









#### ARTspace MEDIA LOUNGE PROGRAM 2013

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### **INSTRUCTIONS:**

I DOWNLOAD THE APP JUNAIO.

- $2\ \mbox{Once}$  Junaio is open click the search icon on the top left corner and search for the VIB3AR channel,
- 3 Once you have successfully opened the channel aim your camera at any of the pages in the catalog and start viewing the AR content.

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v/b3.com

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AR<sup>2</sup>View is an exhibition catalog that brings together a collection of Augmented Reality (AR) artworks from nineteen media artists and two essay articles that review the field and the work inside. Unlike most catalogs, the pages link to media artwork wherever you and the catalog happen to be. It follows the experimental format of Scan<sup>2</sup>Go, which was distributed in Los Angeles at CAA's 100th Annual Conference. Both publications include features designed to provide additional information to each page by using the text and image to function as interactive interfaces for mobile media hardware.

AR<sup>2</sup>View pushes the connection between the page interface and artists' work by using the conference hotel as the context and trigger for experiencing artworks. By using Junaio, which is an image recognition application, photographs in AR<sup>2</sup>View will trigger a display of an artist's digital media artwork on the screen as it is displaying the page image seen by the camera lens. The resulting composite view is an overlay of the computer-generated media accessed from an online database and the camera image. Each page in the book represents one artist's media artwork.

This simple yet auspicious pamphlet is just one example of how artists have been adapting the published book into a conceptual art object. As the first media, print books are used as a found form to become an art space, object and experience. Published books are uniquely capable of melding artist imagery and conceptual intentions with audience curiosity and interaction in much the same way some media artists use the Internet. AR<sup>2</sup>View combines page space with references to hotel space and media art forms for the "reader" to interact with the page — to make something happen, to augment the page with computer generated media designed by the artist. In this way, AR<sup>2</sup>View continues the tradition of artists finding new relationships between media forms to challenge, sometimes with wit and playfulness, the expectations implied by what you are holding in your hands.

My thanks and much appreciation must go to Mimi Sheller and Meredith Hoy for their generous commitment to this project. Artists creating Augmented Reality artwork are at the edge of emerging digital social media and as such rely on the articles like Mimi's and Meredith's to help their work be seen and understood.

The Services to Artists Committee of the College Art Association sponsored the  $AR^2$ View exhibition catalog. Working together with Gail Rubini and Mat Rappaport, members of the media artist collective, *v1b3*, CAA has created a new space and method to exhibit and experience media based visual artworks.

Conrad Gleber

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KEY WORDS AR, VIRTUAL, LOCATIVE, NEW MEDIA, ARTWORKS, SMART PHONES, AUGMENTED REALITY, INTERACTIVE



Navigating AR<sup>2</sup>View Mimi Sheller Professor of Sociology Director, Center for Mobilities Research and Policy Department of Culture and Communication Drexel University

Many people are becoming aware of Augmented Reality (AR) through its increasing use in commercial applications on smartphones (used for everything from finding subway stops and pop-up wiki-info, star gazing and shooting aliens, to shopping in the IKEA catalog). Yet few know that mobile locative artists have been at the forefront authoring more playful and challenging AR experiences to populate this frontier of spatial and visual experimentation. This AR<sup>2</sup>View catalog invites you to the locations where artists have transformed specific physical locations with a "mixed reality" experience.

Mobile locative art includes a diverse set of practices that are not simply about screening digital art on portable devices, but might involve sound walks, psychogeographic drifts, site-specific story-telling, public annotation, digital grafitti, collaborative cartography, or ever more playful "digital cityscapes."<sup>1</sup> Even wandering through the generic hallways of a conference hotel can be transformed with the interruptions of digital imaginaries into the non-places of the conference circuit. Mobile locative artworks tend to engage the corporeal body, the physical location, and the media interface through a complex mixture of sensory and kinaesthetic experience, navigational and locative choreographies, and social relations that may extend across many scales, but might just involve riding an escalator or opening a door handle.

In my series of recent collaborations with artist Hana Iverson,<sup>2</sup> we suggest that locative mobile media art is one of the key arenas in which emergent interactions with sensory dimensions of place, temporality and presence itself are being explored. AR combines virtual data with physical locations, generating an immersive and interactive real-time



environment, with the potential for producing new experiences of "augmented" urban space and "net-locality", even (or especially) in a hotel lobby.<sup>3</sup> Unlike commercial applications, artists often draw on more disruptive and critical traditions that seek to defamiliarize the familiar, to heighten our sensual awareness of location, or to offer new forms of place-making and public engagement.

The Virtual Public Art Project (VPAP), including artists showing their work here, has been creating AR sculptures for several years now. These pieces are public displays of three-dimensional digital works creating "a view of the physical real-world environment merged with virtual computer-generated imagery in real-time." They transport us elsewhere by transposing objects in space. The smartphone interface can make the experience of these artworks immediately intuitive and comfortable, even as it modulates otherwise unremarkable spaces in novel and often subtle ways.

Members of the group ManifestAR, also included here, have been inserting digital objects and Flash animations into highly political public locations for some time: from locations of death on the US-Mexico border, to the Goddess of Liberty in Tiananmen Square in China and across the protest sites of the Arab Spring. Their work also "hacks" institutional spaces, including oil gushing from the BP logo following its massive spill in the Gulf of Mexico, to digital artworks placed in the inner sanctums of the Museum of Modern Art or within the CAA conference location itself.

The physical and the virtual overlay each other, superimposing bodies and data, digital and material presences, into a hybrid assemblage. In such "transarchitectures,"<sup>4</sup> mobile AR remediates our existing habits of viewing, navigating and sensing place, both scattering and intensifying the here and now. Now "you can leave your mark on the world or read the marks others leave behind, re-creating place in a Borgesian digital map. Artifacts and places will be imbued with memories in a far richer way than ever before."<sup>5</sup>

As Lauren Cornell, of the New Museum, and Brian Droitcour wrote in their recent response to Claire Bishop's piece on the "Digital Divide" in the *50th Anniversary Issue of Artforum* (which seemed to question the relevance of digital art), "Digital art is no longer confined to 'cyberspace'. Concerns about networked technologies have been absorbed by artists who draw on their knowledge of painting, sculpture, performance, and installation, as well as an interest in computers and code."<sup>6</sup> Bishop responded that artwork in the "new media niche" misses the point if it is "fixating on the centrality of digital technology rather than confronting it as a repertoire of practices and effects that increasingly lodges capitalism within the body." Here, then, we invite art audiences, producers and critics to enter the debate: let these AR works lodge in your own body, and consider their potential effects for yourself.

"Gordon, E, and de Souza e Silva, A (2011) Net Locality: Why location matters in a networked world, Boston: Blackwell Publishers.

De Souza e Silva, A. and Sutko, D. M. (Eds.) (2009) Digital Cityscapes: Merging Digital and Urban Playspaces, 251-268 (New York: Peter Lang).

<sup>&</sup>lt;sup>2</sup>This includes a double session on Mobile Art:The Aesthetics of Mobile Network Culture in Place Making at the 2012 College Arts Association conference, a co-curated exhibition called LA Re.Play (http://www.lareplay.net/), and a special issue of Leonardo Electronic Almanac (Sheller; Iverson, Aceti, and Hight, forthcoming). <sup>3</sup>Gordon, E. and de Souza e Silva, A. (2011) Net Locality:Why location matters in a networked world, Boston: Blackwell Publishers.

<sup>&</sup>lt;sup>4</sup>Novak, M. (1997), "Transmitting Architecture: The Transphysical City", in A. and M. Kroker (eds) Digital Delirium (St. Martin's Press, New York), pp. 269-70.

<sup>&</sup>lt;sup>5</sup>Vamelis, K. and Friedberg, A. (2006), "Place: Networked Place", Networked Publics (Cambridge: MIT Press), http://networkedpublics.org/book/place.

<sup>&</sup>lt;sup>6</sup>Lauren Cornell and Brian Droitcour; "Technical Difficulties", Artforum, Vol. 51, No. 5 (January 2013), p. 36, letter in response to Claire Bishop, "Digital Divide", Artforum, Vol. 51, No. 1 (September 2012), pp. 435-41.

# Activating Space: Augmented Reality and Postmodernism **Meredith Hoy**

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In 1984, Frederic Jameson famously wrote of postmodern architecture in his analysis of the Bonaventure Hotel. The postmodern hotel, he argues, "aspires to be a total space, a complete world, a kind of miniature city; to this new total space, meanwhile, corresponds a new collective practice, a new mode in which individuals move and congregate."<sup>1</sup> Writing before the age of ubiquitous computing, Jameson imagined the social world of this new postmodern space as a kind of "hypercrowd," in which people operate as if in an extension of the urban environment, a double of the surrounding city. <sup>2</sup>Likewise, the conception for the exhibition AR<sup>2</sup>View proposes the space of the Hilton Hotel in New York City as a place of congregation, of movement and encounters. The exhibition coheres around the idea of the hotel as "a system of generic meeting spaces and temporarily social and personal places," and asks artists to respond, using Augmented Reality interfaces, to the particular site, both as an architectural and as a social construction.<sup>3</sup>

Augmented Reality, briefly, can be defined as a technology that deploys electronic systems within the physical world in order to affect or mediate the experience of that world. The "augmentation" of reality is performed by overlaying computationally generated information, whether graphic, sonic, or textual, onto the physical world, often using the interface of a mobile personal computing device, such as a tablet or cellphone. Users survey a scene before them using the camera view of an enabled device, which responds to geolocative triggers, such as GPS coordinates, generating a virtually modeled "object" that hovers in the foreground of the screen. The theme of AR<sup>2</sup>View calls into question the paradigm, proposed by Jameson, of the postmodern architectural and social space configured by the Bonaventure Hotel. The projects in this exhibition prompt the question of how postmodern spaces can be renegotiated under contemporary technological conditions, specifically the imposition of virtual objects in real spaces, viewed through a screen of an enabled mobile device. The exhibition reveals the extent to which the intervention of a technology such as AR alters the way space is navigated, the way people in space interact with one another, and the way the virtual augmentations can work against disorientation and disengagement. The projects contained within the exhibition explore how AR technology amplifies or disrupts the postmodern situation described, but not endorsed, by Jameson. In what follows, Augmented Reality will be brought into dialog with the paradigm of the postmodern, and its social and political potential will be shown to contrast with the apolitical stance of the postmodern.

The Bonaventure Hotel, according to Jameson, performs as an extension of urban space. In Jameson's distinction between Modernist and Postmodernist architectural constructions, the Modernist building becomes a monument to utopia, a structure that sets apart the activities within the building from those taking place in the



surrounding urban environment. The postmodern building, by contrast, refuses to demarcate itself from its surroundings, instead integrating itself into the rhythms and passages of the city that envelops it. For Jameson, LeCorbusier's modernist construction "radically separates the new Utopian space of the modern from the degraded and fallen city fabric which it thereby explicitly repudiates."<sup>4</sup> "The [exemplarily postmodern] Bonaventure, however, is content to 'let the fallen city fabric continue to be in its being' (to parody Heidegger)."<sup>5</sup> Whereas complete virtual environments set themselves apart from an existing environment, AR elements superimpose themselves on a real spatial fabric, bringing to light unthought or unspoken dimensions of that space. Augmented Reality projects, then, resist a Modernist utopia, a territory set apart from the social and political complexity of the world, instead integrating themselves within an existing environment in a way that forces the user to consider what a given space represents, how it is normatively used, and how it might be "detourned" or repurposed to pursue specific goals. AR projects do not support the disengagement of the postmodern, but they operate within an idiom of extension and amplification, as does postmodern architecture, rather than supporting the exclusion and separation of Modernist architecture or virtual reality.

Whereas the location of the annual CAA conference might provoke a sense of disorientation, the conference itself can be seen to mirror the paradigm of the polis passed down from Plato. In an age of digital communication, the conference sustains an older model of collaborative communication. Calls, proposals, organizations of panels, meetings, and exhibitions, are all conducted in electronic space, but toward an ultimate end of face-to-face meeting and dialog. The postmodern city, in contrast, is a politically disengaged space of accidental, fleeting encounters, run-ins with passers-by, shop windows, traffic; it is not a space of prolonged collaboration or dialog. The conference revives an ancient model of a political and social democratic utopia, and in this sense conflicts with the fragmented, decentralized experience of postmodern space. Modernist structures, in Jameson's account, attempt to build a coherent, rationalized spatial experience, an experience engineered and directed by, for example, the grand entrance. Modernist buildings encourage the formation of social groups through the creation of common spaces, even creating a sense of commonality in individual living spaces by reproducing architectural features uniformly between dwellings. Unlike the Modernist habitation, the Bonaventure has no clearly demarcated entryways or porticos, creating an unresolved, labyrinthine system that promotes disorientation, destabilization, and more aimless movement through the hotel's interior.

Rachel Clarke actuates this disoriented mode of perambulation and interaction in her project "Nowhere." Her vision of the hotel conference space reveals the disconnection and potential alienation of the site, showing how the architecture itself works contrary to the utopian mode of collaboration and face-to-face interaction ideally catalyzed within the social world of the conference. The postmodern space of the hotel creates friction in this ideal social model, confronting the viewer with a dazzling labyrinthine "hyper-space, where one is required to walk through seemingly endless long wide corridors, go up and down in brightly-lit glass elevators and escalators, and through tunnels and by-passes to yet more rooms and halls of connected activities and events."<sup>6</sup> The conference space mimics the simultaneous sense of connection and fragmentation evoked by the network, its tunnels and by-passes leading to nodes of intersection and interaction, interspersed with stretches of anonymity and redirection.

The question remains, then, how the imposition of AR artifacts within the space of the hotel will affect the social and architectural experience of that particular location. AR technology, first of all, will necessarily provoke alterations in the spatial experience of a particular location through its supplementary function. Whereas in Virtual Reality environments, "a virtual world replaces the real world, in Augmented Reality a virtual world supplements the real world with additional information."<sup>7</sup> Virtual worlds, similarly to Modernist architecture as described by Jameson, repudiate real space, configuring a complete, computationally rendered environment that can supplant an existing location. Just as postmodern architecture provides an extension of urban space rather than a separate spatial and social zone, AR artifacts do not demarcate a virtual realm from a real-spatial realm. They do not insist upon transporting the user into another dimension of experience separate from the fabric of everyday life and everyday space. Instead, Augmented Reality overlays virtual objects on real ones, heightening the user's awareness of particular aspects of that space.

For example, John Craig Freeman's "Orators, Rostrums, and Propaganda Stands" "re-imagine[s] the museum plaza in the function of the public square" by making visible black and white animations of various contemporary public uprisings, from the Arab Spring to Occupy Wall Street.<sup>8</sup> The anonymous social space of the hotel, transformed into a space of dialog during the conference, is further shifted into a space of active rebellion and resistance by the project. Smooth glass escalators and elegant foyers, locations of brief encounters and conversation, will be disrupted by political action. Like Freeman's other projects, such as "Water Wars," which superimposes makeshift shantytowns on elegant city streets, warning of the possibility of environmental refugee camps as water is increasingly privatized by major corporations, "Orators, Rostrums, and Propaganda Stands" works against complacency, mobilizing virtual objects towards an active and critical re-evaluation of spaces that might seem reassuringly stable or monolithic. Urban space, or the interior architecture of the hotel, is transformed in AR into a site of political upheaval, accentuating the user's awareness that no space is neutral and that every space contains the possibility for confrontation and dialog.

As in the case of "Orators, Rostrums, and Propaganda Stands," Augmented Reality not only operates through defamiliarization and a heightening of socio-political awareness, but through a strategy of narrativizing otherwise "mute" spaces. Whereas the postmodernist building as described by Jameson might be said to resist narrative through strategies of indirection and fragmentation, the augmented environment explicitly orients itself to the formation of narratives. This formation of narrative might be thought to be a modernist or utopian strategy, one that shores up the instabilities of postmodernist spatial wanderings. Narrative, in other words, might be thought to imply an arc, with exposition, climax, and denouement, a neat package that rejects loose ends, inscrutability, or absurdity. Often, however, augmented environments function more as provocations toward possible narratives, rather than as presentations of definitive storylines. They allow the user to generate the narrative, through the imposition of graphical or textual elements on an existing spatial configuration. Freeman's projects create specifically political narratives, prompting users of equipped mobile devices to re-envision particular sites under apocalyptic conditions, while other projects, such as Pat Badani and Desiree Agngarayngay's "Power Potential," cause users to deliberate and narrativize spatial navigation.



AR elements complement and extend the space upon which they intervene, instead of replacing it, as in the case of the modernist structure or the virtual reality environment. In a 2011 manifesto for AR Art, the collective ManifestAR echoes this resistance to modernist utopian replacement or separation, proclaiming that "AR is not an Avant-Garde Martial Plan of Displacement, it is an Additive Access Movement the Layers and Relates and Merges. It embraces all Modalities. Against the Spectacle, the Realized Augmented Culture introduces Total Participation."<sup>9</sup> Against the modernist avant-garde, which ultimately displaces art from everyday life, AR art layers virtual objects against the real to merge art and life at both a technological and theoretical level. Technologically, objects are superimposed upon the environment via the computing device. Theoretically, the elements provoke thought, action, or the formation of narratives in the interpretation of a given spatial configuration.

In "Psychasthenia Studio," for example, Joyce Rudinsky and Victoria Szabo create a piece combining text and AR elements that explores the process of testing for psychological disorders. They seek to show how "modern life contributes to the maladies it otherwise purports to cure."<sup>10</sup> In one scenario, the user approaches an elevator. As the doors open, s/he confronts a man standing with his palms against the walls of the elevator, sweat beading his brow. A set of multiple-choice questions asks the user to respond in one of a variety of manners, ranging from empathy to disgust. The user's own "pathology" will be diagnosed from his or her response. This piece reveals a complex nexus of psychological states, from the anxieties of the man in the elevator to the user's own, potentially pathological, treatment of him. The particularities of the environment act as the trigger to this social situation, configuring the precise set of circumstances that lead to the man's own internal experience and the technologically mediated interaction between him and the user or "player" of the Augmented Reality game.

Augmented environments like this one work to illustrate the complexity of a given spatial texture. Projects like "Psychasthenia Studio" operate through the strategy of defamiliarizing places that have become unremarkable through repetition and habit. The elevator, for example, is a utilitarian space often hidden from view in a central shaft of a building. It is a vehicle for transition. But, this project also reveals it as a site of psychological pressure not simply as an invisible or unremarkable aid to movement between floors but as a zone of unspeakable anxiety: of claustrophobia, fear of heights or of falling, of social discomfort. Space is not, here, merely a physical envelope, but a producer of psychological states and social interactions. As Lefebvre has claimed, space mutually shapes and is shaped by social practice; space must be understood in active, practical terms.

AR technology encourages a praxis-based approach to spatial knowledge. Its incorporation of mobile computing means that the body is activated in a process of movement and spatial exploration. This can take place in an eminently literal sense, as users move through space, using their enabled mobile device to scan a given location for the presence of AR objects. Or, it can take place notionally, as in the case of Pat Badani and Desiree Agngarayngay's "Power Potential," in which the image of a chandelier in the New York Hilton triggers a 54-second video taking the viewer on a voyage through 46 floors in the hotel. In this video, unlike in other AR works such as Freeman's, which require the user to navigate space, mobile device in hand, scanning his or her surroundings as AR objects loom into view on the screen, the experience of spatial travel is suggested rather than actuated through physical movement. Yet watching the video precipitates the sense of spatial and temporal rupture catalyzed by postmodern architecture. The video centers on the figure of the "luxury chandelier," both as a catalyst of "mood and atmosphere" and as an indicator of electrical consumption.<sup>11</sup> As each chandelier flashes into view, accompanied by the dinging of an elevator bell, the viewer is taken on a journey, but without being given a distinct sense of orientation. There is no kinesthetic or proprioceptive sensation of movement up or down, nor numeric indices of the levels through which the elevator passes. Only the bell and the flashing of chandelier lights reveal spatial and temporal passage. What might seem to be a disembodying visuality instead calls attention to the body, the physical memory of how it feels to travel vertically in an enclosed box and to emerge on a new level with new visual features.

The notion that AR technology activates an embodied, social, and practice-based spatiality is not immediately obvious. Given that a primary feature of AR-enabled devices is that they are often operated by an individual user, one might think that it is a technology that isolates and distances the user from social activity. The interaction with AR artifacts is frequently a personal experience, creating a particular locution of an AR "event" for a single user of a personal device. Moments of social interaction can unfold within this context, as artifacts come into view on the screens of computing device wielded by individual users. But this coming to light requires action on the part of only a single agent, enabling a spatial engagement and a development of a personal narrative about the site that can be experienced individually and then shared between users. Unlike spatial phenomena such as "Happenings" in the 1960s or "Flash Mobs" in the 2000s, which relied heavily on the formation of participatory groups, the mode of interactivity in AR supports an individuated experience of the physical world, augmented by the interposition of computationally modeled objects that appear when viewed through an enabled personal device. This does not mean that social practice is not invoked by AR environments, but that sociality must be investigated through the lens of the personal mobile computing device. The interaction between, in the terminology of ManifestAR, the "networked virtual" and the "physical real" is mobilized in order to "overlay, then overwhelm closed Social Systems lodged in Physical Hierarchies."<sup>12</sup> AR objects interrupt the visual landscape in order to provoke thought and action.

The phenomenon of "total participation," the mode of awareness and action brought into being through the intervention of AR elements on the existing landscape, requires an acknowledgment of contemporary spatial and social experience as ubiquitously mediated by mobile technologies.<sup>12</sup> Participation is, in these cases, manifested through the action of placing virtual elements within the field of real space, provoking thought, discourse, and potential social or political action. In a technologized world, social participation does not develop solely through immediate channels, such as pure face-to-face interaction, but is filtered and extended by the augmentations made possible by computing instruments. The augmentation of real space catalyzes social discourse; the partial imposition of the virtual carries significant effects in physical, social sites.

A critical reflection on AR projects might suggest that the technology itself renders objects that sit awkwardly within their real spatial context. The virtualization, in AR, is incomplete, and the augmentation is clearly overlay-

ing real space rather than blending with it. But in a sense, it is precisely this lack of integration that subtends the political possibilities of the work. In the words of ManifestAR, "Augmented Reality is a new Form of Art, but it is Anti-Art. It is Primitive, which amplifies its Viral Potency."<sup>12</sup> Instead of lulling users into a seamless virtualization, numbing them to the mediated quality of technological intervention, AR elements reveal themselves as contingent and unstable. Without the mobile screen, they are invisible, their potentiality unrealized. When seen through a mobile device, they judder into existence, looming into view, rupturing the interior or exterior landscape. AR elements disrupt. This is their viral potency. They are potentially anywhere and everywhere, reminding the user that every space contains a subtext, for example the consumption of electrical energy underlying the dazzling display of chandeliers in "Power Potential," or the notion that any space can become a platform for social uprising, in "Orators, Rostrums, and Propaganda Stands." Even projects that do not speak a directly political language, such as "Nowhere," which foregrounds alienation over social action, launch a critique of disengagement and aimlessness, advocating for an act of re-orientation on the part of the viewer.

The AR projects described here work against the disoriented, fragmented, and disengaged space of postmodern architecture. In certain cases, they amplify the dizzying overstimulation instigated by postmodern space, and in other cases, they use private experience—the view of objects on a mobile device—to foster social activism. In both cases, these projects critique postmodern space as a politically disengaged zone of frenzied, disoriented movement and vertiginous experience. Augmented Reality technology can be used to describe the alienation felt within the kaleidoscopic, stimuli-laden contemporary condition, or it can be alternatively mobilized to combat political and social disaggregation and non-participation. The personal computing device, which has been criticized as a tool that produces social alienation and distantiation from real social and spatial contact, becomes a catalyst for awareness or activism. Ultimately, AR enables political critique and action, mobilizing computing technology to move beyond the disengaged, fragmented and apolitical stance of the postmodern.

<sup>&</sup>lt;sup>1</sup>Jameson, Frederic. Postmodernism: Or, the Cultural Logic of Late Capitalism. Durham; Duke University Press, 1991, 40 <sup>2</sup>Jameson 40

<sup>&</sup>lt;sup>3</sup>"Call for Participation: AR\* to View." http://blogs.colum.edu/interarts-cbpa/2012/10/09/call-for-participation-ar-to-view/. Accessed January 13, 2013 <sup>4</sup>Jameson 41

<sup>&</sup>lt;sup>5</sup>Jameson 41

<sup>&</sup>lt;sup>6</sup>Clarke, Rachel. Project Proposal for "Nowhere"

<sup>&</sup>lt;sup>7</sup>Feiner, Steven, MacIntyre, Blair, Höllerer, Tobias, Webster, Anthony. "A Touring Machine: Prototyping 3D Mobile Augmented Reality Systems for Exploring the Urban Environment." Personal Technologies, Vol. 1, Issue 4, 1997, pp. 208-21, 208

<sup>&</sup>lt;sup>8</sup>Freeman, John Craig. Project Proposal for ''Orators, Rostrums, and Propaganda Stands.'' http://www.nikolajkunsthal.dk/en/kunst/john-craig-freeman-oratorsrostrums-and-propadanga-stands. Accessed January 13, 2013

<sup>&</sup>lt;sup>9</sup>ManifestAR. "The AR Art Manifesto." http://www.manifestar.info/. Accessed January 13, 2013

<sup>&</sup>lt;sup>10</sup>Rudinsky, Joyce, Szabo, Victoria. Project Proposal for "Psychasthenia Studio"

<sup>&</sup>quot;Badani, Pat, Agngarayngay, Desiree. Project Proposal for "Power Potential"

<sup>&</sup>lt;sup>12</sup>ManifestAR. ''The AR Art Manifesto''



KEY WORDS ELECTRICITY, SUSTAINABILITY, LUXURY, CHANDELIERS, HOTEL POWER USAGE, OULIPO **Pat Badani with Desiree Agngarayngay** *Power Potential* 

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Greg Browe Song of ThornKing: City Passage

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KEY WORDS ANIMATION, WEBCOMIC, MOTION COMIC, STORYBOOK, TEXT



#### KEY WORDS TRAFFIC CONES, PYLONS, EXPOSE INTERVENE OCCUPY, AUGMENTED REALITY, PUBLIC SPACE

# **Celine Browning** Lacerated Cone, from series Pylons on Parade

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#### KEY WORDS

3D, ANIMATION, DISORIENTATION, ANXIETY, DISLOCATION, HOTEL HYPER-SPACE, LABYRINTHINE, BRIGHTLY-LIT, ELEVATORS, CORRIDORS, TUNNELS, BY-PASSES



# KEYWORDS AUTOMATION, ARCHITECTURE, SOURCE CODE, PHP, PROCESSING, VIDEO

## Joelle Dietrick with Owen Mundy Particle Convergence

http://joelledietrick.com/ and http://owenmundy.com/ http://owenmundy.com/site/packet-switching jdietrick@gmail.com and omundy@gmail.com





John Craig Freeman Orators, Rostrums, and Propaganda Stands

http://johncraigfreeman.net http://johncraigfreeman.wordpress.com/orators/ John\_Craig\_Freeman@emerson.edu KEY WORDS ORATORS, FREEMAN



#### **KEY WORDS**

MOVING IMAGES, VIDEO, SILENT FILM, VIDEO ART, MONOCHROME FORMS, BLACK-AND-WHITE, TIME, MEMORIES, MOVEMENT, SPEED, SLOWNESS, BODY, PERFORMANCE ART, PERFORMANCES

# Chia-Ling Lee I, Move

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Chris Manzione Scholar's Rock

www.christophermanzione.com www.christophermanzione.com/scholarrock chrismanzione@gmail.com KEY WORDS SCULPTURE, SCHOLAR'S ROCK, VIRTUAL, POLYGONAL, VIEWING STONE



# KEY WORDS 3D PRINTING, ANIMAL FACES, HUMAN SCANS

## **Barbara Rauch** Sleeping Goethe Dreaming about Schiller, 2012

http://apache.ocad.ca/faculty\_biographiesbiophp?bid=1428&fac=art brauch@faculty.ocadu.ca





## Leslie Raymond Katabasis

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#### KEY WORDS

DEPARTURE, JOURNEY, DESCENT, BROADCAST, RETURN, EXPANDED CINEMA, MEDIA ART



# KEY WORDS COMPLEX, CLOCK, BLINKING EYE, WIRE STRUCTURE, WIRE FRAME

# Michael Rees Complex

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Keith Roberson spider-cabin

http://kroberson.fab.fsu.edu/spider-cabin keith@art.fsu.edu KEY WORDS SPIDER, CABIN, ARCHITECTURE, WOODEN CHAIR, STOVE



KEY WORDS GLOPSYCHASTHENIA, ADVENTURE, GAME, HILTON, PSYCHOLOGY, PATHOLOGY

## Joyce Rudinsky and Victoria Szabo InnerSpace Adventure

http://psychasthenia-studio.com psychasthenia-studio.com/innerspace.html info@psychasthenia-studio.com





## Mark Skwarek with Patrick Lichty

The Coming of the (Silent) Spring

mark.skwarek@gmail.com and plichty@colum.edu http://www.voyd.com/ http://www.markskwarek.com/ KEY WORDS FLOOD, AUGMENTED REALITY, CLIMATE CHANGE, SILENT SPRING



#### **KEY WORDS**

ARADIO, TIME TRAVEL, CHAOS MAGICK, WILDERNESS, LOG CABINS, INTERNET MEMES, CLASICAL INFORMATION, LOCAL, GLOBAL, NON-LOCAL, QUANTUM STATES, ARCTIC, SUB-ARCTIC, TRANSHUMANIST APOLOGETICS, NEW UP, ONE UP, ALIEN LIFE, QUANTUM UNIVERSE

# Nathan Shafer with Meme-Rider Media Team

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Thomas Smith It's a New Model Man

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### KEY WORDS JOHN WALTER, VIRUS, NECKLACE, VITRINE, GALLERY

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#### KEY WORDS

JQUERY, ANIMATION, URBAN, URBANISM, ARCHITECTURE, CITY, NARRATIVE, STORYTELLING, MONOLOGUE, ELECTRONIC LANGUAGE, DIGITAL POETICS



#### **KEY WORDS**

HOTEL, SEX, DREAM, NIGHTMARE, PILLS, DRUGS, BOOZE, ADULTERY, LOVE, ROMANCE, HONOR

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#### KEY WORDS ARTIST, DESIGNER, PROGRAMER, AUGUMENTED REALITY, MEDIA ART, PUBLIC

# aug•men•ted re•al•it•y

noun

a technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view

— Dictionary

Augmented Reality (AR) is a live, direct or indirect, view of a physical, real-world environment whose elements are augmented by computer-generated sensory input such as sound, video, graphics or GPS data. It is related to a more general concept called mediated reality, in which a view of reality is modified by a computer. As a result, the technology functions by enhancing one's current perception of reality. With AR technology (e.g. adding computer vision and object recognition) the information about the surrounding real world of the user becomes interactive and digitally manipulable. — Wikipedia