language. A VRML plugin is required, also the RealPlayer plugin. Two VRML plugins are listed. (Experience with VRML is recommended)

Choose the **Contact plugin** if you have a Pentium 3 PC & you do NOT wish to view other works by Mr. Guynup. The **Cortona plugin** requires a faster PC (Mr. Guynup's work is developed for it). **Cortona** has a Mac version, but it works very poorly for this very complex project.

Audio **RealPlayer** - <http://www.real.com/>

VRML **Contact** - <http://developer.blaxxun.com/download/index.html>

VRML **Cortona**- <http://www.parallelgraphics.com/products/>

Virtual Crystal Cabinet (Contact Version) [http://www.pd.org/~thatguy/crystal\\_blaxxun/index.html](http://www.pd.org/~thatguy/crystal_blaxxun/index.html)

Virtual Crystal Cabinet (Contact Version) <http://www.pd.org/~thatguy/crystal/index.html>

Other works by Mr. Guynup <http://www.pd.org/~thatguy>

## **Authors**

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One of the most controversial developers of virtual spaces in the world, Steve's works confront ideas and issues that represent the bleeding edge of three dimensional design. A seven year veteran in Web3D, he has presented at SIGGRAPH in 1998,1999 and 2000, won awards from Blaxxun and the Contact Consortium, and recently worked with 1996 Ars Electronica winner Andy Best on his Iceberg Project. Currently he is pursuing a PhD in Communication at Georgia State University.

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An assistant professor in 18th century literature in Georgia Tech's School of Literature, Communication and Culture, Ron is a boundary breaking scholar. With technical skill and a wealth of knowledge he uses the new media not to reinvent or reinterpret the past, but to reestablish it. He holds a PhD in Romanticism and Literary Theory from the University of Florida and a Masters in British Literature from Boston College.