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Virtual Translations



Katie Brill
ARC 505 | Fall 2010
Robert Svetz | Susan Henderson

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Glossary of Terms

- Reality
true; not merely ostensible, nominal, or apparent. existent or pertaining to the existent as opposed to the nonexistent.
- Virtual
immaterial- thoughts, associations, beliefs, or ideals that form the actual
- Actual [AR]
existing in act or fact, current, or present, that consists of experiences and sensations.
- Digital
available in electronic form; readable and manipulable by computer.
- Virtual Reality [VR]
virtual implications of the immaterial accessed through a digital medium.
- Cyberspace
The electronic medium of computer networks, in which communication and interaction takes place.
- Potential
a latent excellence or ability that may or may not be developed
- Possibility
capable of existing, taking place, or proving true as an investment that has little growth potential.



Summer 2006: with the advent of my freshmen year of college approaching, faster than I anticipated, fears of alienation and isolation trickled unwillingly through my mind. Stranded alone in an environment of strangers, not yet belonging to the intricate network of students on campus seemed far too unwelcoming and overwhelming.

Immersion into the **virtual realities** of our digital technologies creates potential for dynamic interaction and performance.

The virtual world of Facebook first began to break through the boundaries of my self-contrived fears of isolation. On this social networking site, the RA, the resident advisor for the floor of my dorm, set up a 'group' through the site that allowed everyone to meet online before the actual move-in. Before I knew it I had formed virtual friendships with people I'd soon meet.

Activities induced in **virtual reality** can influence activities and happenings in **actual reality**. Significant events happen in these environments of VR that produce meaningful and important consequences in AR.

Familiar faces, and interests founded in VR, preempted meetings and activities in dorm life. The double loaded corridors of the dorm with its cramped rooms pressured us from our computer screens to reemerge into the reprieve of the common room where activity flourished. Facebook had been the mediator, its interface allowing for the exchange of identity and information not immediately available in an actual, face to face meeting.

Certain characteristics of **virtual reality** allow for activities to only happen there, activities that cannot happen in an **actual** environment. This creates opportunities and advantages to negotiating the relationship between VR and AR to influence more dynamic **situations** and **spaces**.

My second year met with quite the opposite experience. No one was pre-connected through a site like Facebook. The floor remained passive and isolated from each other. no one entered the common room except as a private retreat. Its significance and existence went mostly unused or misused. The isolation between one another ultimately left the actual space of the common room obsolete.

Although Virtual Realities, like the example of Facebook, have the ability to activate particular places of actual space, its absence is not the reason a space will fail. Because a public space exists, such as a common room, does not make it public if people have no reason to go there.

In the first example, the VR scenario gave us reasons to use that space. In the second example, there was no immediate reason to meet, nor was there anything to instigate this interaction. Without the proper medium to prompt the need for a public space in the dorm, the common room as a public space failed.

- What are the potentials of these environments of virtual reality to create reasons to not only use a space, but influence how it can be designed?



Introduction to content

- Part I sets up the distinction between the concepts of the virtual and actual and how they are intricately related to producing experiences that define our spaces. Virtual Reality [VR] is a concept that has developed alongside digital technologies. It brings the potential of the virtual into the possibilities that the digital environment provides. As digital technologies improve, more and more time is spent immersed in these VR worlds.
- As more activities find themselves manifested behind digital screens, there is a loss of activity in actual spaces. It has destroyed the attachment to these physical places, or even the need to inhabit them. But this immersion in VR has also produced a more dynamic environment of activities and networks. The capabilities of VR extend beyond those that our physical environment can provide.
- Part II highlights important conditions of the performative qualities of VR, such as how identity is shaped and transforms boundaries of public and private spaces. These conditions of VR actually have significant repercussions in our physical space. VR is not destroying our attachment to these physical spaces, but rather it is providing another medium to experience and activate them.
- Part III examines the ambiguity and transformative condition of VR. It distinguishes between VR as simulation and VR as a performative device. Constant's New Babylon and the Situationists of the 1960's provide a parallel condition to discussing the transformative qualities available in VR.
- VR has the potential to stimulate significant activities that will somehow influence actions in AR. One cannot remain completely immersed in the extravagance and fantasy of VR. Part IV considers what it means to reemerge back into our physical environments. These activities performed in VR will carry themselves into the experiences of AR.
- For the reemergence to successfully generate activity in the physical space there must always be a strong relationship between VR and AR. They must continually be affecting activity in one another. Part V culminates in this distinct relationship, and how it can be applied to design. As a designer, we should think about how activities in VR can influence relationships in AR and vice versa, and how we should design the space to accommodate.



"Through the ubiquitous interegration of digital network technologies in physical space increasingly questions physical spaces' roles as the fundamental model for ordering human experience and as the primary architectural medium."²⁸



The Virtual, the Actual, and the Digital

What is real?

We define reality according to experience. The sense we make out of the world has little to do with actual objects and material attributes but rather how our abstract notions determine our sense and experience of them.

These abstract notions, [the virtual] better described as that of imagination or intuition, construct how we identify tangible sensations and experiences [the actual].¹ This intricate relationship between the real ideals of the virtual and the real experiences of the actual are essential in defining reality.

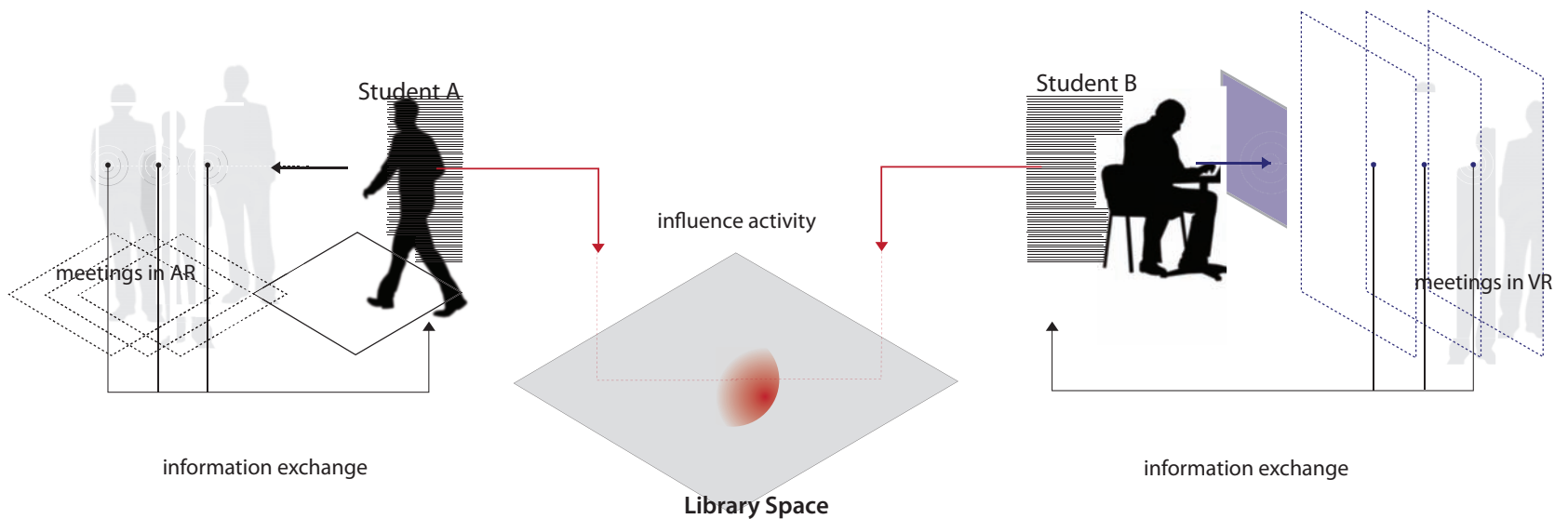
However, conflicting notions about the 'realness' of the digital environment [virtual reality], have influenced whether or not we take seriously the variety of significant activities happening there and how they are actually affecting our physical environments. Technology has always evoked new representations of reality.

A) A student, approached with a research topic, has the need to acquire sources and information to begin. Through various conversations with peers, or meetings with professors, this student is able to construct an idea of what to search for in a library. These meetings effect how the student proceeds to use and navigate the library space. This interaction and exchange of information may influence who they meet up with, how they isolate themselves, and how the space is activated from their presence.

B) Another student approached with the same research topic, instead posts the discussion, through a VR site, on a 'blog'. He receives responses, opinions, and sources to help from multiple contributors across the Internet. This exchange of information and the collaboration of these contributors affect how the student will then proceed to use the library space. This interaction and exchange also influences the activation of the space.

Which situation is more real? While student A had meetings in actual space, and student B collaborated behind the screen of the computer, both proceeded to interact in the library space in a similar way. Here the VR world becomes a real space of information exchange and collaboration, as real as the spaces the first student met with people face to face. Activities can be "real without being actual, and ideal without being abstract."²

Real activities are taking place in VR, similar to how the blog was used to network sources. They cannot be dismissed as irrelevant. And so happenings in these digital environments do not become real when brought into our actual, physical space, but must be considered as real all along. In understanding this relationship reveals how they translate back into actual spaces.

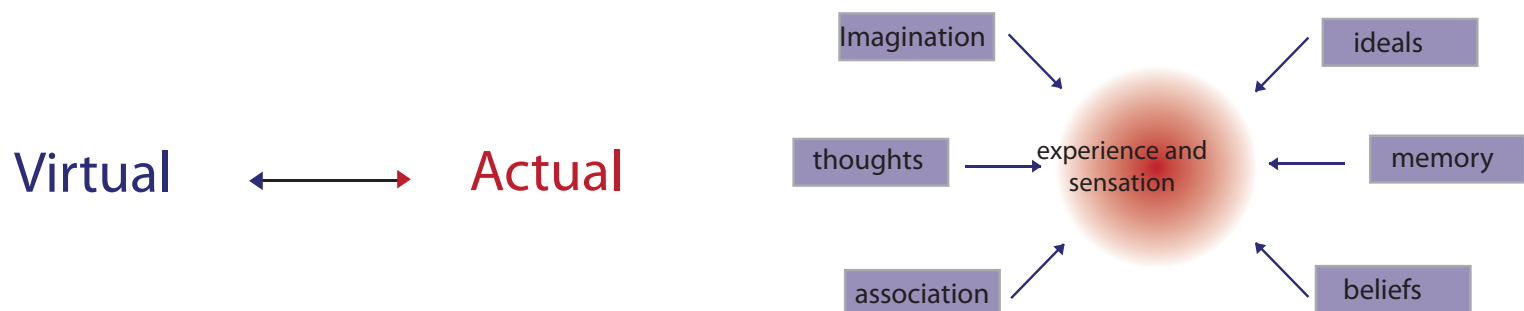


Between the Virtual and Actual

In understanding how the virtual shapes reality, it must first be understood that it is NOT virtual reality. The concept of the virtual can be more simply understood as the manifestation of thoughts, imagination, intuition, and beliefs. Individuals may share similar ideals, but ultimately it is the application of our unique thoughts that reflect how we experience the world. It is a tensile situation, self-varying and transformable. How one person experiences a space may not be how another person experiences it.

If thoughts and ideals define the virtual, then their translation into sensations and experiences construct the actual. Brian Messumi, in his essay *Line Parable for the Virtual*, following that of Deleuze, insists on a distinction between the actual, the possible, and the potential as an integral part of any thinking of the virtual.³ The virtual as an ambiguous condition presents numerous **potentials** to actualize. Therefore, the actualization of an object, space, or experience is directly tied to the existence of the virtual.

- Assuming that every reality is constructed by this mediation, our experience of space depends both on our imagination and the techniques we develop to translate them.



“A winding path follows the banks of an artificially created lake, forming an itinerary that grows in accumulated experiences and images. An evocation of famous literary journeys of intertwined with the natural history of the Stour Valley, evoked in the statue of a river god, and an artificial grotto on the lake’s distant shore. Architectural monuments across the landscape evoke and commemorate incidents in national and family history.”⁴

Stourhead Gardens, Wiltshire England, Henry Flitcroft, 1775

The picturesque in English garden design of the 18th century presents multiple examples of how designers manipulated the potential of virtual thoughts to produce meaningful experiences in actual space. The gardens of Stourhead, designed by Henry Flitcroft in 1775⁵, have various artificial constructions that attempt to evoke sensations and associations. For example, the classical reference to a river god, will evoke the grandeur and fantasy of antiquity. This will then provoke similar sensations within the space of the garden, using the association of virtual memory to construct a particular experience. The designers concerned with the picturesque were aware of the potential of drawing on associations and idealizations to promote their design. They incorporated structures and landscapes specifically to achieve results

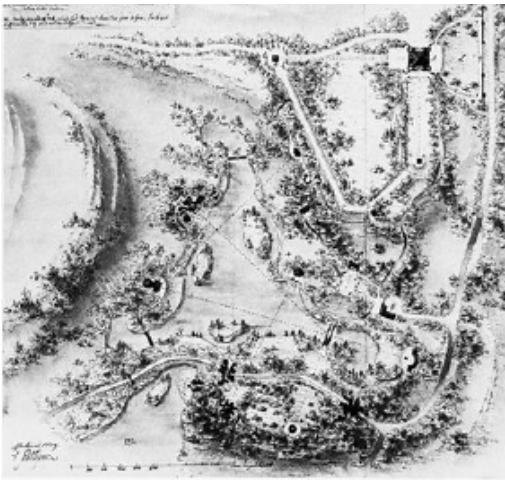


Figure 2: Plan: Stourhead Gardens, Wiltshire England. 1775 by Henry Flitcroft. The plan was designed continually evoke pleasurable experiences to enhance the inhabitation of the space.



Figure 3: bridge at Stourhead Gardens, Wiltshire England. 1775. Every view was constructed with precision to create points of interest that would immediately draw attention and evoke sensations.

V association
and memory

A experience
and sensation

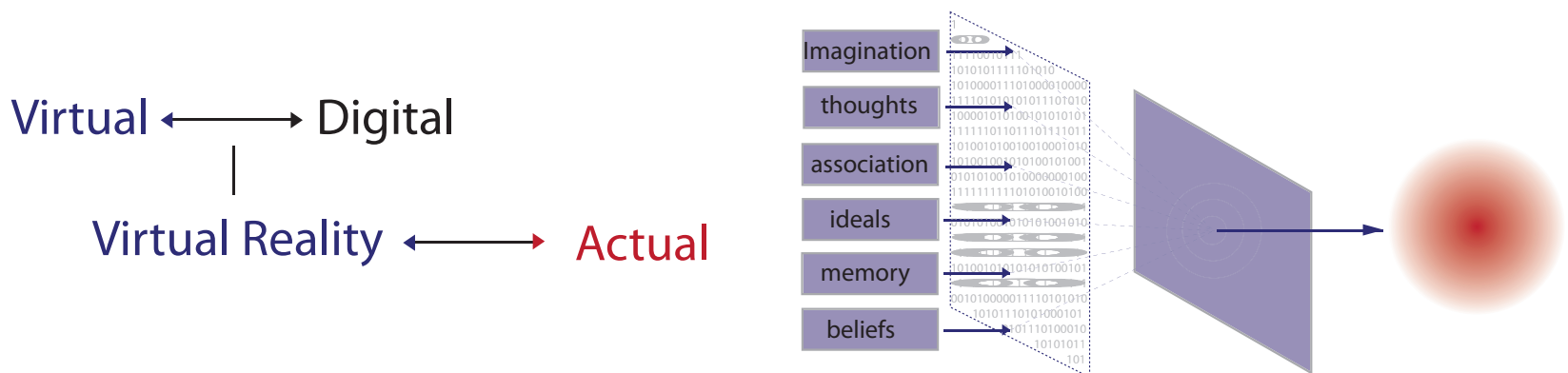
Cyberspace and Virtual Reality

“Nothing is more destructive for the thinking of the **virtual** than equating it with the **digital**.”⁶

Messumi, following his description of the relationship between the virtual and the actual, contrasts this to the integration of digital technologies. Commonly, the term virtual has been misused in its association with computer and digital devices. Just because it is within a computer does not make it virtual. Messumi equates the virtual with **potentiality**, which is in opposition to the static nature that is the machine; the computer, the cell phone, the I-pod. Essentially, these digital devices are highly systemized and codified.

The actions of machine are neither intuitive nor imaginative. The structured order and regularity of its components do not lend themselves to the ambiguous transformability of the virtual. “The medium of the digital is **possibility**, not virtuality, not even potential. Digital coding is possibilistic to the limit.”⁷ The overall computational efficiency has developed with the advancement of technology, and within these digital devices, the effective space, time, and material available has been increased. With this expansion, it creates many possible futures and instances where the **potential** of the virtual can be integrated.

Virtual Reality as cyberspace is a concept that was born with the advent of digital technologies. When William Gibson (1984) coined the word ‘cyberspace’ to describe an information space, he was referring to the immateriality that the concept suggested, a ‘consensual hallucination’⁸



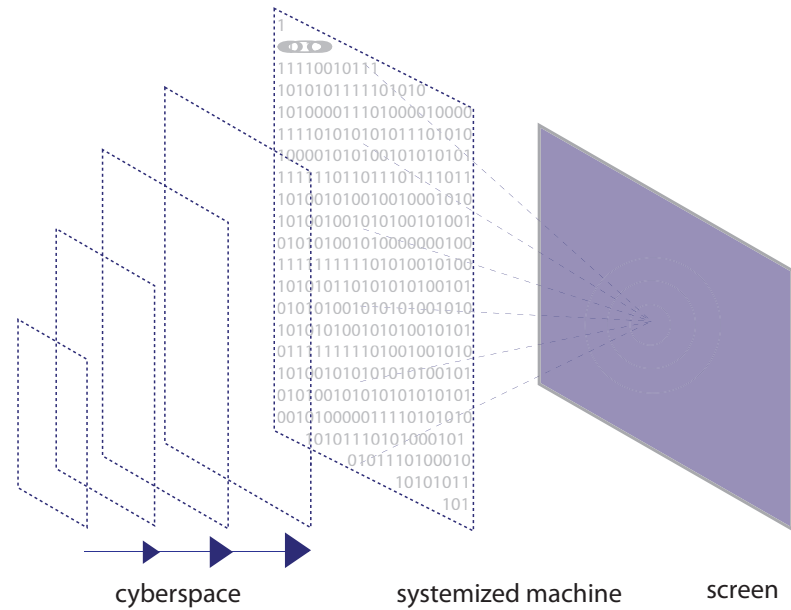
Cyberspace is usually nothing more than a representation of space. What can be understood, beyond the screen, are limited to the capabilities of the digital source. The notion of space identifies with a certain degree of ambiguity; that of 'the space of the screen,' 'space of the imagination,' 'outer space,' cosmic space,' and literal, three dimensional space. The virtual environment as cyberspace is a place for the body to inhabit a dematerialized world.

Screen space⁹: screen culture inhabits neither place nor ground, it is fragmented and dislocated. It operates on a surface that is ephemeral and mediated. The screen itself as a two dimensional surface does not exist as an abstraction of something real, rather it fronts the machine of a computer that simply has the capabilities of rendering representations of something real.

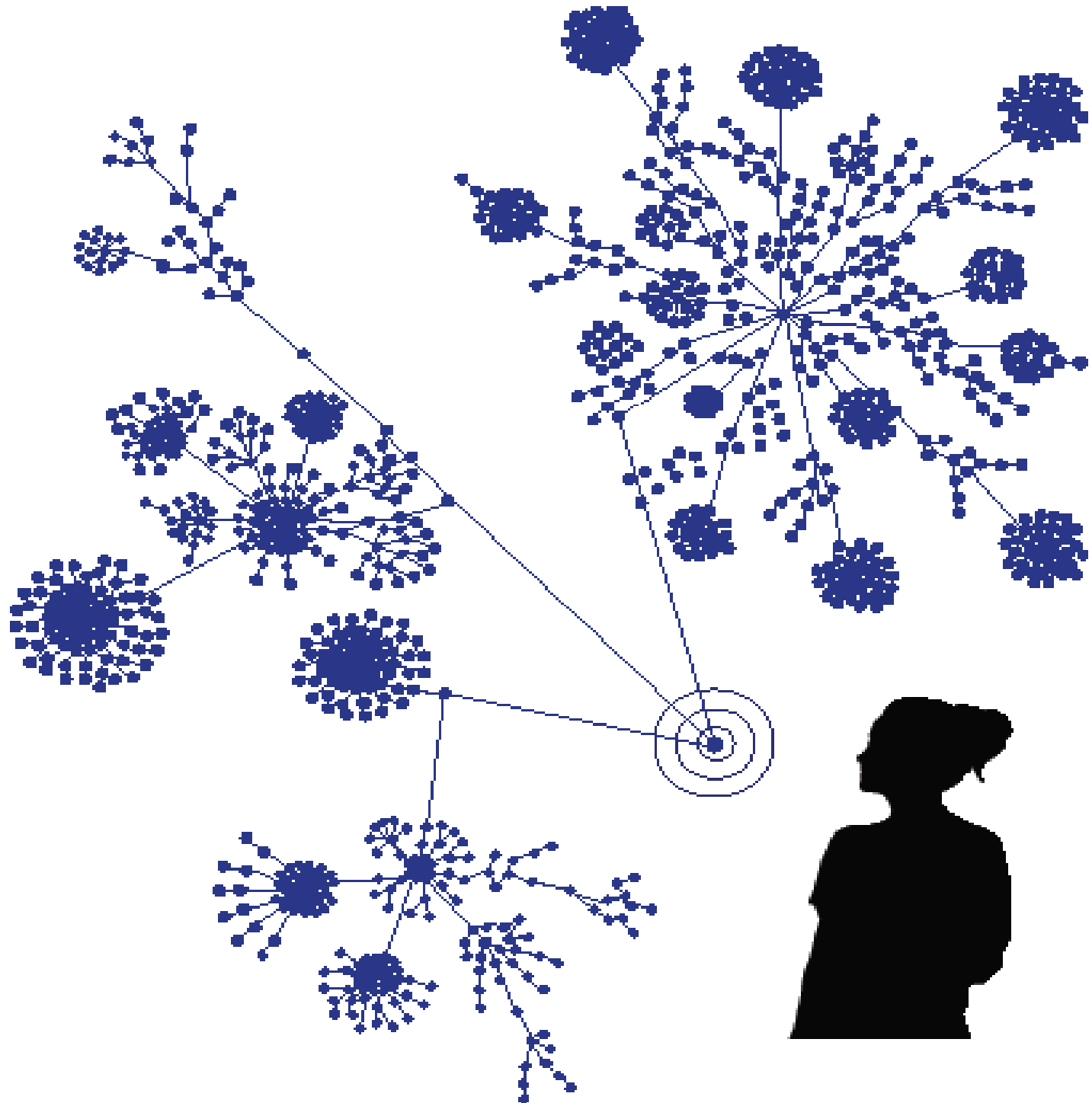
Virtual reality within cyberspace is nothing more than what is seen through the screen. This kind of interaction of the virtual landscape navigation is rapidly moving onto the Internet, giving cyberspace the appearance and feel of being not just a place to inhabit, but a place to navigate, to move forward though, and in the process, to command and control.'

Screen Space

The rapidly increasing capabilities of the machine are providing more possibilities of operation and development. These include the speed of the processor, the graphic qualities and capabilities, and the ability to produce realism. These are all highly systemized and codified options of development and have no place for intuition or imagination.



- The growing possibilities of technology have increased the network potential of cyberspace.





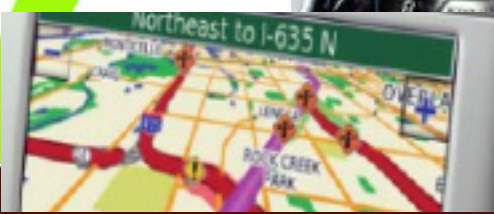
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GOOGLE

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University of Phoenix
Thinking ahead.



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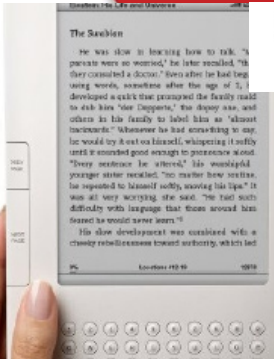
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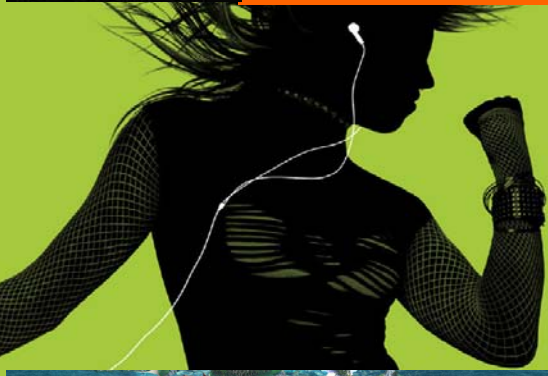
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The Exodus into Virtual Reality

Into Cyberspace

Increasingly we are spending more and more time in cyberspace, immersed in our virtual realities. This departure has given rise to issues of the loss and abandonment of physical space. These places of interaction and gathering have now relocated themselves into instruments like cell phones and computers. As technology develops new ways of emergence into the digital, there is a disappearance of the use of physical artifacts and physical spaces. It has been re-appropriated into the digital.

The demand for specialized sites of information work, such as the office cubicles, library, computer clusters are diminishing. Devices exterminate not only the artifact, but affect how people pay attention to these spaces. Has what we do in VR become more important?

Apple's I-Pod touch website heads with 'There's an app for that. Hundreds of thousands, actually.' The thousands of I- phone applications available are creating infinite potential to access our environment through digital technologies. There is even an application now for cashing checks, no need for a trip to the bank. ¹⁰

Websites like E-bay and Amazon have brought new meaning and accessibility to shopping. They cut out the circulation of perusing around the shopping malls for items; a click of a button presents multiple products for selection. With another click, they are purchased. Amazon now has an easy one-click application that immediately sends the order to be shipped. Easy purchasing methods such as this has increased the speed of consumerism and changed its boundaries. ¹¹

September, 2010 Blockbuster filed for bankruptcy. Sites like Netflix, Youtube, and Veoh have made this space obsolete. Commercialism and consumerism migrate into VR. ¹²

Collaborations in the music industry have led to the new phenomenon of VDJing or the Virtual Disc Jockey. Here musicians from all over the world can collaborate and create music, even throwing concerts on the internet. This form of music has no need for spaces of performance beyond the individual computer screen. ¹³

The University of Phoenix, DeVry University, and American Inter-Continental University are all top, accredited online universities. College degrees can be earned from in front of a computer screen. Traditional campuses and classrooms are unneeded. ¹⁴

We allow the digital to dominate. Instruments of spatial and temporal displacement enable new and socially valuable combinations of people. The real world will experience loss, but it will also be challenged to change. Rather than despairing at its loss, it is more advantageous to resign to the fact that this is where people go, this is where they spend their time, and this is a place of significant happenings. As a designer of space, it is important to understand all venues for activity and interaction, and what it can mean for activating and transforming a space.

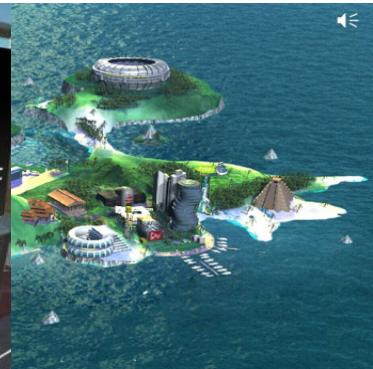


Figure 5: Translation into VR

“These computer- Generated worlds are not localized topologically. They are genuinely placeless. By shrinking time-space distance by dissolving the physical presence of place where events occur, they recruit their players beyond the social, factual, spatial, and time boundaries. This is a possibility that actual space, on the grounds of its structural mass alone can never provide.”¹⁵

In each example, the migration into VR has transformed or destroyed some aspect of existing spaces. Although attention and interactions in actual spaces are being reduced, they still present beneficial situations. For example although online colleges have eliminated the social aspects of college life and the space of classroom, the benefits of an online university provide more accessible and convenient ways of education. Virtual DJing provides a new source of collaboration from across the world while video and consumer sites provide convenient outlets of access.

- “We bring true public life around with us in our cell phones, i-pods, and kindle books”²¹



Identity

“My body is one and several. I change identity with the **click of a keystroke**”¹⁶

Virtual Reality and advances of the Internet has completely restructured the role of identity and interaction. It has changed how people can portray themselves through the intricate network of the connections.

The *'brain coats'* designed in correlation to the Blur building by Diller and Scofidio warp conventional identity and interaction. It changes the relationship between portrayal and perception. The proposed coats have information coded within them that transmit responsive colors depending on who is near and if there is shared affinity or antipathy. When two people share similar identities they glow orange. However, if they are opposite they appear blue. This design relates to how identity interacts in virtual reality. The ability to display different kinds of identity to people can change how interactions take place. It allows information to be shared within a space that would not be recognized by just passing by. There is also an expanded awareness of others within the space.¹⁷



Figure 6: Diller and Scofidio, Blur Building, swiss national expo 2002, Yverdon-les-bains, Switzerland

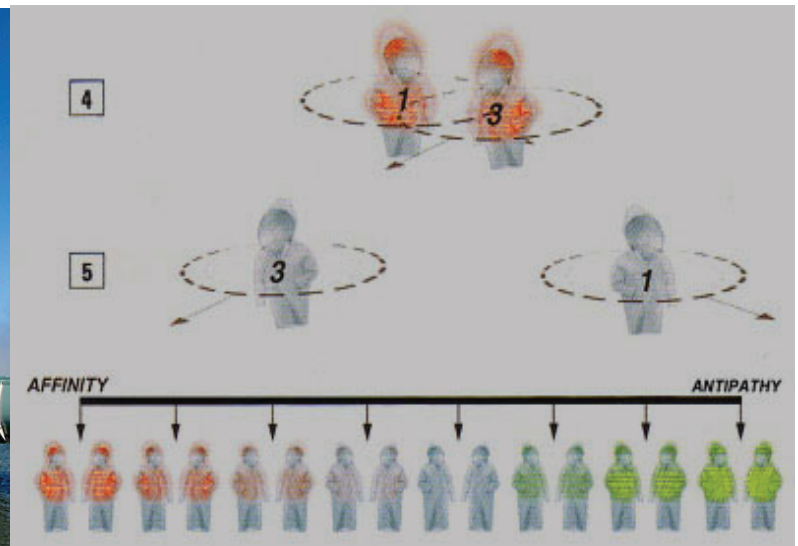


Figure 7: Diller and Scofidio, Brain Coats, swiss national expo 2002, Yverdon-les-bains, Switzerland

IMPLANT Workspace Unlimited

IMPLANT, a museum proposal by workspace Unlimited, is part of an ongoing investigation into the immaterial architecture of material flows within physical space. It impacts notions of self, place, and identity. Online visitors explore the space through a game, which creates links and information paths based on their identity that translate to a display back in the physical museum space. The activities and circulation flow of visitors in the physical museum also get translate and displayed back in the virtual reality world. Each visitor narrates their own space. ¹⁸

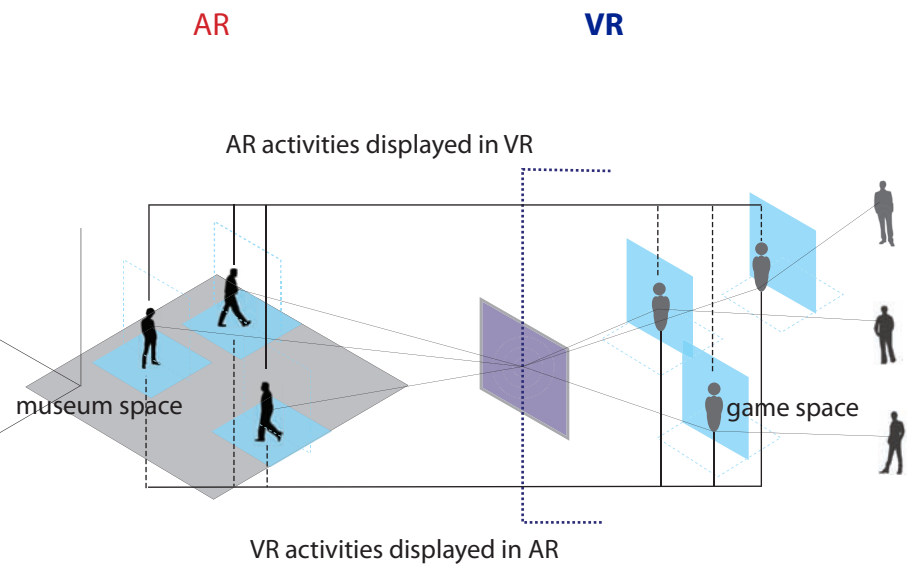


Figure 8: IMPLANT by Workspace Unlimited is the concept for the Cultural Center in Belgium 'Vooruit'.

"A good, or convincing idea, or an entire personality, may spread to neighbors at the speed of light. Boundaries of personal identity are fluid, arbitrary and subjective, as strong and weak interconnections between different regions rapidly form and dissolve."¹⁹

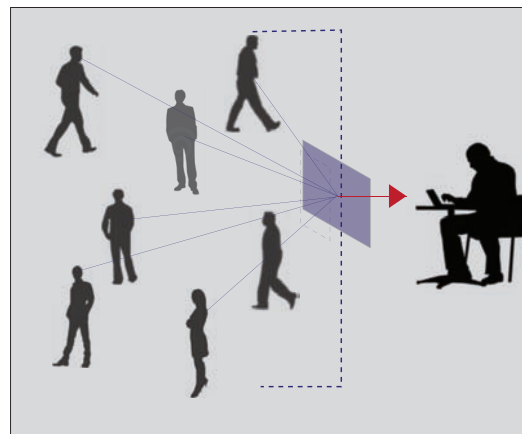
Social networking sites like facebook make identity and information more available to others. An entire personality could be displayed on a web page, as well as interests, beliefs, and tastes. Here, virtual reality has enhanced the ability to portray and connect to a more public audience.²⁰

Online games of multi-user environments create a different way to display identity in virtual reality. The game second Life, published by Linden Lab in 2000 use 'avatars' to represent players. Avatars do not display information to others but rather creates a flexible and artificial way to interact. Any identity or information exchange stops in virtual reality, and never completely reveals the person behind the screen, unless allowed.²¹

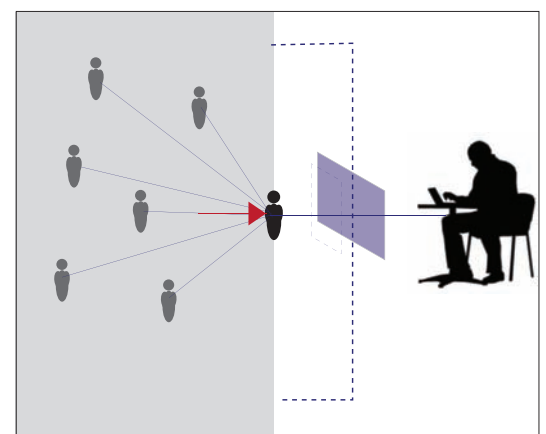


Figure 9: Facebook start page

Figure 10: Second Life, Linden Lab, 2000



Facebook display



Second Life anonymous

“Virtual reality is more powerful, more adaptable, than conventional engineering techniques. We need to embed the user in the system. We need rules, tension, and reward in order to embed the user in the experience. And the users, too, need an individual measure of provocation, conflict, and validation.”²⁰

The digital medium is restructuring how we shape identity. Advances in the technology of the digital have pushed the boundaries and capabilities of the mind to spatialize virtual reality as well as identity within it. However perceived identity in the digital world reflects a completely different experience than perceived identity in the physical realm. Instruments of spatial and temporal displacement enable new and socially valuable combinations of people and activities. The internet has provided a viable source for the potential of interaction and information flow as a manipulative device to reveal more information or less.

- This disconnect from the body has both negative and positive repercussions. **Virtual reality** allows for more control and manipulation.

Space of Public and Private Transformations

The ever expanding, continuously on-call individual, becomes another kind of interface, forever screening, filtering, ignoring, accepting, and repressing the plethora of inputs, information and demands for action that absorb his or her private space and individual time. The borders between what we know as private and public have collapsed.

Public space

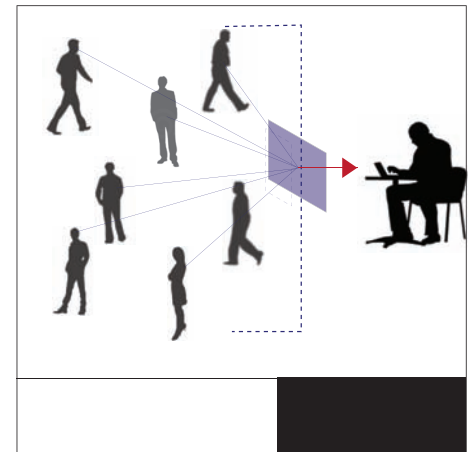
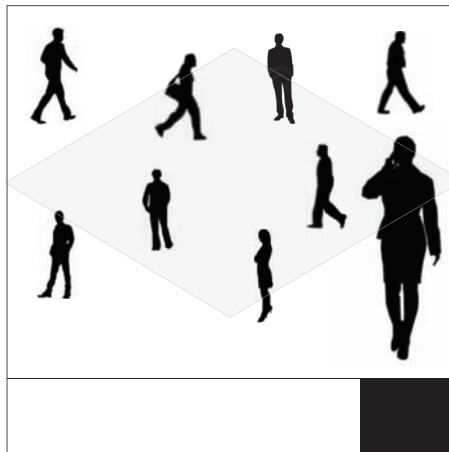
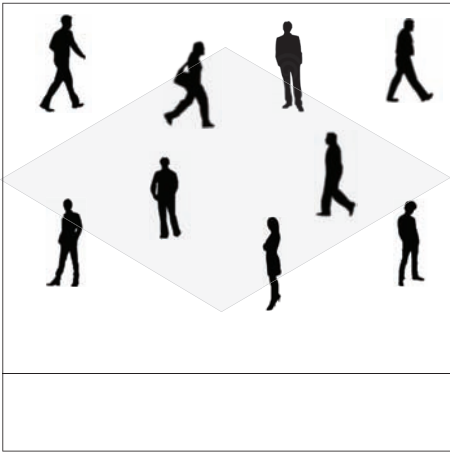
Public space with private cell phone conversation

Public information share of networking sites within private room

Private occupation of a room with avatar interacting in public network

Private occupation of room with public network connection

Private occupation of room

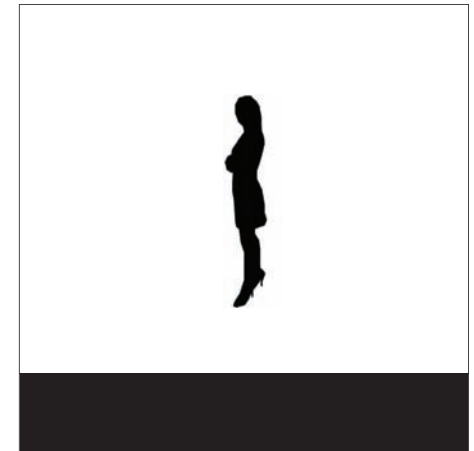
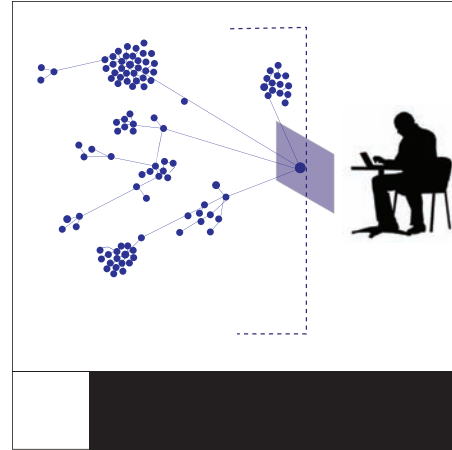
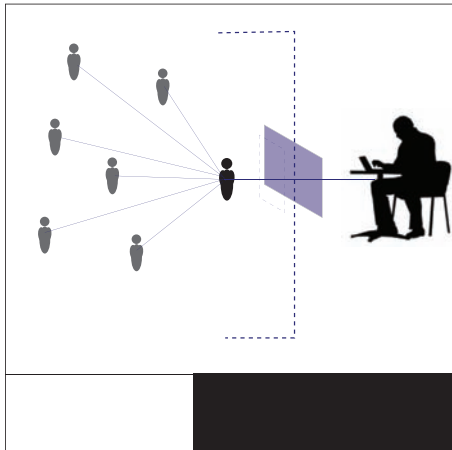
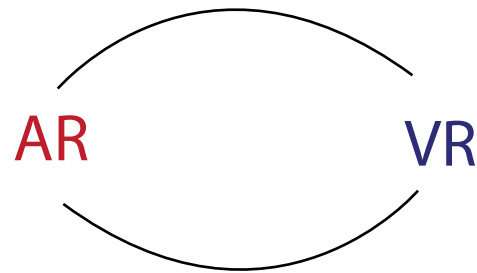


PUBLIC

AR


VR

"Cities in the past evolved around piazzas and market places, where most social and economic activities took place. Unlike these meeting places of the past, the spaces of online game worlds, which host from dozens to millions of citizens, do not require physical urban facilities. Here there is a variation of social interaction and agents in the games"²²



PRIVATE

AR



I like to connect to people in the virtual world, exchanging thoughts and ideas,
when in the physical world we might never have the opportunity to cross paths.

DEMI MOORE, Twitter



Imaging vs. Imagining

“Grant and I were apartment hunting, driving down every weekend from San Francisco, without a place to stay in Los Angeles. We sniffed someone's personal WiFi at the corner of Washington and 9th and though homeless, we found a home base in an unfamiliar city, returning to that location throughout the day. That corner of 'public' space morphed temporarily into 'our' space, creating an invisible home for our home-searching activity.”²³

The networked relationship to virtual reality creates a continuously updated re-investment in content. It allows access at any point in space. This ambiguous, transformative condition allows it to follow 'real time'. As just simulation, static images, and representations on a screen, it is not transformative. Activity in VR must exist alongside the activity in AR to create reiterative influences and relationships. The relationship fails if the connection between them is ended, or becomes static.

VR needs to extend beyond representation. It is not enough to simulate space and activity. For example, today architects may use VR programs to simulate walkthroughs of project proposals to convey the space and experience to the client. Although this tool may effect how the client originally perceives a design, the relationship ends when the simulation ends. Because the project proposal does not have a deeper, more networked reliance on VR, it will not continue to induce feelings and activity for that space.

New Babylon

Architectural Utopias from the 1960's like Constant's New Babylon or Archi-grams plug-in City accentuate architecture's transformative potential. New Babylon was an example of a user-influenced transformative environment. Its maze-like arrangement of spaces were supposed to create more interesting and significant experiences of movement. The ambiguous way the space was arranged and responsive would continually create new paths of exploration and experience.²⁴

Situationism

Situationalists of the 1960's such as Dubord's idea of the *derive* had a similar approach to the ambiguity of experience. As a combination of chance and conscious choice, moving through a city would allow for many ways for experiencing a place.²⁵

"The absence of joy is the biggest threat to our society."²⁶

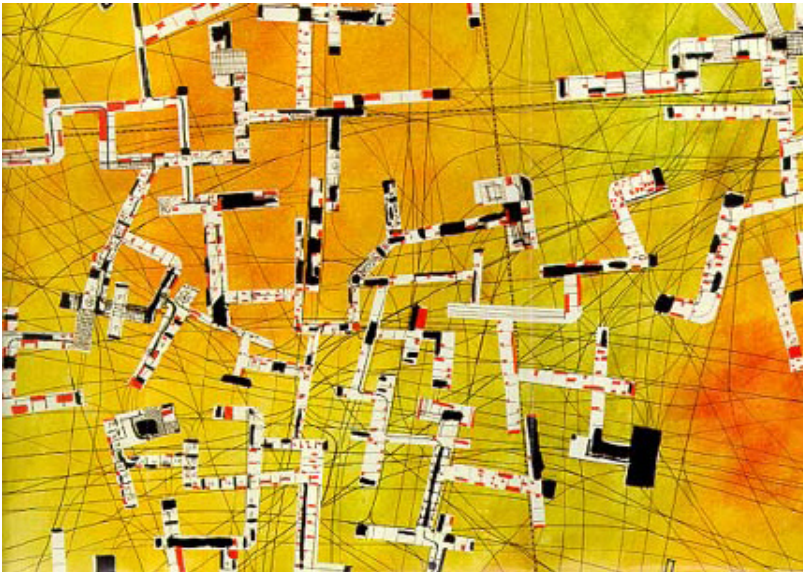


Figure 12: Collage plan of Constant's New Babylon 1960

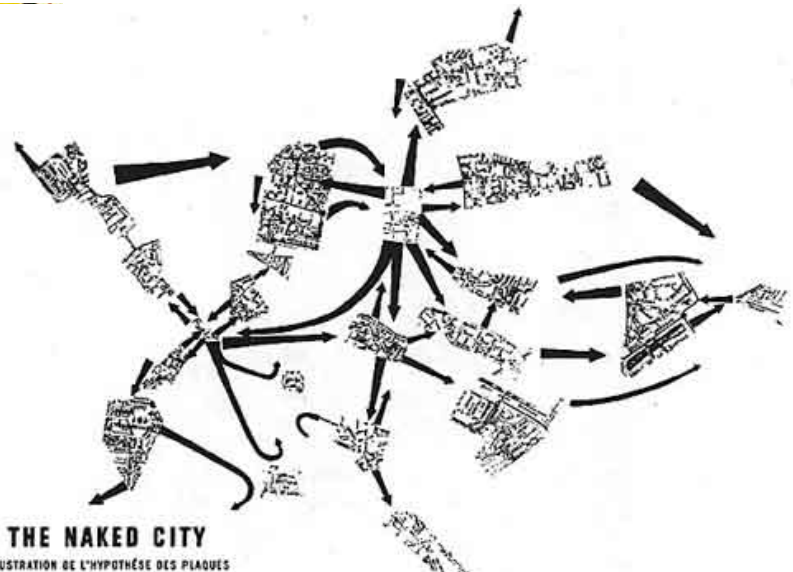


Figure 13: The Naked City, Guy Dubord, 1959.

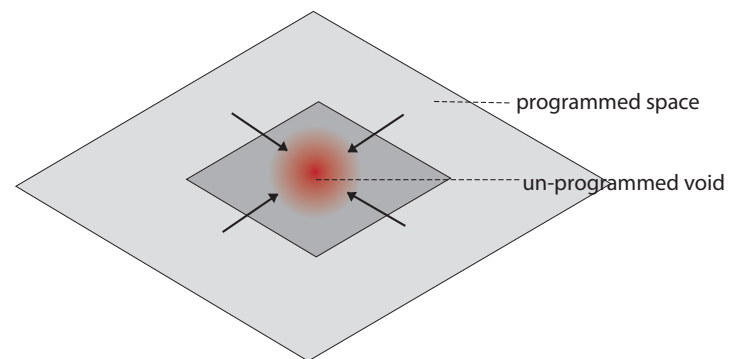
"Architecture is not simply about space and form, but also about event, action, and what happens in that space"²⁵ Bernard Tschumi

School of Architecture Marne La Vallee

Bernard Tschumi's proposal for the School of Architecture at Marne La Vallee in France is organized to generate activity and spontaneous conditions of interaction. All the rigorously programmed activities including studios, classrooms and offices are on the periphery. They surround an unprogrammed void. The void is meant to encourage unanticipated and spontaneous events since the circulation must pass through it. As a space of transparency the void acts to reveal various dynamics at work. The spatial potentials accelerate a cultural or social transformation already in progress.²⁶



Figure 14: School for Architecture, Bernard Tschumi, Marne La Valle, France

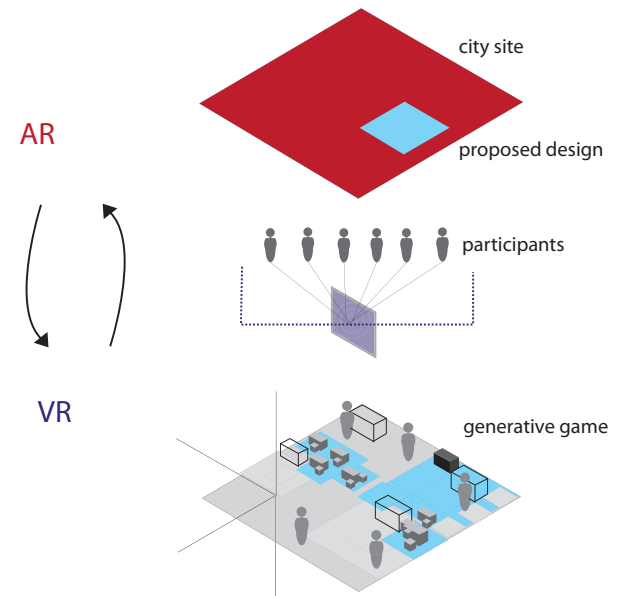


PlastiCity

Aslops suggestion of replacing two of the most prominent buildings in the geographical center of Bradford with a lake was highly controversial. The response from the city created many opinions. He used this urban planning provocation as a driving idea for designing a game, PlastiCity²⁷, to influence design. The game lets residents of Bradford experiment playfully with the city they live in. The encourage players to change the city in a cooperative way with other individuals in the game. Players can click on buildings, move them, and change them based on individual discretion. However, it was hoped that the residents would provide solutions that would benefit everyone.



Figure 14: PlastiCity, Alsop Architects, Bradford, England.



Military Simulation

The Internet has had a transforming impact on the United States Military in its exploitation of the power of distributed knowledge such as VR environments. With intelligence organized in easily accessible databases allows for a shift in training procedures. They are turning to gaming as this new training tool.

Strategy and tactics games have been modified for operational planning such as Jane's Fleet Command.²⁹ Many of the commercial game engines are being modified and adapted to create scenarios and simulations of effective users. These games are not concerned with winning or losing, nor so they attempt to teach weaponry, or accuracy. They have been appropriated to promote leadership, test intuitive reactions, and interaction scenarios with comrades. It is affecting how they then interact with each other, and how they explore, and approach environments.

Many of these scenarios can not be accomplished in AR training facilities or perhaps not as effectively. What is accomplished in these VR facilities will influence real combat reaction and strategy. This creates effective results due to the fact that there is a reason to play to influence events in actual environments.



Figure 16: Military Simulation



Figure 17: Military Simulation, Jane's Fleet Command, 2006



"Entering cyberspace is like entering the space of the tea ceremony."³⁰



Reemerging

“The tea ceremony cultivates the sights and sounds of nature, of running streams and falling leaves, the feel of rocks and the scent of flowers. The contrast I have in mind comes from the gentleness of the Japanese tea ritual. This sharp contrast to the explosion and hyperactivity of the internet begs us to import the tea ceremony into Internet culture. The internet calls for design projects that translate the depth, refined rhythm, and the strong sense of place achieved by the way of tea.”³¹

In Michael Heim’s essay *Virtual Reality and the Tea Ceremony* declares that cyberspace should become like the Japanese tea ceremony. This juxtaposition of the zen, tea ceremony as natural and peaceful to the dynamic extravagance of VR worlds seems an unlikely pairing. As the intensity of technology and the internet creates a world of explosions of dynamic, hyperactive space it accelerates a tempo for life. Heim equates Cyberspace as dynamite. Soon enough, however, even the veteran Net surfer grows tired of speed thrills and choppy surfaces. The need to reemerge out of this intensity eventually surfaces.

Just as the tea ceremony is a meditative tool, Heim seeks to find peace within VR. The reemergence into AR must create a similar feeling of relief and contentment. Although the extravagance and infinite networks available in VR are addicting and immersive, we cannot stay in VR forever. Often the rapid succession of boredom in VR forces a need for departure. In the relationship between VR and AR, all activity should not be pushed to VR, but rather there should be a reason for reentry into the physical environment.

The extravagance and beauty of VR worlds can leave the feeling that AR is lacking. The increasing persistence for realism in computer design create beautiful environments of fantasy and utopias.

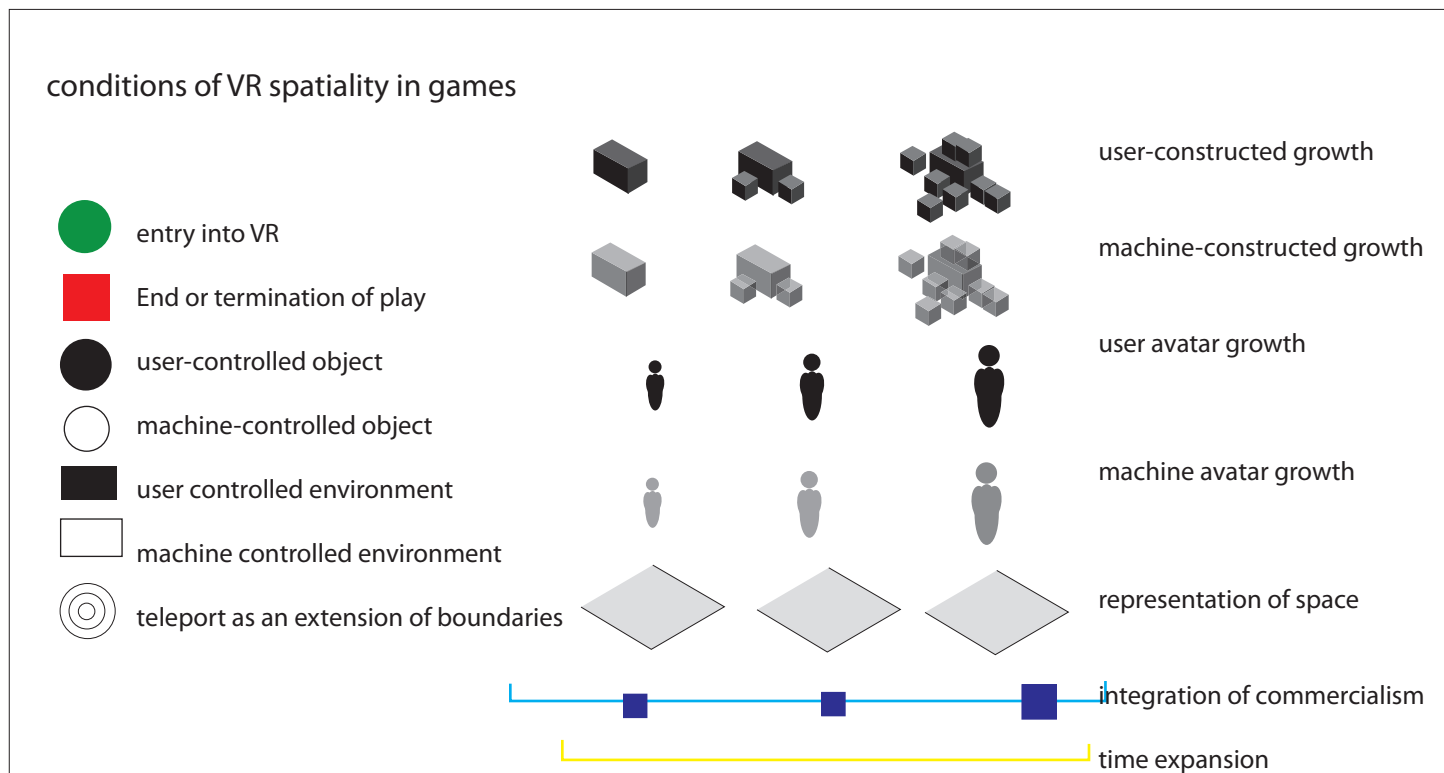
The immersion in these parallel worlds can often lead to addiction. In game worlds new identities can be taken on that allow the player to fulfill their fantasy. Site like Facebook make player continuously return to see what everyone is doing, thinking, and posting. VR is a provocative tool to provide play and suspend reality. The VR extravagance of the gaming industry is both a cultural and commercial phenomenon that has been pushing the potentials of user immersion. Pervasive games allow for things like politics, commercialism, and social networking to cross the boundaries between the actual and VR. As people become more immersed, there is a push for these outlets to find their way in. There is an elusive balance between fantasy and a commitment to the real world.



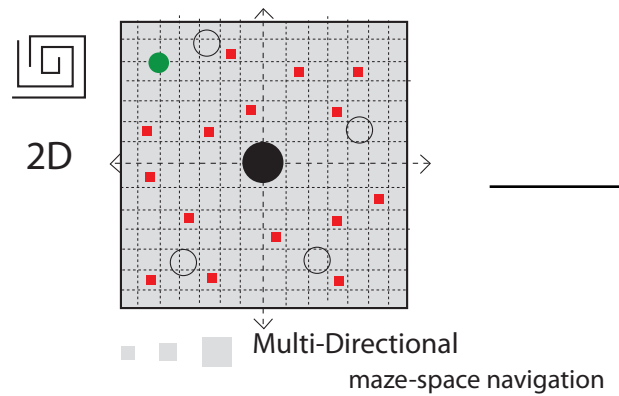
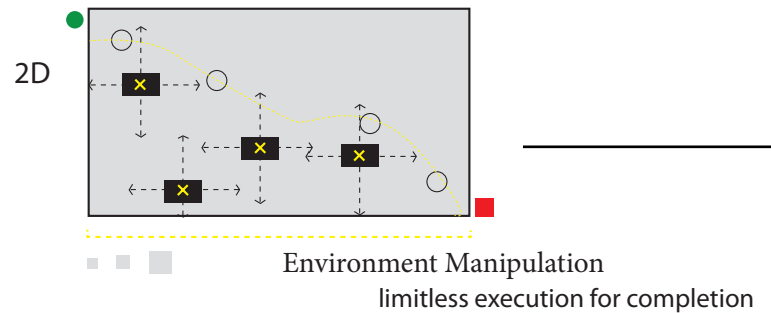
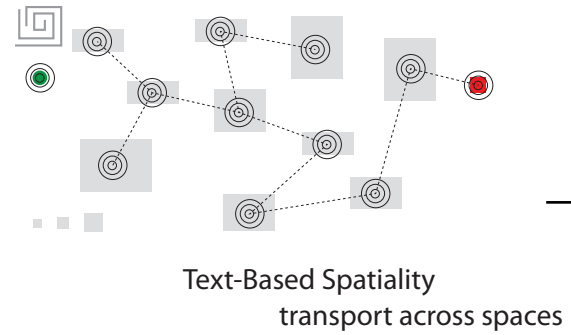
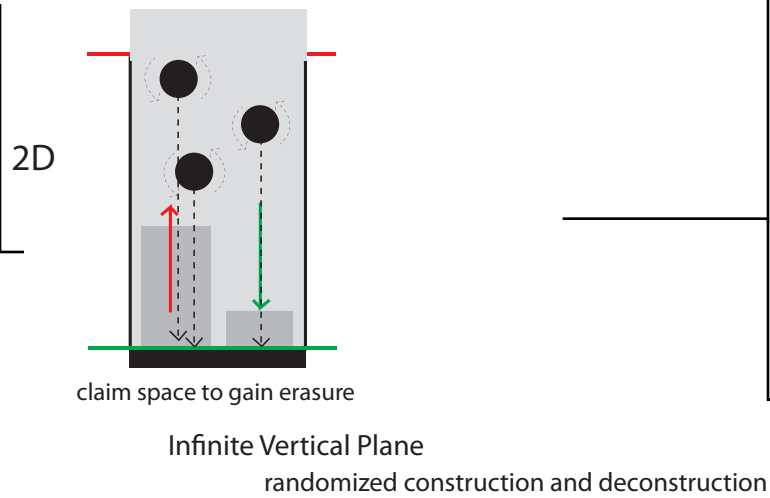
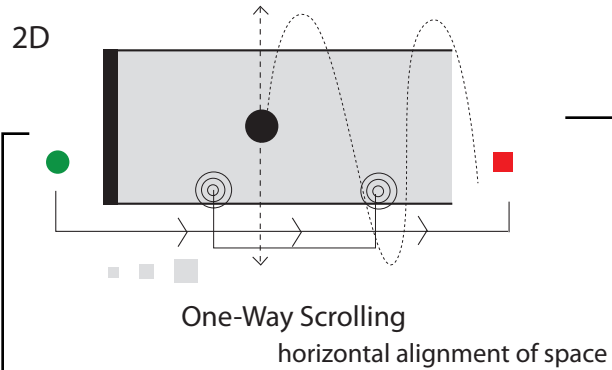
Figure 15: Daniel Dociu, Crescent City

What counts in the end is what we take back from immersion into our real lives. Virtual worlds must not be a replacement for reality, but a **contribution** to it. Ultimately, play affects our reality, and the real world informs our play.

Gaming technologies have developed for social and commercial ends. More than just play is integrated into design. With the competitive market for games, there is a need for more and stronger external stimuli to create a world where to immerse ourselves in. Immersion is about being in the moment. We can achieve a relieving loss of self-consciousness and transformation of time in a believable artificial environment. The interdisciplinary approach of cross-breeding games leads to interesting outcomes of pervasive activity.



Development of Agents of Space in Games



2D

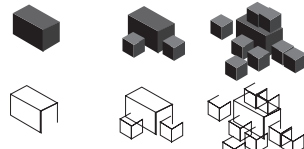
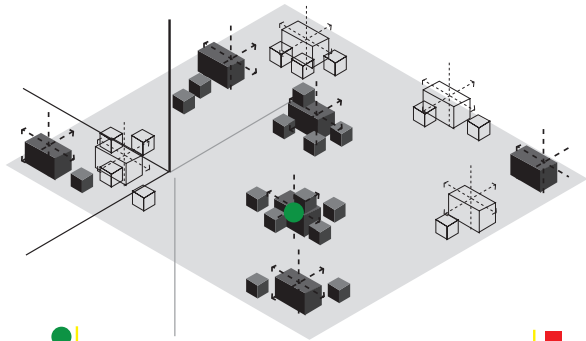
one-way movement

multiple screen spaces

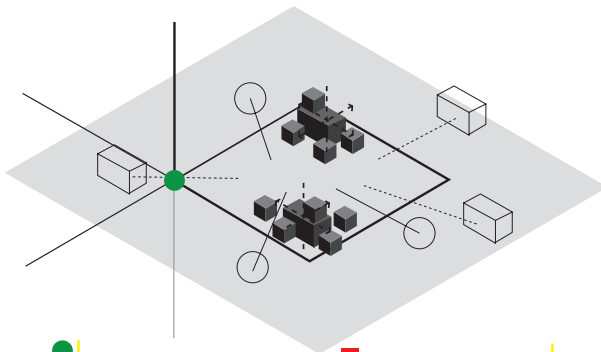
multi-directional

single space screen

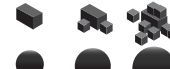
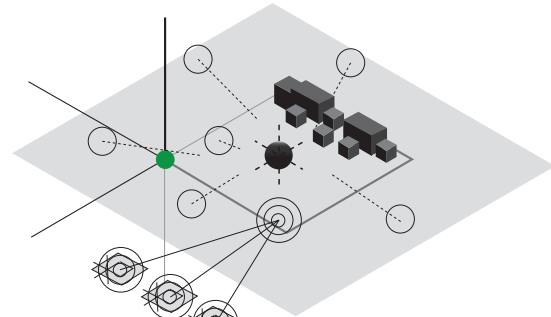
environment manipulation



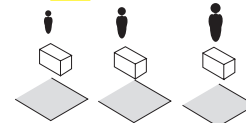
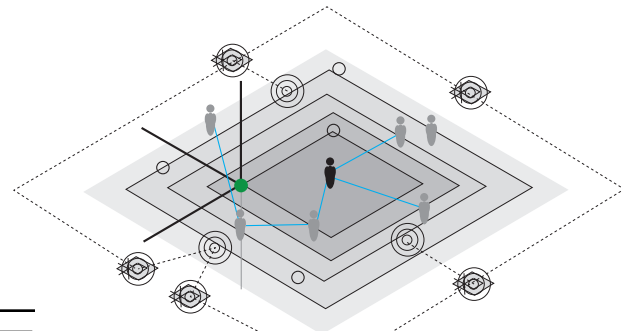
Iterative Development
 long term goals and shorty term objectives
 regenerative space



Planning Culture
 design and manipulation



Suburban Utopia
 introduction of 'avatar'



Expansion of Space
 continuous expansion

regenerative environments

avatar
 constucting environments

real time play

multi-user play

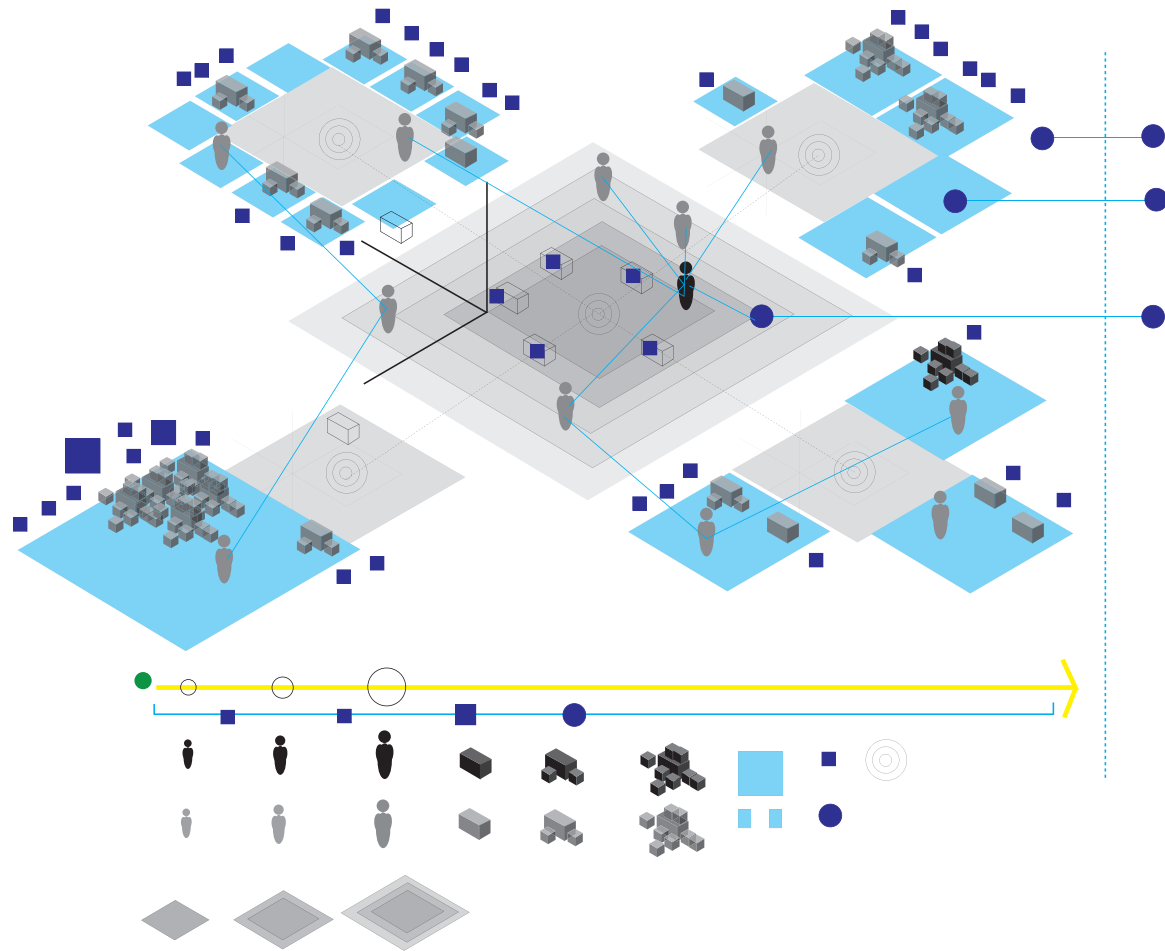
3D

Civilization 1991

SimCity

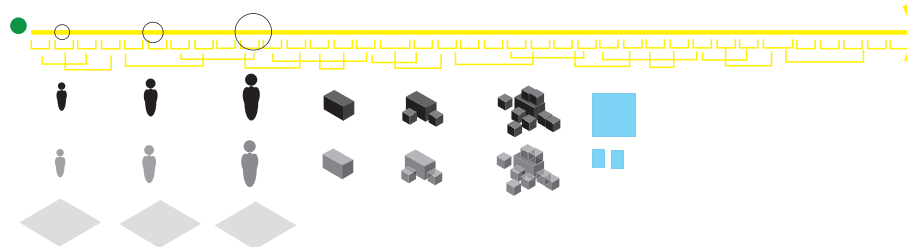
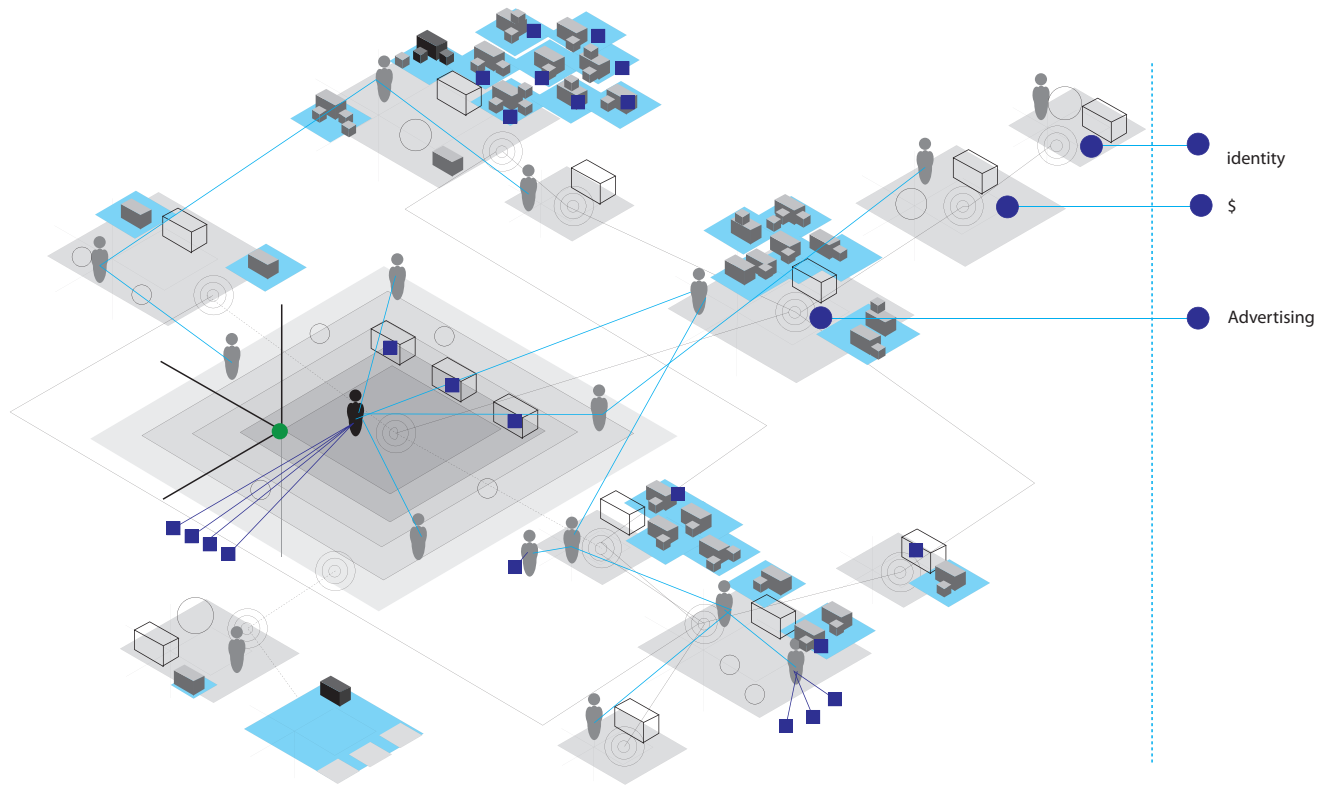
The Sims 2000

Lineage 1998



Second Life by Linden lab has developed into a complexity that combines elements from previous games to produce a highly transformative, lucrative, and addictive environment. It integrates various agents of interaction that cross the boundary between VR and AR space.

4D real-time play



Play in virtual reality has reached its height in Project Entropia. Here the extension of user interaction, manipulation, and growth is continuously expanding. Players can even buy VR real estate and make real profit from the extensive in game economy.





Conclusion

Virtual Reality can act as an agent of change in our experience of the world, in our interactions with each other, and in our use of physical senses. It extends across time, movement, and spatial perception, a constantly shifting organism that defines space and interactions within it. To succeed it must create and re-create itself incessantly. With VR, any environment has the potential to become a new point of interaction and of storytelling.

Any point in space has the potential of defining a new architecture. Likewise, architecture, material or immaterial, has the potential of lending significance to any point in space. When it gains meaning, it becomes desirable to occupy. Allowing the extensive potential of VR to translate into AR will influence both design potentials and the continual activation of the space.

As a designer of space, it is important to understand all venues for activity and interaction within VR and AR and what it can mean for activating and transforming that space. I am proposing creating both a design for a VR site that directly relates to the program of AR. By looking at existing VR conditions of interaction, whether they already exist in correlation with a program or not, will help construct the conditions pertaining to specific design goals for my AR site. Also, by looking at the existing conditions, or characteristics of how the AR site is used will inform which VR conditions will be applicable.

For any dynamic relationship to exist, there must first be a distinct reason of use. The design of VR must be aware of existing reasons for occupation and activity in an AR space. No one will enter VR without a purpose. If at anytime the purpose, or desire of immersion into VR fails, then the AR will fail. In the same way, if the reemergence into AR does not contain significant reasons for interaction then it will fail.

Any program has the potential to be affected by already existing relationships between VR and AR. However, a heightened, design-specific relationship will create a more successful design that will continually influence and reinvest in the activity and interaction within.

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3) Messumi, Brian. "Line Parable for the virtual (on superiority of the Analog)". *The Virtual Dimension: architecture, representation, and crash culture*. Beckmann, John. Princeton Architectural Press, 1998.

4-5) 12) Mallgrave, Harry. *Architectural Theory volume 1*. Blackwell Publishing 2006.

In this anthology of architectural theory I am interested in discussions on the picturesque and association such as Robert Adams, John Locke and Boule.

6-7) Messumi, 308

8-9) Dyson, Francis. "Space, Being, and other Fictions in the domain of the Virtual" *The Virtual Dimension: architecture, representation, and crash culture*. Beckmann, John. Princeton Architectural Press, 1998. p28

10) Apple Store. iPhone Touch Applications. 2010 Apple Inc. <http://store.apple.com> November 28, 2010.

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14) Earn My Degree. Top Online Colleges. <http://forms.earnmydegree.com>. November 28, 2010.

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This collection of essays and video games looks at the spatial implications and developments of the virtual and how these spatial abstractions directly relate to the space of architecture and interaction. It contains different categories of video game space and what these spaces mean in relation to play, experience, and emotions.

17) Doesinger, Stephan. *Space between People: How virtual changes physical architecture*

The book begins by examining the important issues that have emerged as technology reshapes our idea of place. If architecture is the construction of space between people, what happens when that space exists in a virtual world?

18-20) Borries, Walz, Bottger, 330, 88

21) Dyson, 30

22) Borries, Walz, Bottger, p168

24-25) Sadler, Simon. *The Situationist City*. MIT Press, 1999.

From 1957 to 1972, the artistic and political movement known as the Situationist International worked aggressively to subvert the conservative ideology of the Western world. In this book Simon Sadler investigates the artistic, architectural, and cultural theories that were once the foundations of Situationist thought, particularly as they applied to the form of the modern city.

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30-32) Heim, Michael. "Virtual Reality and the Tea Ceremony" *The Virtual Dimension: architecture, representation, and crash culture*. Princeton Architectural Press, 1998.

28) Borries, Walz, Bottger, p300

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Bachelard examines how we read and experience intimate spaces and the forces and elements that are involved for understanding their significance.

Calvino, Italo. *Invisible Cities*. Houghton Mifflin Harcourt, 1978.

Marco Polo tells Kublai Khan about all the cities he's seen on his travels, which may all be the same city. His colorful descriptions reveal varying emotions and experiential events and actions of each particular space.

Hildebrand, Grant. *Origins of Architectural Pleasure*. University of California Press, 1999.

Grant Hildebrand discusses ways in which architectural forms emulate some archetypal settings that humans have found appealing and useful to survival, from ancient times to the present. He speculates that nature has designed us to prefer certain conditions and experiences.

Bachelard, Gaston. *The Poetics of Space*. Beacon Press, 1994

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Figure 1) Heim

Figure 2-3) Mallgrave, 77

Figure 4-5) website icons and technology

Figure 6-7) Doesinger, 220

Figure 8) Borries, Walz, Bottger, 330

Figure 9) Facebook.com. Facebook Login, 2010. www.facebook.com. November 30, 2010.

Figure 10) Doesinger, 20

Figure 11) Aaron Koblin. House of Cards. <http://www.aaronkoblin.com/work.html> December 4, 2010

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Figure 14) Sakamura, Ken. Hiroyuki Suzuki. *The Virtual Architecture: The difference between the possible and impossible in architecture*. Tokyo Digital, Tokyo. 1997

Figure 15) Figure 8) Borries, Walz, Bottger, 220

Figure 16-17) Macedonia

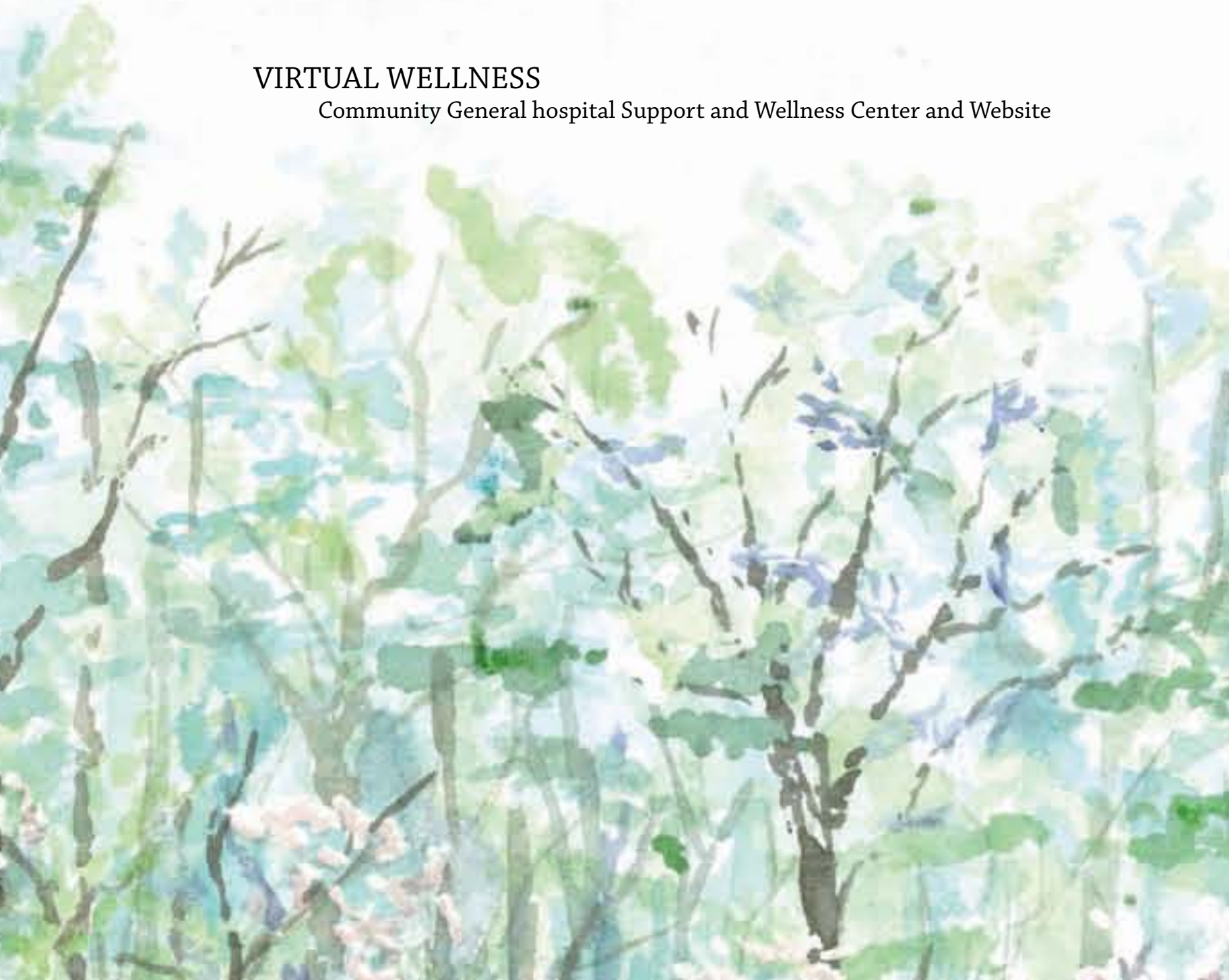
Figure 18) Heim, 156

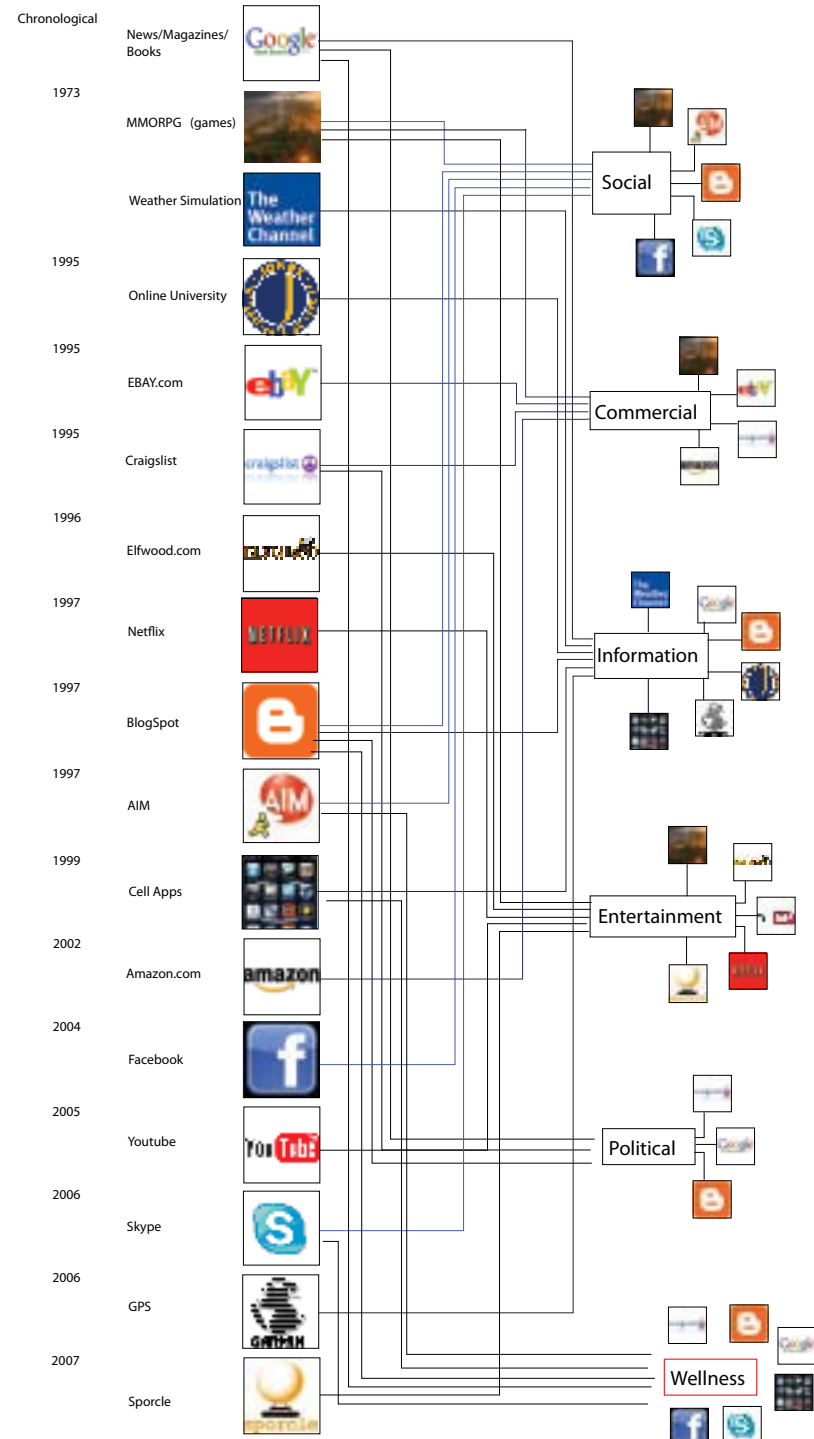


Final Thesis Presentation

VIRTUAL WELLNESS

Community General hospital Support and Wellness Center and Website





We all immerse ourselves behind the screens of our digital devices, whether it be through our cell phones, our i-pods, or our computers. They've begun to define how we perform many of our everyday activities, from the way we interact with others, to even the way we use space. Activities induced in these virtual realities influence and produce meaningful and important consequences in our physical space. When considering these virtual realities, it is important to first understand its relationship to the virtual, the actual, and the digital.

The sense we make out of the world has little to do with the actual objects and material attributes, but rather how our abstract notions determine our sense and experience of them. These abstract notions are what we consider the virtual, and are better described as that of imagination or intuition, and ultimately they construct how we identify tangible sensations and experiences, or the actual. This intricate relationship between the real ideals of the virtual, and the real experiences of the actual are essential for defining reality.

And so, the realness within these virtual realities in our digital devices, and how we imagine and image these places and websites, influence how we then actual and experience real physical spaces.

Technology has always been a provocative tool in producing extensive and progressive virtual realities. There has always been an elusive balance between fantasy and a commitment to the real world. Looking at video games and the complexities of spatial interplay within, we can achieve a loss of self-consciousness and a transformation of time in these believable artificial environments. From its beginnings of the simple 2d graphics of a game like pacman, it has developed into the extravagant imaging and depictions of multilayer complexities of today's pervasive games. In a game like second life, millions of players sign on with their avatar to interact in a highly temporal environment that is constantly reinvesting in itself and its play on a day to day, week to week, and season to season basis.

But what counts in the end is what we take back from this immersion into our real lives. Digital worlds must not be a replacement for reality, but a contribution to it. Ultimately play affects our reality, and the real world informs our play. We can no longer think about the design of spaces or architecture without acknowledging this influence, and we should be designing virtual realities and physical places to influence each other.

We all know that these digital devices allow us certain activities that could never happen in our physical spaces, like talking to someone all the way across the world. It also warps our sense of identity. Perceived identity in the digital realm reflects a completely different experience than perceived identity in the physical real,. For example, the idea of a profile page, like in the dorm story revealed more information, and things one would never mind meeting face to face. Or on the opposite side, something like an avatar projects a completely new identity that reveals less about the person.

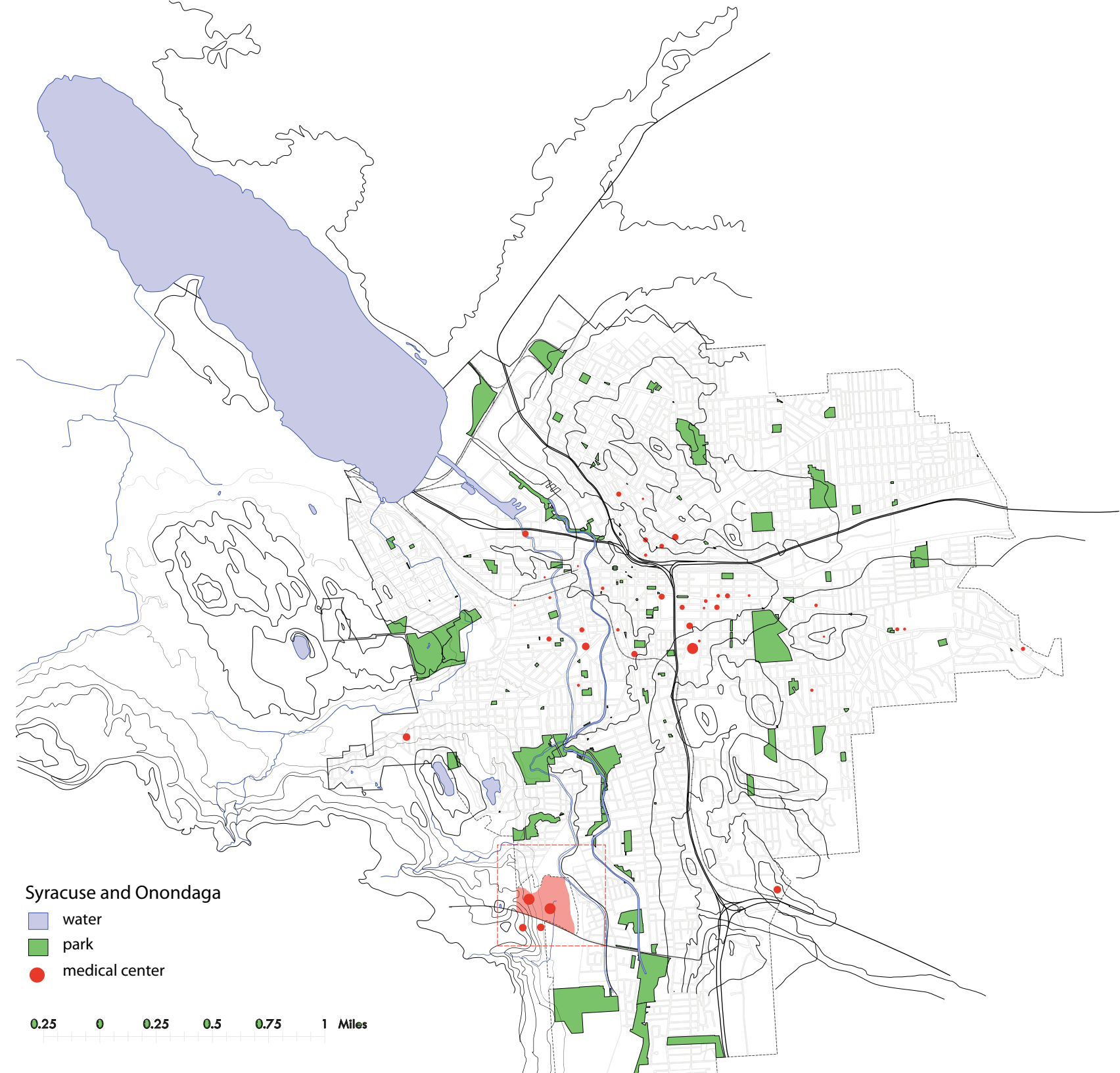
This exists within sites like facebook that affect a dorm space, but I actually chose an issue relating to health care, a support site, because of its intricate relationship to this idea of screen identity. The support site basically allows for interaction though these layers of identity, through blogging or chat rooms, but also reflects how the architecture of the physical support center should be designed to accommodate certain experiences, associations and programs.

A common thread across these sites is the consensus, that although its great to share information, there is always the unfulfilled want to meet face to face. Although they allow for interaction, their activities never translate into the physical space because of the anonymous aspect. But finding support, grieving, and getting though a difficult time, almost begs to have an equally effective physical space of healing to reemerge into.

And this brings up the issue of trust. How can you trust a website that is accessible to everyone, and what can a physical building do to waylay these issues. But just having it grounded in a physical community already adds this element to the website. The physical site I chose was on the Community General Hospital campus on Onondoga in Syracuse NY., based on its location being far enough away from the city not be noisy, but still accessible to the city. The physical support and wellness center needed to be near a medical institute to further ground itself in the staid community of an existing site. It also promotes views from the top of the hill that overlook the city of Syracuse that as an imaging device can depict certain calming and healing associations that also become imaged in the website.



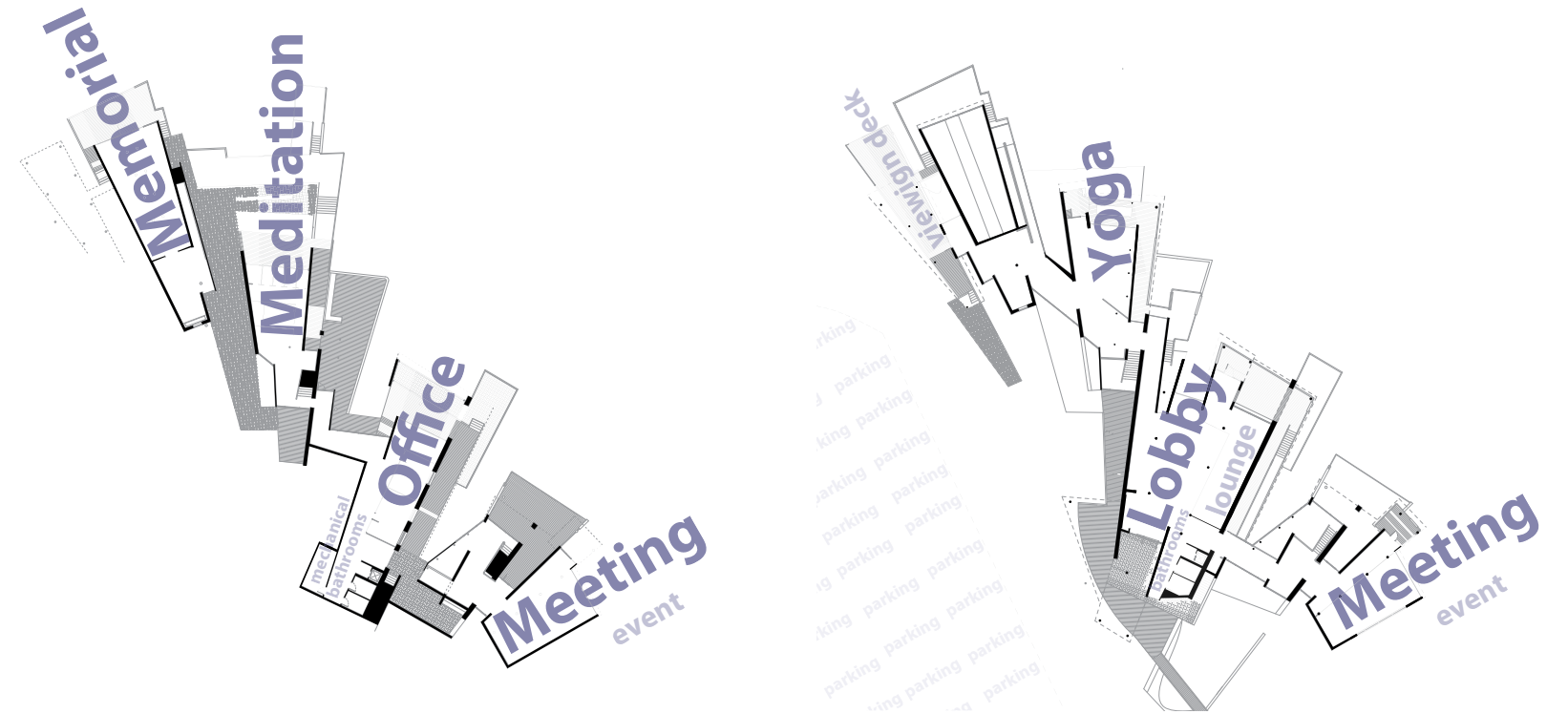
Community general hospital website home page

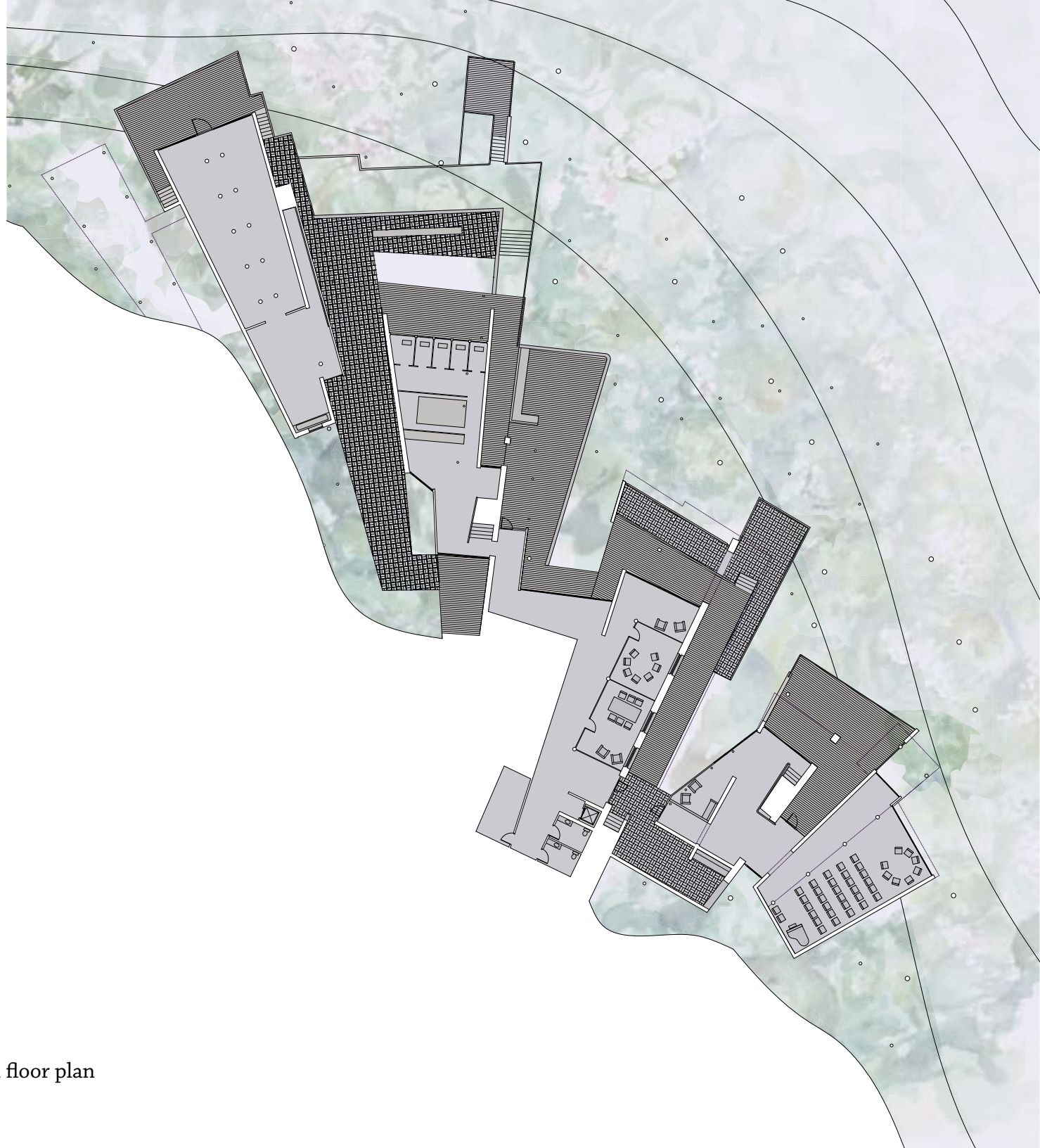


As a place for both patients and their families, it is a protective and calming environment. The same way the website does not overwhelm with text, but rather commits to images, the building entry eases its way down the hill from the campus, and settles itself among the trees,



The program provided includes a more public end of a large meeting hall, lounges and offices, then to the more quiet and reserved yoga and meditation area, to the private and contemplative memorial space. The program necessary for the website has informed the program for the building and vice versa.

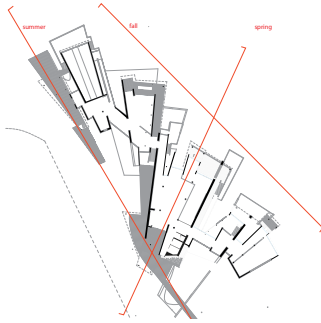




bottom floor plan



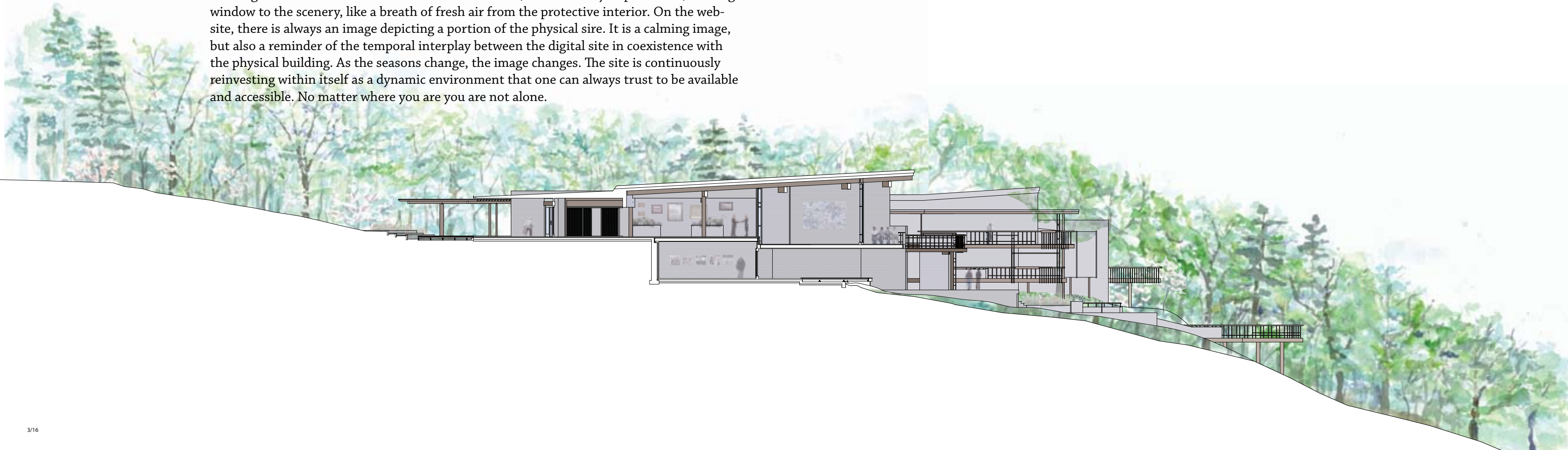
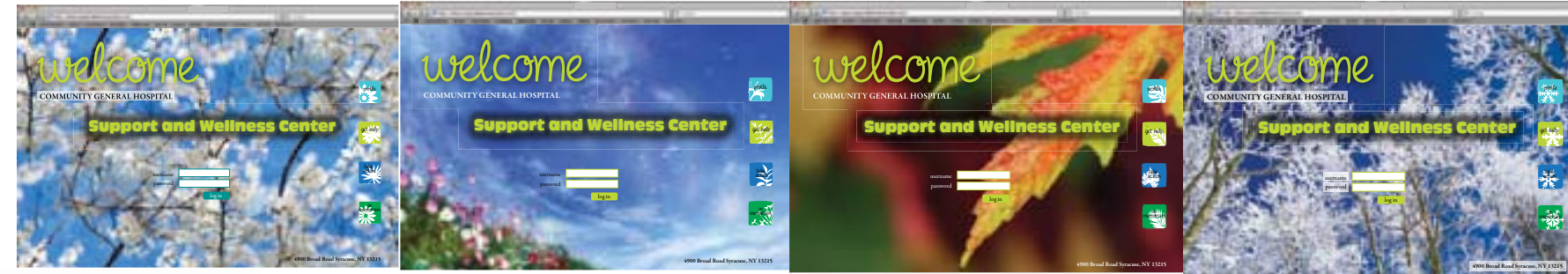
top floor plan

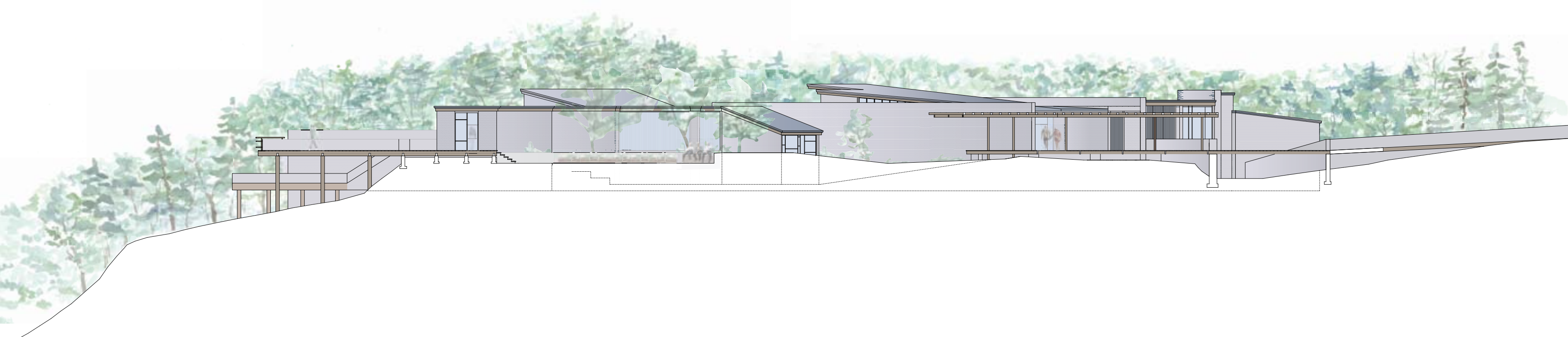


The decision to splay the walls across the hillside, was not only to emphasize the view outward, but to really commit to the idea of easing the visitor into the site, letting them slide into it, as well as opening it up from the calculated institutional walls of a hospital. At no point should one feel like they are in a hospital.

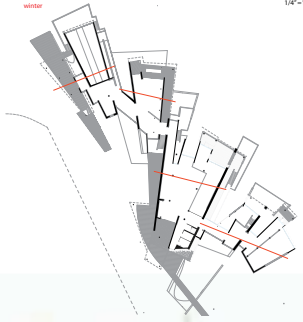
The scheme is both directive and wandering. Although it suggests an entry, or a circulation path through these different layers, there is always the option to wander, and never find oneself restrained. You can go down one of the side paths and slide under the building onto the terrace, traverse across the many viewing decks on the exterior, or find private recesses throughout the building to be alone.

But among this wandering, there is always the image of the forest to orient the building like a website screen. No matter where one is, there is always a protective, calming window to the scenery, like a breath of fresh air from the protective interior. On the website, there is always an image depicting a portion of the physical site. It is a calming image, but also a reminder of the temporal interplay between the digital site in coexistence with the physical building. As the seasons change, the image changes. The site is continuously reinvesting within itself as a dynamic environment that one can always trust to be available and accessible. No matter where you are you are not alone.





The website is set up into four options or four programs. A profile section, a get help section which has the online chat support group which is in tandem with the meeting rooms. The take action represents the even and yoga section, while in memoriam represents the memorial space.



MEMORIAL

YOGA & MEDITATION

ENTRY & LOUNGE

MEETING

The online chat session allows you to share stories, comment and meet people. The meeting rooms offers a space for coming together and reemerging out of the virtual reality of the web site, as well as encouraging meetings online. This is where the website becomes an essential tool for activating these spaces, and really influencing its use and relevance. For example, without the website to facilitate a certain degree of comfort and familiarity, the building would fail as a meeting space. One would never walk up to a stranger and just start talking to a stranger about this sensitive issue. This returns to the idea of screen identity, where the virtual counterpart allows one to conceal or reveal their identity at their own pace. The relationship feeds off each other and encourages new experiences and purpose.



community general hospital
Support and Wellness Center

home
 profile
 get help
 take action
 my team

Shared Name, Shared Diagnosis, Shared Hope
 Two women - united by the same name and cancer diagnosis - share their treatment and recovery after meeting on CaringBridge.

Sometimes unexpected blessings can be hidden within unwelcome circumstances. In January 2001, Mindy Fast was diagnosed with multiple myeloma and underwent a stem cell transplant that summer only to have partial success. Her cancer was unmistakably active - news nobody wants to hear. Cycles of taking various combinations of medications followed, proving to be successful for only brief periods of time. In July of 2008, Mindy needed a second transplant. But just around the bend in this long journey, a glimmer of hope would soon appear through one unlikely spark that quickly spread to a comforting flame.

*"We have CaringBridge to thank for bringing us and the rest of the family together."
 —Mindy Fast, General Community Support author*

Sharing Hope
 Since their connection, that small spark of curiosity quickly became a reassuring flame that provided each of them glimmers of hope along their journey. "Since Mindy and I went through transplants at roughly the same time, and underwent identical treatment, we could understand what each other was experiencing and provide emotional support nobody else could," Mindy says. During and after the transplant, the two were able to share details of problems and side effects with each other that were difficult for others to understand.

A Gentle Flame Burning Strong
 In October 2009 Mindy and her husband took a trip to Virginia to meet her cousin's family and have been able to help her reconnect with extended family in New Jersey where Mindy currently lives. "We have CaringBridge to thank for bringing us and the rest of the family together," Mindy says.

Mindy currently has no sign of cancer in her blood or bone marrow and is happily in remission. She is undergoing post-transplant treatment and is monitored every three months by her myeloma specialist.



The second main part of the program is the yoga and meditation area. Here you can also join a class, or find a place of private meditation. Through the website you can also access these moments, by either signing in to watch a session, or listen to the music in the background. No matter where you are, the activities of the center will always be available through the digital site.



community general hospital
Support and Wellness Center

- home
- profile
- get help
- take action
- meditation

Take Action

• Become involved
• Health and Wellness
• Events

Find Healing in Wellness
Join one of our classes today!

- Healing of the body and mind is an important coexistence. Our yoga and health facilities allow you to find peace within body and mind.
- Look at our calendar for all class times, or just stop by the center and see what is happening. Take a class with others, or seek solitude and personal meditation in our meditation garden.

community general hospital
Support and Wellness Center

- home
- profile
- get help
- take action
- meditation

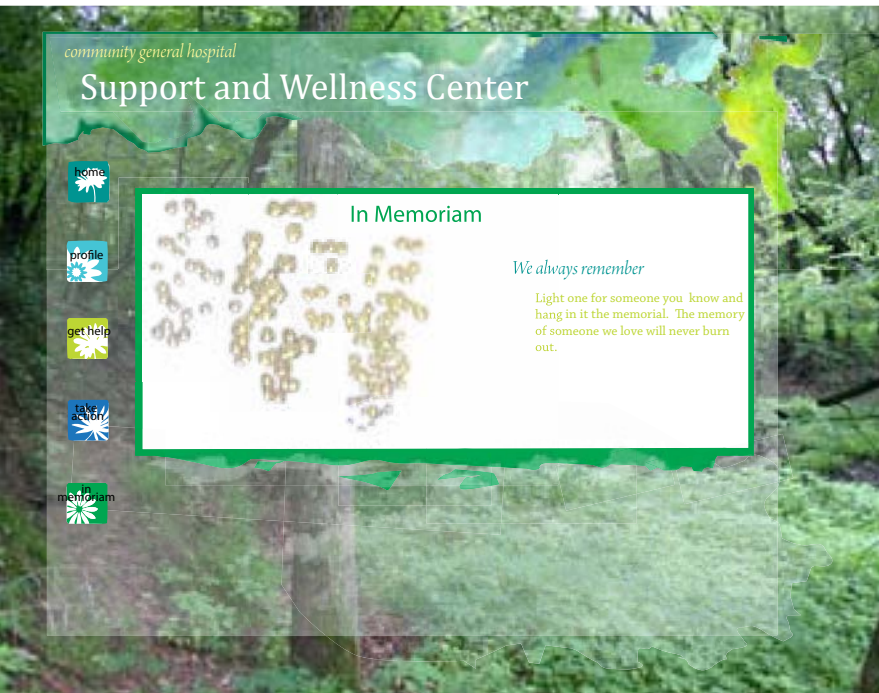
Take Action

February 15, 2011

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- Our Health and fitness facilities allow you to find peace within body and mind
- Look up our class times in the calendar, or stop by at anytime to have your own personal session. Enjoy group classes or private meditation.

Finally, there is the memorial space. This is actually the one piece of program where the architecture is informing the website. The memorial space is a place of remembrance and contemplation. Rather than engraved in stone, the information is often washed away in the black hole of cyberspace. But this website keeps its stories, and gives back to the families who are grieving. The physical room is a symmetrical gesture of a sacred space, that is filled with luminaries and light as a symbolic token, like the ones often used in relay for life. It becomes a more ephemeral existence than its website counterpart, where the information is engraved in the stone of virtual reality.



In conclusion, the relationship to the virtual reality of the support site upholds the programmatic quality and schematics of the physical site, in the same way the building grounds the website in a community of trust. Without each other, the spaces would fail to fulfill their potential, but integrates in a continuous, temporal translation, they provide experiences and use to the space. The design is sensitive to accommodate all these relationships and allow this interaction to take place.



This type of relationship is conducive to health care, and perhaps the design of spaces for patient care will never again be without a website to provide that sensitive extension to the physical architecture. But ultimately, whether it be health care or dorms, we should always consider design, acknowledging the enormous potential of our ubiquitous and pervasive virtual realities.

