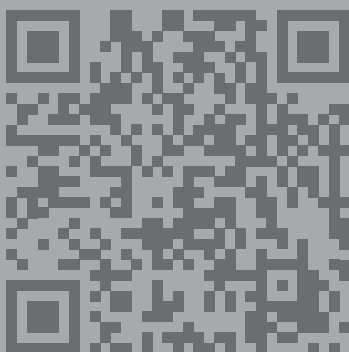
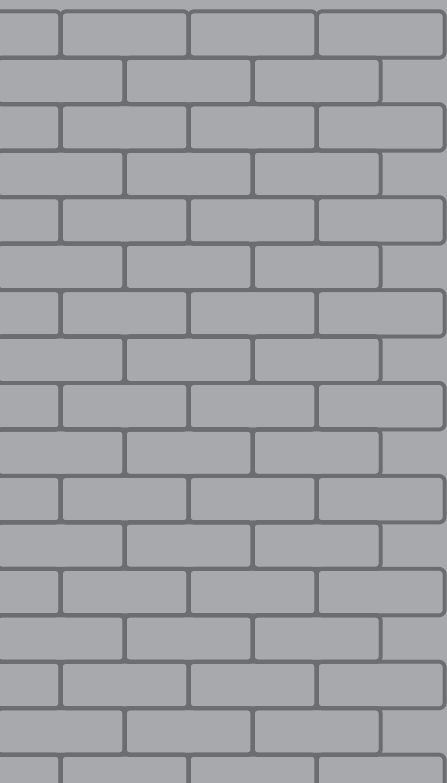


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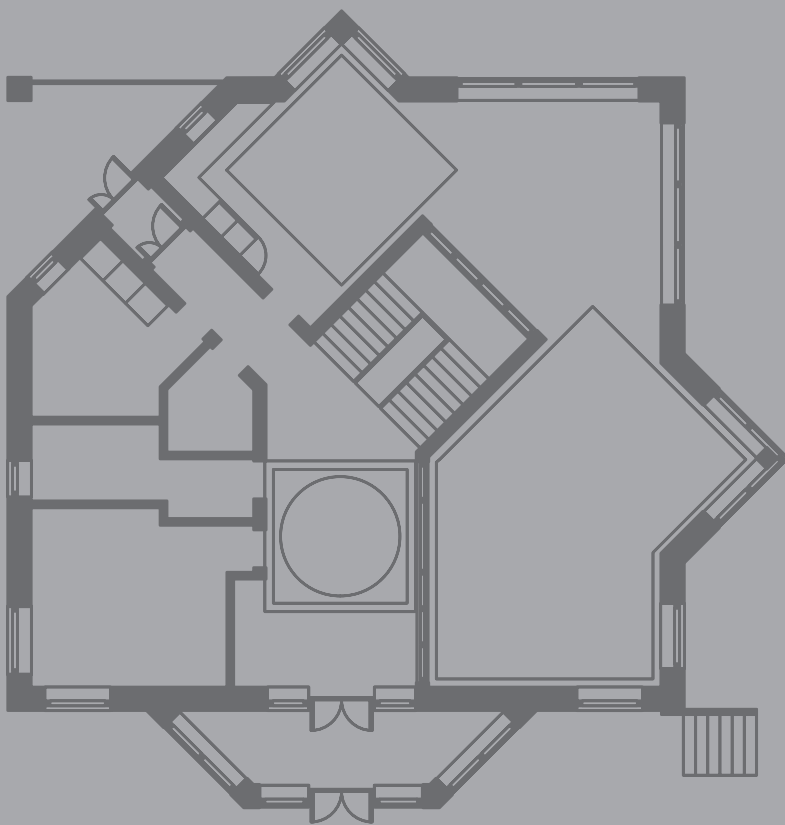
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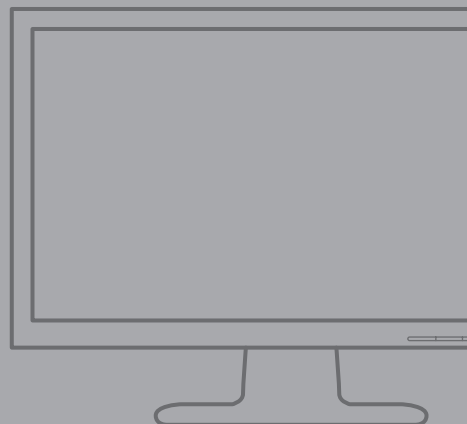
VOL 19 NO 2 VOLUME EDITORS **LANFRANCO ACETI** AND **RICHARD RINEHART**

EDITORS **ÖZDEN ŞAHİN**, **JONATHAN MUNRO** AND **CATHERINE M. WEIR**

This LEA publication has a simple goal: surveying the current trends in augmented reality artistic interventions. There is no other substantive academic collection currently available, and it is with a certain pride that LEA presents this volume which provides a snapshot of current trends as well as a moment of reflection on the future of AR interventions.



NOT THERE



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Leonardo Electronic Almanac

Volume 19 Issue 2

DATE OF PUBLICATION April 15, 2013

ISSN 1071-4391

ISBN 978-1-906897-23-9

The ISBN is provided by Goldsmiths, University of London.

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Leonardo, the International Society for the Arts,
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Leonardo Electronic Almanac is published by:

Leonardo/ISAST
211 Sutter Street, suite 501
San Francisco, CA 94108
USA

Leonardo Electronic Almanac (LEA) is a project of Leonardo/
The International Society for the Arts, Sciences and Technol-
ogy. For more information about Leonardo/ISAST's publica-
tions and programs, see <http://www.leonardo.info> or contact
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Leonardo Electronic Almanac is produced by
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LEONARDO ELECTRONIC ALMANAC, VOLUME 19 ISSUE 2

Not Here Not There

VOLUME EDITORS

LANFRANCO ACETI AND RICHARD RINEHART

EDITORS

ÖZDEN ŞAHİN, JONATHAN MUNRO AND CATHERINE M. WEIR

The Leonardo Electronic Almanac acknowledges the kind support for this issue of

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Not Here, Not There: An Analysis Of An International Collaboration To Survey Augmented Reality Art

Every published volume has a reason, a history, a conceptual underpinning as well as an aim that ultimately the editor or editors wish to achieve. There is also something else in the creation of a volume; that is the larger goal shared by the community of authors, artists and critics that take part in it.

This volume of LEA titled *Not Here, Not There* had a simple goal: surveying the current trends in augmented reality artistic interventions. There is no other substantive academic collection currently available, and it is with a certain pride that both, Richard Rinehart and myself, look at this endeavor. Collecting papers and images, answers to interviews as well as images and artists' statements and putting it all together is perhaps a small milestone; nevertheless I believe that this will be a seminal collection which will showcase the trends and dangers that augmented reality as an art form faces in the second decade of the XXIst century.

As editor, I did not want to shy away from more critical essays and opinion pieces, in order to create a documentation that reflects the status of the current thinking. That these different tendencies may or may not be proved right in the future is not the reason for the collection, instead what I believe is important and relevant is to create a historical snapshot by focusing on the artists and authors developing artistic practices and writing on augmented reality. For this reason, Richard and I posed to the contributors a series of questions that in the variegated responses of the artists and authors will evidence and stress similari-

ties and differences, contradictions and behavioral approaches. The interviews add a further layer of documentation which, linked to the artists' statements, provides an overall understanding of the hopes for this new artistic playground or new media extension. What I personally wanted to give relevance to in this volume is the artistic creative process. I also wanted to evidence the challenges faced by the artists in creating artworks and attempting to develop new thinking and innovative aesthetic approaches.

The whole volume started from a conversation that I had with Tamiko Thiel – that was recorded in Istanbul at Kasa Gallery and that led to a curatorial collaboration with Richard. The first exhibition *Not Here* at the Samek Art Gallery, curated by Richard Reinhart, was juxtaposed to a response from Kasa Gallery with the exhibition *Not There*, in Istanbul. The conversations between Richard and myself produced this final volume – *Not Here, Not There* – which we both envisaged as a collection of authored papers, artists' statements, artworks, documentation and answers to some of the questions that we had as curators. This is the reason why we kept the same questions for all of the interviews – in order to create the basis for a comparative analysis of different aesthetics, approaches and processes of the artists that work in augmented reality.

When creating the conceptual structures for this collection my main personal goal was to develop a link – or better to create the basis for a link – between ear-

lier artistic interventions in the 1960s and the current artistic interventions of artists that use augmented reality.

My historical artist of reference was Yayoi Kusama and the piece that she realized for the Venice Biennial in 1966 titled *Narcissus Garden*. The artwork was a happening and intervention at the Venice Biennial; Kusama was obliged to stop selling her work by the biennial's organizers for 'selling art too cheaply.'

"In 1966 [...] she went uninvited to the Venice Biennale. There, dressed in a golden kimono, she filled the lawn outside the Italian pavilion with 1,500 mirrored balls, which she offered for sale for 1,200 lire apiece. The authorities ordered her to stop, deeming it unacceptable to 'sell art like hot dogs or ice cream cones.'" ¹

The conceptualization and interpretation of this gesture by critics and art historians is that of a guerrilla action that challenged the commercialization of the art system and that involved the audience in a process that revealed the complicit nature and behaviors of the viewers as well as use controversy and publicity as an integral part of the artistic practice.

Kusama's artistic legacy can perhaps be resumed in these four aspects: a) engagement with audience's behaviors, b) issues of art economy and commercialization, c) rogue interventions in public spaces and d) publicity and notoriety.

These are four elements that characterize the work practices and artistic approaches – in a variety of combinations and levels of importance – of contem-

1. David Pilling, "The World According to Yayoi Kusama," *The Financial Times*, January 20, 2012, <http://www.ft.com/cms/s/2/52ab168a-4188-11e1-8c33-00144feab49a.html#axzz1kDck8Rzm> (accessed March 1, 2013).

porary artists that use augmented reality as a medium. Here, is not perhaps the place to focus on the role of 'publicity' in art history and artistic practices, but a few words have to be spent in order to explain that publicity for AR artworks is not solely a way for the artist to gain notoriety, but an integral part of the artwork, which in order to come into existence and generate interactions and engagements with the public has to be communicated to the largest possible audience.

"By then, Kusama was widely assumed to be a publicity hound, who used performance mainly as a way of gaining media exposure." ² The publicity obsession, or the accusation of being a 'publicity hound' could be easily moved to the contemporary group of artists that use augmented reality. Their invasions of spaces, juxtapositions, infringements could be defined as nothing more than publicity stunts that have little to do with art. These accusations would not be just irrelevant but biased – since – as in the case of Sander Veenhof's analysis in this collection – the linkage between the existence of the artwork as an invisible presence and its physical manifestation and engagement with the audience can only happen through knowledge, through the audience's awareness of the existence of the art piece itself that in order to achieve its impact as an artwork necessitates to be publicized.

Even if, I do not necessarily agree with the idea of a 'necessary manifestation' and audience's knowledge of the artwork – I believe that an artistic practice that is unknown is equally valid – I can nevertheless understand the process, function and relations that have to be established in order to develop a form of engagement and interaction between the AR artwork and the audience. To condemn the artists who seek publicity

2. Isabelle Loring Wallace and Jennie Hirsh, *Contemporary Art & Classical Myth* (Farnham; Burlington, VT: Ashgate, 2011), 94.

in order to gather audiences to make the artworks come alive is perhaps a shortsighted approach that does not take into consideration the audience's necessity of knowing that interaction is possible in order for that interaction to take place.

What perhaps should be analyzed in different terms is the evolution of art in the second part of the XXth century, as an activity that is no longer and can no longer be rescinded from publicity, since audience engagement requires audience attendance and attendance can be obtained only through communication / publicity. The existence of the artwork – in particular of the successful AR artwork – is strictly measured in numbers: numbers of visitors, numbers of interviews, numbers of news items, numbers of talks, numbers of interactions, numbers of clicks, and, perhaps in a not too distant future, numbers of coins gained. The issue of being a 'publicity hound' is not a problem that applies to artists alone, from Andy Warhol to Damien Hirst from Banksy to Maurizio Cattelan, it is also a method of evaluation that affects art institutions and museums alike. The accusation moved to AR artists of being media whores – is perhaps contradictory when arriving from institutional art forms, as well as galleries and museums that have celebrated publicity as an element of the performative character of both artists and artworks and an essential element instrumental to the institutions' very survival.

The publicity stunts of the augmented reality interventions today are nothing more than an acquired methodology borrowed from the second part of the XXth century. This is a stable methodology that has already been widely implemented by public and private art institutions in order to promote themselves and their artists.

Publicity and community building have become an artistic methodology that AR artists are playing with by

making use of their better knowledge of the AR media. Nevertheless, this is knowledge born out of necessity and scarcity of means, and at times appears to be more effective than the institutional messages arriving from well-established art organizations. I should also add that publicity is functional in AR interventions to the construction of a community – a community of aficionados, similar to the community of 'nudists' that follows Spencer Tunic for his art events / human installation.

I think what is important to remember in the analysis of the effectiveness both in aesthetic and participatory terms of augmented reality artworks – is not their publicity element, not even their sheer numbers (which, by the way, are what has made these artworks successful) but their quality of disruption.

The ability to use – in Marshall McLuhan's terms – the medium as a message in order to impose content by-passing institutional control is the most exciting element of these artworks. It is certainly a victory that a group of artists – by using alternative methodological approaches to what are the structures of the capitalistic system, is able to enter into that very capitalistic system in order to become institutionalized and perhaps – in the near future – be able to make money in order to make art.

Much could be said about the artist's need of fitting within a capitalist system or the artist's moral obligation to reject the basic necessities to ensure an operational professional existence within contemporary capitalistic structures. This becomes, in my opinion, a question of personal ethics, artistic choices and existential social dramas. Let's not forget that the vast majority of artists – and AR artists in particular – do not have large sums and do not impinge upon national budgets as much as banks, financial institutions, militaries and corrupt politicians. They work for years

with small salaries, holding multiple jobs and making personal sacrifices; and the vast majority of them does not end up with golden parachutes or golden handshakes upon retirement nor causes billions of damage to society.

The current success of augmented reality interventions is due in small part to the nature of the medium. Museums and galleries are always on the lookout for 'cheap' and efficient systems that deliver art engagement, numbers to satisfy the donors and the national institutions that support them, artworks that deliver visibility for the gallery and the museum, all of it without requiring large production budgets. Forgetting that art is also about business, that curating is also about managing money, it means to gloss over an important element – if not the major element – that an artist has to face in order to deliver a vision.

Augmented reality artworks bypass these financial challenges, like daguerreotypes did by delivering a cheaper form of portraiture than oil painting in the first part of the XIXth century, or like video did in the 1970s and like digital screens and projectors have done in the 1990s until now, offering cheaper systems to display moving as well as static images. AR in this sense has a further advantage from the point of view of the gallery – the gallery has no longer a need to purchase hardware because audiences bring their own hardware: their mobile phones.

The materiality of the medium, its technological revolutionary value, in the case of early augmented reality artworks plays a pivotal role in order to understand its success. It is ubiquitous, can be replicated everywhere in the world, can be installed with minimal hassle and can exist, independently from the audience, institutions and governmental permissions. Capital costs for AR installations are minimal, in the order of a few

hundred dollars, and they lend themselves to collaborations based on global networks.

Problems though remain for the continued success of augmented reality interventions. Future challenges are in the materialization of the artworks for sale, to name an important one. Unfortunately, unless the relationship between collectors and the 'object' collected changes in favor of immaterial objects, the problem to overcome for artists that use augmented reality intervention is how and in what modalities to link the AR installations with the process of production of an object to be sold.

Personally I believe that there are enough precedents that AR artists could refer to, from Christo to Marina Abramovich, in order develop methods and frameworks to present AR artworks as collectable and sellable material objects. The artists' ability to do so, to move beyond the fractures and barriers of institutional vs. revolutionary, retaining the edge of their aesthetics and artworks, is what will determine their future success.

These are the reasons why I believe that this collection of essays will prove to be a piece, perhaps a small piece, of future art history, and why in the end it was worth the effort.

Lanfranco Aceti

Editor in Chief, *Leonardo Electronic Almanac*
Director, Kasa Gallery



Site, Non-site, and Website

In the 1960's, artist Robert Smithson articulated the strategy of representation summarized by "site vs. non-site" whereby certain artworks were simultaneously abstract and representational and could be site-specific without being sited. A pile of rocks in a gallery is an "abstract" way to represent their site of origin. In the 1990's net.art re-de-materialized the art object and found new ways to suspend the artwork online between website and non-site. In the 21st century, new technologies suggest a reconsideration of the relationship between the virtual and the real. "Hardlinks" such as QR codes attempt to bind a virtual link to our physical environment.

Throughout the 1970's, institutional critique brought political awareness and social intervention to the site of the museum. In the 1980's and 90's, street artist such as Banksy went in the opposite direction, critiquing the museum by siting their art beyond its walls.

Sited art and intervention art meet in the art of the trespass. What is our current relationship to the sites we live in? What representational strategies are contemporary artists using to engage sites? How are sites politically activated? And how are new media framing our consideration of these questions? The contemporary art collective ManifestAR offers one answer,

"Whereas the public square was once the quintessential place to air grievances, display solidarity, express difference, celebrate similarity, remember, mourn, and reinforce shared values of right and wrong, it is no longer the only anchor for interactions in the public realm. That geography has been relocated to a novel terrain, one that encourages exploration of mobile location based monuments,

and virtual memorials. Moreover, public space is now truly open, as artworks can be placed anywhere in the world, without prior permission from government or private authorities – with profound implications for art in the public sphere and the discourse that surrounds it."

ManifestAR develops projects using Augmented Reality (AR), a new technology that – like photography before it – allows artists to consider questions like those above in new ways. Unlike Virtual Reality, Augmented Reality is the art of overlaying virtual content on top of physical reality. Using AR apps on smart phones, iPads, and other devices, viewers look at the real world around them through their phone's camera lens, while the app inserts additional images or 3D objects into the scene. For instance, in the work *Signs over Semiconductors* by Will Pappenheimer, a blue sky above a Silicon Valley company that is "in reality" empty contains messages from viewers in skywriting smoke when viewed through an AR-enabled Smartphone.

AR is being used to activate sites ranging from Occupy Wall Street to the art exhibition ManifestAR @ ZERO1 Biennial 2012 – presented by the Samek Art Gallery simultaneously at Bucknell University in Lewisburg, PA and at Silicon Valley in San Jose, CA. From these contemporary non-sites, and through the papers included in this special issue of LEA, artists ask you to reconsider the implications of the simple question *wayn* (where are you now?)

Richard Rinehart

Director, Samek Art Gallery, Bucknell University

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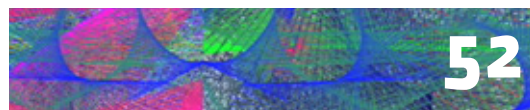
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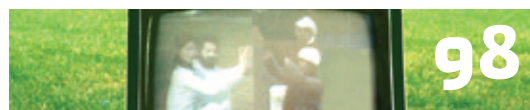
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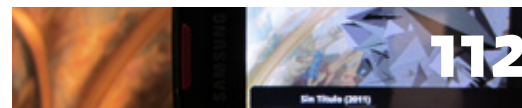
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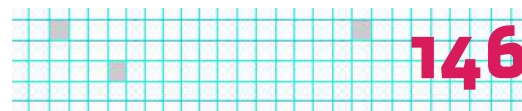
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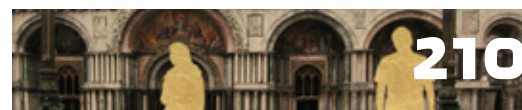


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Spatial Art: An Eruption of the Digital into the Physical

The art, my friend, is flowing in the wind.
— Guy McMusker ¹

INTRODUCTION

This text analyzes the work of artists who use augmentation, information and immersion in specific contexts – public or private spaces – with or without authorization. Their goal is to create interventionist actions and collective experiences within an experimental augmented framework. These artists play on ambiguities in defining what reality is – how it is perceived, felt and detected. The aim of the analysis is to understand socio-cultural transformations in the fields of art and technology in social space, and what new forms of aggregation and participation have developed, providing an opportunity to reflect on new concepts of democracy that are emerging in our global media age. Recently Gibson described things this way: “Cyberspace has everted. It has turned inside out. Colonized the physical.” ² We no longer go into the network; instead, it is the network that comes into us. Digital data and services are embedded “in the very fabric of the physical world.” ³ This is not only a technological issue, however; it is also a matter of aesthetics: every generation has its own art and artistic trends.

by

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The Invisible Pink Unicorn, 2011, Les Liens Invisible, augmented reality. © Les Liens Invisible, 2011.
One view of St. Peter's Square in Rome during the apparition of *The Invisible Pink Unicorn*.

A SYMBOLIC WORK

Let's begin with the symbolic work “The Apparition of the Unicorn, Pink and Invisible at the Same Time” by the artist collective Les Liens Invisible, in which “Art overtakes Faith in imagination.” ⁴

These prankster artists took the phenomenon of web-based parody religions to produce a humorous intervention that breaks the law at the same time. Using augmented reality, they brought about an event that people on the Internet had long been waiting for: the apparition of the Invisible Pink Unicorn, a legendary figure that first appeared on the Net in the early 1990s as an eminent deity to satirize theistic belief. In the words of Steve Eley “Invisible Pink Unicorns are beings of great spiritual power. We know this because they are capable of being invisible and pink at the same time.” ⁵ The goddess made her appearance as a cyber-monument in Saint Peter's Square in Rome on April 23 – Easter Day – 2011. The work demonstrates the illegal, unauthorized use of public space. Perhaps not everyone knows that the eponymous square in front of Saint Peter's Basilica is not located on Italian territory as the Vatican City, home of Pope Francisco I, is an independent state. It is also an undemocratic state, where protests and demonstrations of any kind are strictly forbidden, a situation guaranteed by tight security.

Parody religions have developed with ease over the web, which as a medium facilitates the global spread of ideas and behaviors that use artistic strategies as a tool for delving into the depths of society. Ideas and behaviors flow uninterrupted from society to the web, and then back again, in a process that can only be appreciated with the theoretical help of memes, ⁶ that is what Richard Dawkins, in applying Darwinian theory to culture, defines as that which survives in the evolution of knowledge, making ‘memes’ comparable to ‘genes’. ⁷ The Invisible Pink Unicorn was chosen by the artists because it had become a rallying point for



The Invisible Pink Unicorns, 2011, Les Liens Invisible, augmented reality. © Les Liens Invisible, 2011.

The Invisible Pink Unicorn is suspended in the air over the Vatican Obelisk.

activists, and in a certain sense ‘illegal’. Les Liens Invisibles announced the first ever public appearance of “the magnificent figure of a great pink unicorn... suspended in air over the Vatican Obelisk, surrounded by devoted believers, pilgrims and tourists” of all kinds in St. Peter's Square in Rome at midnight on Easter day, comparing it to a “collective mystic vision.” According to the artists, “As far as it is universally recognized that Easter transcends its meaning in other monotheistic religions as a “pass over” moment, even the Invisible Pink Unicorn manifested itself and personified a new crucial moment, opening a new shining season for collective visions and joyful hallucinations.” ⁸

The work can clearly be interpreted as a critical analysis of religion and of how beliefs in general take root and spread across the web, feeding off convictions which technology has enabled to spread and creating mythologies that develop through websites, mailing lists, and the posting of texts and blogs. The action is an example of an exercise in mapping Net mythologies and how they spread virally. Ideas, philosophical systems and religions are, therefore, sets of memes

belonging to the semiotics of the Internet and data space – of a community of art-hipsters who create their own codes of interpretation, which goes well beyond the select audience targeted by the Art System. Via its emergence through reaction, manipulation and remixing, that community attributes new meanings to mainstream codes of artistic interpretation. However, it is not only codes of interpretation that have changed. Les Liens Invisibles' "ubiquitous monument" has prompted "an eternal reshape of the Eternal City," as the Internet everts out of itself and into reality. "A Monument to the Invisible Pink Unicorn – which is a work and symbol of atheism, fervid imagination and hope – has been permanently placed in the middle of the square and all the passersby can now admire it through the comfortable viewer of their smart-phones freely installing the popular Layar AR application." According to the authors, "the Invisible Unicorn is not a joke and it won't be removed it from its current position. The virtual sculpture is 'real', (in)visible and it has to be taken into serious consideration: it is the way a recontextualized symbol can alter, challenge and reshape the perception of a public space – especially a very closed and symbolic one like the [sic] St. Peter's Square in Rome."⁹

As Paola Antonelli points out, "In contrast to the twentieth-century triumph of semiotics, which looked down on communication as nothing but a mechanical transmission of coded meaning, the twenty-first century has begun as one of pancommunication – everything and everybody conveying content and meaning in all possible combinations, from one-on-one to everything-on-everybody. We now expect objects to communicate, a cultural shift is evident."¹⁰ A New Aesthetic movement is emerging. "We're all supposed to think that an avant-garde is impossible within post-modernity, so we don't talk about it much nowadays; the very term 'avant-garde' sounds musty and weird now, very old-fashioned future. However, time passes

and such things happen anyhow, because generations change and technologies change. Changes in personnel and the means of production will trump the formulations of an aging philosophy. These avant-gardes pretty much must happen, and there isn't any honest way to fob this problem off onto some romanticized vision-bots. The bots are just not going to carry that water-bucket. There's an Uncanny Valley there."¹¹

SQUATTING IN SPACE

Exploring the issue of "Site vs. Non-site," or "Not Here, Not There" brings us to the topic of representation in art and to the movements that are opposed to it, along with their theorists, such as Robert Morris. Abstraction, and hence non-representation, was one way of decisively opposing representation in art, instead promoting aesthetics focused on the substance, essence or identity of an object through the elimination of all its essential modes, characteristics or concepts. At the same time though, the representational element was recovered through objects being site-specific without being sited. These developments over the 1960s and 1970s mark out an ideal progression taking us to two key issues of contemporary art: one tied to 'official designated sites' and 'unofficial urban sites,' which are often claimed or taken over by art; and another tied to the closely-related issue of the im-materiality of art.

The historical beginning of it all is widely considered to be from a methodological point of view at least, the exhibition "Les Immatériaux," organized by Jean-Francois Lyotard. The exhibition was, in reality, a 'non-exhibition' embodying a new curatorial approach in terms of both the object displayed and the issues addressed.¹² The exhibition can also take the credit for having legitimated post-industrial art in the digital global era, at a time (1985) when it was still marginal-

ized and yet to be accepted by the art establishment – something that would not happen until the mid-1990s at least. Most of all, however, it introduced a definition of art that for the first time was free of technical terms, its relationship with technology is anything but subordinate, considering the social, economic and political impact that it has. For an in-depth look at what the use of the term 'immaterial' means in this context and at the differences between the de-materialization of an artwork and the disappearance of the object, I suggest reading the work of Harold Rosenberg,¹³ who gauges the connection between art trends and new technologies. Instead, as concerns the spiritual meaning with which Yves Klein used the word 'immaterial' at the end of the 1950s, here I use the word in the contemporary sense of information technology and the post-industrial age.

With the birth of net.art, the web began to be used as the space *par excellence* for all that was immaterial, encouraging new directions in art focused on the real versus the virtual. "The 1990s were about the virtual. It started with the media obsession with Virtual Reality (VR). It is quite possible that this decade of the 2000s will turn out to be about the physical – that is, physical space filled with electronic and visual information."¹⁴ Since 2002, Lev Manovich has traced the development "of the technologies which deliver data to, or extract data from, physical space – and which already are widely employed at the time of this writing (early 2002/2005)."¹⁵ Manovich thus turns the crux of the matter on its head; the point is not technology but space, and the definition of art that overlays and occupies that space.

ART AND POLITICS

What impact does this style of art have on society and on the public? In what way does it appropriate public

and private space? And in doing so what political issues does it raise and what participatory democratic processes does it activate?

William Gibson in a recent article writes:

*"Jeremy Bentham's Panopticon prison design is a perennial metaphor in discussions of digital surveillance and data mining, but it doesn't really suit an entity like Google. Bentham's all-seeing eye looks down from a central viewpoint, the gaze of a Victorian warder. In Google, we are at once the surveilled and the individual retinal cells of the surveillant, however many millions of us, constantly if unconsciously participatory. We are part of a post-geographical, post-national super-state, one that handily says no to China. Or yes, depending on profit considerations and strategy. But we do not participate in Google on that level. We're citizens, but without rights."*¹⁶

Manovich explains: "This close connection between surveillance and assistance is one of the key characteristics of the high-tech society. This is how these technologies are made to work, and this is why I am discussing data flows from the space (surveillance, monitoring, tracking) and into the space (cellspace applications, computer screens and other examples below) together."¹⁷ It is easy to see that the heart of the matter lies in the definition of, or focus on, social space, or Augmented Space, as a specific characteristic of high-tech society. The technologies available to us – ubiquitous computing, augmented reality, wearable computers, smart building, home automation, smart objects, smart phones – are all what we might call 'pervasive computing,' which seeks to link changes in the environment with computer systems, which are otherwise static. Nowadays, our approach to these technologies has become a geo-referenced phenomenon with biopolitical connotations, as it affects our



Monument R.I.O.T., 2010, Les Liens Invisible, augmented reality. © Les Liens Invisible and Share Festival, 2010.
A view of Turin (π) with one of R.I.O.T. works series.

political constitutions, sets of values, existing practices and the common sense traits of our everyday cultures and forms of life. It does so in different ways, but the end result is the same; the Internet has everted, overlapping layers of data over physical space. Deriving the term from 'augmented reality,' Manovich refers to this new kind of space as "augmented space," which is becoming a reality and works very well. What is never explicitly mentioned, however, are the political implications that naturally arise from this overlaying of layers, made possible by tracking and monitoring users: "delivering information to users in space and extracting information about these users are closely connected. Thus, augmented space is also monitored space."¹⁸

In response to this encroaching form of social control, the imaginary group of artists Les Liens Invisibles, consisting of Clemente Pestelli and Gionatan Quintini, accepted Share Festival's invitation to produce the Special Project 2010 with their usual creative cheekiness. Specially designed for the sixth Piemonte Share Festival, the project mustered all the surreal and virtual imagination that lies at the centre of their work to invade Turin's urban environment. *R.I.O.T./Reality Is Out There*¹⁹ was a series of urban strikes

invisible to the naked eye – but for that no less tangible – using augmented realities that surround us every day. Deconstructing the natural association that has existed ever since the Stone Age between reality and the tools we build to control it, *R.I.O.T.* turns this relationship on its head by using reality as a tool, as a means through which we move to explore a universe visible only on our smart phones, creating a paradoxical tourism. Setting their sights on augmented reality, or rather on the what the myth of 'augmented reality' appears to promise, the city of Turin was invaded by a series of imaginary installations squatting in key locations. The public was invited to uncover the virtual sculptures through a game, a digital urban treasure hunt, and was treated to the sight of flying objects such as floating bananas, Facebook banners, revolutionary slogans, Space Invader icons and so on.

The desecrating collective showed no mercy in its manipulation and recontextualization of reality via an inverse process compared to the past, intervening in reality so as to subvert the map. Intervention took place in symbolic locations around town, creating a hybrid event at the crossroads of digital art, urban space and hacking. The meaning of the work lies in the title *R.I.O.T./Reality Is Out There*, which alludes to the pos-

Get Lost Into Reality, 2010, Les Liens Invisible, postcard, copyright Les Liens Invisible and Share Festival.

Description: This photo shows how to use R.I.O.T. with Turin map (π).



Get lost into Reality in 3 steps:



sibility of a return to the exploration of reality, and the overcoming of traditional antitheses between the real and the virtual by using 'low cost' reality-browsing technologies.

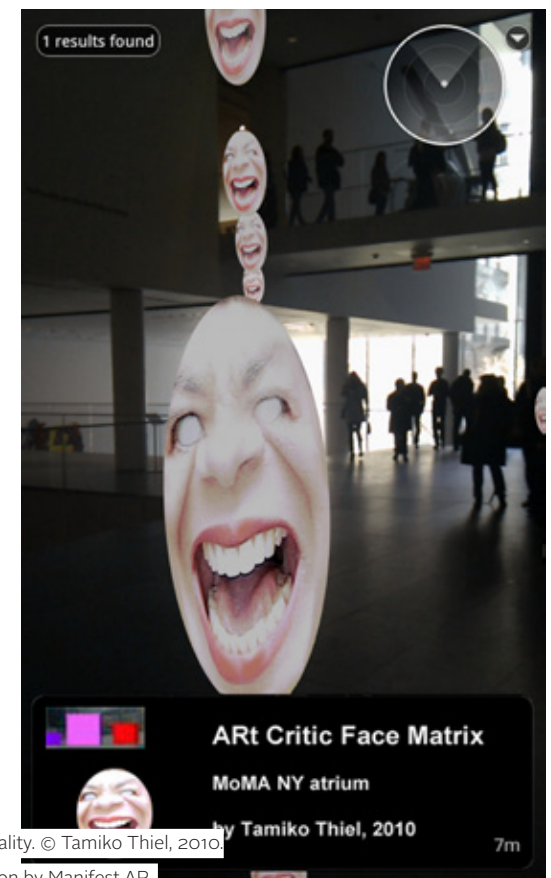
Here, real and virtual space interact so as to create a single social environment, made possible ever since digital space became an integral part of the city itself. The game is, therefore, an urban hack, the reappropriation of public space via intervention directly on the streets, squares and roads, and under monuments, porticoes and buildings. It is action in the collective digital sphere to create an unexpected gulf, cultural jamming, a guerrilla attack on communication in the global city. As a symbolic act, Les Liens Invisibles' urban hack is an aesthetic overexposure, an exercise in the subversive use of augmented reality, which becomes unreality, a vision, an augmented dream in subcultural practices. It is less about public space and more about destruction, interruption and aperture, in an effort to crack open standard mechanisms of closure.

MoMA Invasion

Other projects with direct political connotations for the Art System have been organized by other artists. One very clever example was the virtual augmented reality show held on October 9, 2010 at the MoMA building in New York – only the MoMA did not know about it. The infiltration was organized as part of Conflux, the psychogeography festival.²⁰

Sander Veenhof and Mark Skwarek, the two artists behind the invasion, extended to the public a 'cordial' tongue-in-cheek invitation to their temporary exhibition, adding a post scriptum that the MoMA itself was yet to be involved. Squatting in the halls of the MoMA

Art Critic Face Matrix, 2010-2011, Tamiko Thiel, Augmented Reality. © Tamiko Thiel, 2010.
Thiel's work was exhibited in MoMA as part of the art intervention by Manifest.AR.



in New York, the exhibition featured augmented reality art in its proper context: a contemporary art museum, showcasing the radical new possibilities and implications that augmented reality is bringing to the cultural and creative field. Over thirty artists took part in the “art invasion’ annex exhibition”²¹, distributing their works on all the floors of the building and effectively taking over the MoMA. In the artists’ statement, Veenhof and Skwarek attribute remarkable responsibility to a technology that allows provocation without the risk of arrest that graffiti artists face, even though they are not anonymous. They called it ‘progression’ in the field of art; depending on the way one looks at it, it is artistic freedom or just plain illegal.

“The technique causing this ‘progression’ is called augmented reality. It has led to an armada of virtual creativity of various kinds into our public physical space. Actually, AR has rewritten the scope of ‘public space’. Physically walled private spaces, such as musea [sic], are now open areas for anyone’s objects and actions. To reflect on this and to investigate the implications for art institutes, Mark Skwarek and I propose to infiltrate the MoMA with an augmented reality exhibition, curated and transmitted from a distance using GPS-driven Layer AR technology. A helpdesk will assist Conflux participants to collaborate and contribute a work to this ‘virtual DIY museum.’”²²

SPATIAL ART

Space is expanding in terms of the information it holds and is being augmented through the addition of media such as images, video, sound, music, words and data, which are introduced in space, but also captured within space. Augmented space is a space that is monitored and watched at the same time; it is a space in which users are tracked, where data is distributed

but also extracted. In this context, the aesthetics of ubiquitous computing opposes art to virtual reality by expanding on the digital and taking it into the physical dimension, in what we might call, following Manovich’s lexical lead, ‘Spatial Art.’ The term may be somewhat redundant, but before dismissing it I would like to use it for its analytical value – for the possibility it brings of giving art both an urban and immaterial connotation at the same time.

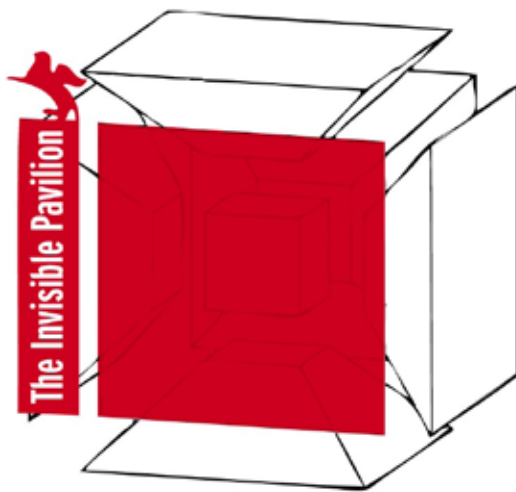
As yet another label, ‘Spatial Art’ is hardly indispensable and will probably be short-lived. Nevertheless, it can help us reconstruct the narratives of certain specific artistic practices which, as has happened in the past, have been variously labeled computer art, software art, net.art, electronic art, tech-art, new media art, digital art, bio-art and data-art. Some of these names overlap each other or denote the same type of art; others carry a clearly historical connotation. All of them, though, are intimately connected with a digital, global society. Over time, they have lost their punch and been replaced or recalled as the vestiges of an age of critical study of the relationship between art, technology and society. Spatial Art overlays and unites several spaces into one, making artistic use of time, movement and data or information in a space defined by growth in technological interaction, i.e., a data-space. Spatial Art speaks to a public on the move, to a public that is mobile and not stationary, obliging us to realize that the media that we wear are part of the objects that make up our world.²³ In 2005, Manovich conceptualized a scenario akin to the world presented in the film “They Live,” directed by John Carpenter.²⁴ In that world, special sunglasses revealed subliminal images and the real information underlying physical media (newspapers, billboards), in a reality augmented by messages of alien persuasion (obey, consume, watch TV, etc.). Today, additional layers of information are conveyed directly to people living in the smart city.

What is Spatial Art? What is its goal? What tools does it use and how is it best exemplified? What is it that we are witnessing? From an aesthetic point of view, the question of space is not new in art. Reaching out into the third dimension, into space, from a flat, two-dimensional canvas is a recurring theme throughout the history of art. Perspective in Renaissance Art was itself a technical expedient for creating the optical illusion of depth, just as the introduction of oil paint permitted multiple layering and hence three-dimensionality in art. In the post-war era, space was a key central concept of Spatialism as an art movement, and was also present in many other art movements over the twentieth century, though in different forms and with different connotations. The intuition that any new language of sculpture was dependent on the notion of space as a means of overcoming the static nature of the work was already present in Boccioni, for instance, while Pinot Gallizio, in his *Cavern of Antimatter* (1959), took his work in an ‘environmental’ direction that would be developed into the happenings and installations of the 1960s.

Nowadays the problem of bringing together two different spaces is conceived in much broader terms. Overlaying dynamic and contextualized data onto physical space brings change, dynamism, interactivity and multimediality. An aesthetic analysis of this practice is crucial for understanding the artistic paradigm and giving artists themselves the opportunity to take a fresh look at past experiences with space, and at how both temporal and spatial dimensions can be inserted in their work to overcome the stagnant nature of art.²⁵ That is how to introduce into an artwork those elements that characterize reality as the continuous flow of states that we perceive as change. The contrast between site and non-site, between the real and the virtual, between being here and there at the same time – the ubiquity of objects and images, the relationship between physical space and artworks – is a field widely explored by artists.

So what is human-object communication? How is the relationship immaterial and what are the social and, ultimately, political implications of that immateriality? Every single place on Earth has coordinates that can be tracked technologically; every single space can be surveilled. As Korzybski put it, the map is not the territory – a concept later examined and developed by Bateson, though also explored by Borges in his well-known short story *On Exactitude in Science*. Maps today – spanning Google, GIS, GPS and the entire web itself, including games such as Foursquare and social networks, which themselves publish content in the form of maps, graphic data and infosthetics that are directly geolocalized, and hence are forms of territorial representation – have become activities and practices of socialization, interacting with social life. The result, as we have seen, is the illusion of living within a technological Panopticon in which it is no longer possible to dabble in any form of expression beyond control and outside of sovereignty: we ourselves produce the data that fulfill the contemporary paradigm of surveillance and control. By subjectifying the process of subjectification, biopolitics is self-generating.²⁶ ‘Biopolitics’ is the term by which Foucault refers to how, ever since the eighteenth century, we have sought to rationalize issues for a government that are specific to groups of human beings living as one population, such as health, hygiene, birthrates, lifespan and race. The technological Panopticon is an expression of augmented power that pervades from the inside out, constructed as a series of multiple power relationships. Through those power relationships, through the invisibility of control, the biopolitics of social control is applied.

The concept of space has evolved from an implicit counterpart of new work in aesthetic fields (as theorized briefly within the context of the historic avant-garde movements) to become a theoretical and practical element underpinning a new approach to art,



taking us from the gallery or museum to social space, from the picture to the installation, from public art to urban art, from acquiescence towards institutions to grassroots independence, from the finished work to the open work. What will come next? The only artistic precedent to have any tie to Spatial Art lies in the overtly political connotations of the life and work of Joseph Beuys.²⁷ As far back as the 1960s, the flame that would inspire Beuys throughout his career was the “extended definition of art,” later developed into the idea of “social sculpture” and his thoughts on how and whether art should interfere with politics. Joseph Beuys extended the definition of art such that his field of action came to directly encompass the social organism as a whole, with a view to building, with the participation of every human being, an invisible sculpture,²⁸ both immaterial and existing in the form of social life. Is this not highly reminiscent of the cooperative aspects that underpin the global network and the need for direct participation and activism in contemporary democracy?

From an aesthetic point of view, contributing to the architectural construction and maintenance of the network – the “social sculpture” of today – has led artists to work in new fields that contain elements of new forms of participatory democracy. One example of this process started with the Invisible Pavilion, which was an effort to explain concrete developments in the relationship between a site, art and technology and hence to talk not about aesthetics as some untried and untested absolute, but rather about action

Invisible Pavilion, Exhibition Logo, 2011. © Les Liens Invisible and Simona Lodi, 2011.

shaped by universal concepts. The next step will take its cue from the curatorial process for organizing art exhibitions in which artists are invited specifically to use augmentation, information and immersion in a specific public or private space, with or without authorization, as a metaphor for an information layer overlapping physical reality, presenting an artistic viewpoint on issues such as public space, biopolitics, ubiquitous computing, surveillance versus inverse surveillance, freedom of speech, urban and private life, the smart city, mobile communication, personal presence, and inclusion versus exclusion.

The Invisible Pavilion was an uninvited, experimental, hallucinatory experience of augmentation, information and immersion in a specific context, involving the unauthorized use of public space, which squatted in the exhibition spaces of the 54th Venice Art Biennale. It was a performance involving the ‘flow’ of digital-based works of art, which filled the whole Giardini concourse where the national pavilions were located. Curated by Les Liens Invisibles and I, the main purpose of the project was to augment the spaces of the Biennale with a stream of signs and symbols, in an attempt to emphasize how producing art is a state of flow in the ‘always-on’ age. The format used for inviting artists to contribute to the performance was also designed specially for the use of augmentation, information and immersion. Artists were not asked for ‘one’ piece from a collection but for a ‘stream’ of pieces since the idea was not to use the augmented space to reproduce the same curatorial scheme as the visible Biennale. The Invisible Pavilion project led to a new partnership with the artistic collective Manifest.AR and their Venice Biennale 2011 AR Intervention. Together a format was built that stepped up the interventionist component of the projects.

The Invisible Pavilion represented an inquiry into the significance, meaning and use of public space. The



Drug Box, 2010, REFF – Roma Europa Fake Factory, augmented reality. © Roma Europa Fake Factory, 2010.
Invasion of the augmented reality Drug Box in the Giardini of 54th International Art Exhibition Venice Biennale.

underlying question was how to give new meaning to the concept of public space, changing its proprietary boundaries, and to the concept of what it is to perceive reality.

Nine artists – Artie Vierkant, Constant Dullaart, CONTEXT.NET, IOCOSE, Jon Rafman, Les Liens Invisibles, Molleindustria, Parker Ito, and REFF–RomaEuropa FakeFactory – were invited to contribute to the pavilion project, turning the Biennale space into a performance by providing a stream of works for the entire length of the exhibition. What the artists had in common, and hence the reason why they were all invited to take part, was their focus on confronting our perception of reality through the conscious, mocking

and obviously hypercritical use of new media. The invitation to contribute to the Invisible Pavilion was yet another chance for them to comment on the art industry and all its contradictions in the context of the Venice Biennale.

Molleindustria is an Italian team of artists, designers and programmers, whose aim is to encourage serious discussion of the social and political implications of videogames. Their strategy is to involve media activists, net-artists, habitual gamers and detractors of videogames. Their intervention and contribution to the Invisible Pavilion targeted the Chinese Pavilion after Chinese artist Ai Weiwei was arrested at Beijing Airport on April 3, 2011, while en route to Hong Kong.



Augmented Perspective, 2011, molleindustria, augmented reality. © molleindustria, 2011.

This work was positioned by the artist in front of the Chinese Pavilion to protest against the arrest of the artist Ai Weiwei and Chinese censorship.

His arrest appeared to be part of a larger crackdown on democracy activists and dissidents.

Augmented Perspective references Ai Weiwei's series of photographs *Study of Perspective*, allowing visitors to superimpose the artist's one-finger salute onto the surrounding landscape. The Chinese Pavilion, it is known, was under the direct control of the Chinese government, leading Molleindustria to denounce Italian complicity with the Chinese dictatorship, stating, "While the international art community is mobilizing for the release of Ai Weiwei by pressuring Chinese authorities and demonstrating at embassies around the world, the Venice Biennale provides a central stage for government-endorsed Chinese art, becoming, de facto, an accomplice of this unacceptable attack on freedom of expression."²⁹

For REFF, "Defining what is real is an act of power. Being able to reinvent reality is an act of freedom. REFF promotes the dissemination and reappropriation of all technologies, theories and practices that can be used to freely and autonomously reinvent reality."³⁰ This commitment is what led the artists to invent

REFF AR Drug, an augmented reality drug combining three "very powerful molecules": *REMIXine*, "known to augment the total entropy of systems"; *REALITene*, whose "configuration is not determined in the lab, but is left to the shaping processes enacted by the patient and its surrounding context"; and last but not least, *REINVENTum*, "a compound that collaborates with the other molecules found in our drugs to reassemble components into new forms once their bonds have been disassembled."³¹

According to the artists, the purpose of the drug is to treat biopolitical issues such as social depression, fear of the future, precariousness, anthropological distress, lack of opportunity, communication totalitarianism, scarcity of freedom and intolerant social ecosystems. It has yet to be launched on the market.

CONTEXT.NET is more conceptual in its work. Founded in January 2006 by Sabine Hochrieser, Michael Kargl, Birgit Rinagl and Franz Thalmair, this Vienna-based collective takes the idea of the 'context' as its starting point, to reflect upon the spatial, temporal, discursive and institutional framework in which contemporary



Show Me Your Digital, 2011, IOCOSE, augmented reality. © IOCOSE, 2011.

This work is positioned in the entrance of the main boulevard of The Giardini as a stage curtains of the Venice Biennale's 54th International Art Exhibition.

conceptual artistic practices are grounded. For the Invisible Pavilion, the collective produced *Blemish*, one of the most scheming and intriguing works streamed. As the artists explain,

*"The work blemish pursues the technological limitations of mediated images by extinguishing single components of it. Ephemeral image vacancies are inscribed in the mobile display as a layer of defective pixels and can be read as an intervention in the technological conditions of devices that serve for the representation of reality by digital means. Equally, blemish is an intervention in the public space, giving priority to the context of the global art world as well as targeting the blind spots of its modes of production and representation. The unstable nature of reality as well as the contemporary methods of its reproduction is called into question: Which of the significant components of a digital product are visible, which are not? Which components of an overall image are not on display, deliberately or accidentally? Which of the many artistic formats appears in the canon of contemporary art, which of them are blanked out in the files of its operating system? The immaterial defect of form – a dead pixel – is inscribed in the auratic art spaces of the Venice Biennial. Barely perceptible for the viewers it is disguised as a loose arrangement of black squared errors which finally can be read as an abstract comment about the blemished context of art."*³²

Constant Dullaart's *Invisible Watermark* and Jon Rafman's works *Pollock Tank*, *Georgia O'Keeffe Spinner* and *Matisse David*, forming part of the series *Brand New Paint Job*, have much in common with the 'New Aesthetic' theorized by James Bridle.³³ The concept deserves particular attention as the New Aesthetic could well become the next big thing in art today. I make particular reference here to Bruce Sterling's

"*Essay on the New Aesthetic*,"³⁴ which starts out as a commentary on John Bridle's panel at South by Southwest 2012, but goes beyond Bradley's ideas. The extensive debates raging on the most popular mailing lists, such as Nettime, SPECTRE, NetBehaviour and New Media Curating, show just how much we need to stop and reflect on a number of intriguing issues, such as the points raised and focused on by Bruce Sterling.

*"The New Aesthetic concerns itself with 'an eruption of the digital into the physical' .. The 'New Aesthetic' is a native product of modern network culture.. The New Aesthetic is a 'theory object' and a 'shareable concept.' .. Above all, the New Aesthetic is telling the truth.. Next, the New Aesthetic is culturally agnostic.. It's also deep. If you want to get into arcane matters such as interaction design, computational aesthetics, covert surveillance, military tech, there's a lot of room for that activity in the New Aesthetic. The New Aesthetic carries a severe, involved air of Pynchonian erudition.. It's contemporary. It's temporal rather than atemporal.. It is generational."*³⁵

Lots of images made up of lots of pixels was the answer to a figurative approach to the New Aesthetic's reproduction of reality, questioning the unstable nature of the real world and the contemporary methods used for its digital reproduction. The Invisible Pavilion was used as a space to post images using augmentation, information and immersion techniques to confuse the audience, prompting the public to think about the temporary nature of reality and contemporary methods of reproducing it. On show was a series of invisible components making a global image, which purposefully and randomly represented the leftover mistakes of a restrictive, institutional system. Ultimately, they were a comment on the abstract and defective context of art, which creates gaps and blind spots – or invisible pavilions – in its methods

of production and representation. Those spaces are experimental and not created by invitation, but ultimately they are not a provocation. Rather, they are a bit of black humor, casting a wink at the aura that shrouds the Biennale, that historic, promised land – an aura, which tends to, lift in the midst of augmented reproducibility. They are an emblematic abstraction to decorate with illusion and signal change in a venue, a city, a place that speaks and interacts, that informs us continuously, non-stop. They announce that human-machine interaction, the interface, has become the urban environment, a collective external space, a pavilion – an area in which to aggregate and share information in real time, which changes our perception of the physical venue through a gesture that transforms the city a gesture by artists that are augmented town planners. Building this r/Reality is not, however, a conscious decision. It is a fact, a place into which town-planning artists are thrown. It is a r/Reality that is not an object distinct from what it will become, but the object of its own becoming. The artist is the builder of what the world will become the r/Reality that exists as an expression of art – an art that is no longer an interpretation of the world, but an act of dialectical transformation of the tangible and intangible, the visible and the invisible. For this r/Reality, for this pavilion which “comes into being on its own,” the artists were invited to produce not just a “piece” of work, but rather a stream of “pieces,” a constant flow of work, for a curatorial project that would reach out and speak to the Visible Biennale.³⁶

SPATIAL ART CONTINUED...

Working on the Invisible Pavilion project for the 54th Venice Biennale, it so happened that we came across another group of artists working on much the same issue, so we decided to cooperate with them and launch a joint attack on the Biennale from different

fronts and perspectives. In June 2011, the cutting-edge international cyberartist group Manifest.AR³⁷ issued a statement to the general public and to the president and director of the 54th Venice Biennale informing them that they had created additional pavilions in the Giardini concourse, built in the new medium of augmented reality and that some of the works had leaked out into the public space of Saint Mark's Square. The statement announcing the unauthorized intervention was directed critically at Bice Curiger's “five questions” and the “ILLUMInations” theme of the exhibition, stating that their uninvited participation would “not be bound by nation-state borders, physical boundaries or by conventional art world structures,” and “As ‘one of the world's most important forums for the dissemination and ‘illumination’ about current developments in international art; the 54th Biennale of Venice could not justify its reputation without an uninvited Augmented Reality infiltration,” raising questions of “physical and hierarchical boundaries.”³⁸ The artists Mark Skwarek, Sander Veenhof, Tamiko Thiel, Will Peppenheimer, John Craig Freeman, Lily and Hong Lei, Naoko Tosa and John Cleater all took part directly in the project.

As Tamiko Thiel explains,

“Augmented reality has redefined the meaning of ‘public space.’ As corporations privatize many public spaces and governments put the rest under surveillance, augmented reality artists take over the invisible but actual realm that overlays real space with multiple parallel universes. Augmented reality actualizes the metaverse in the real universe, merging the digital and the real into a single, common space.

Augmented reality can conquer space but it is not indifferent to space. With my artworks you must negotiate real space in order to view the works.



They are usually not single images or objects, but installations that surround you. In order to look at them you must move your body in space, looking up, down and twisting around.”³⁹

In *Shades of Absence: Outside Inside*, Tamiko Thiel inserted into the closed curatorial space of the Giardini concourse in Venice the silhouetted figures of artists who have been threatened with arrest or physical violence. Regardless of whether they are outsiders or insiders to the Art System, known internationally or only within small circles, their work has excluded these artists from the safety of protected space.

In contrast, John Craig Freeman explains that the

“Use [of] augmentation, information, immersion in a specific context in my work means to design, question and expand the notion of ‘public’ by exploring how digital networked technology is transforming our sense of place. I use new technologies to produce large-scale public work at sites where the forces of globalization are impacting the lives of individuals in local communities.

I have been interested in emergent technology as art practice and public art as intervention for over two decades. Intervention in both institutions of high culture and intervention in government policy and nation states. In November, 1990, I created Op-



Shades of Absence: Schlingensief Gilded, 2011, Tamiko Thiel, Augmented Reality. © Tamiko Thiel, 2011. Memorial to Christoph Schlingensief in front of the German Pavilion, re-named “EGOmania” after his eponymous 1986 film. Venice Biennale 2011, art intervention.



Monumento a las Mujeres Desaparecidas, 2012, John Craig Freeman and Christina Marin, Location-based Augmented Reality. © John Craig Freeman, 2012. Since 1993, hundreds of young women have been murdered and their bodies abandoned in vacant lots around Ciudad Juárez just over the border from El Paso.

eration Greenrun II, a major public art intervention consisting of eleven 10' x 40' billboards along Highway 93 at the Rocky Flats nuclear weapons plant near Bolder Colorado... The decision to shutdown Rocky Flats for good was made in 1991, during the media firestorm this project created, proving that art does have a role to play in tangible political change. I consider my work to be an extension of this public art practice.

For the past eight years, I have worked on the corner of Tremont and Boylston Streets overlooking the historic Boston Common, the first public park in the United States. I walk across the park every morning. As I do, I often contemplate the role that the town square plays in [the] shaping of political discourse and national identity formation. As the location of the public sphere, the town square is where we air grievances, display solidarity, express our difference, celebrate our similarities, remember and mourn... In the early 1990s we witnessed the migration of the public sphere from the physical realm, the town square and its print augmentation, to the virtual realm, the Internet. Augmented reality brings the placelessness of [the] Internet and its distributed discourse crashing back down to place, making location relevant once again, and doing so without sacrificing the global connectivity of the Internet. Imagine now, the entire mobile Internet,

and its physical manifestations of place, as a worldwide public square."⁴⁰

A whole new scene is emerging. Here I would also like to look at other exhibitions and projects connected with the topic of Spatial Art, with the aim of expanding the field of research and gauging the progress made in augmentation, information and immersion by the contemporary art world. Starting with the question: if the concept of data-space has become a paradigm for contemporary society, what are the implications for art?

In contrast with the concept of the Internet everting out of itself, though somewhat along the same lines, Aram Bartholl⁴¹ takes the virtual into the physical to parody the idea of ubiquity, where it is the real object that activates the web. Remixing the real and virtual aspects of our lives is a circular process that goes in both directions. The unifying thread of Aram Bartholl's work lies in the physical reconstruction of cyberspace with tangible, physical objects. He has, for instance, added a 'virtual' arm and gun to an ordinary pair of paper and plastic glasses, giving the wearer the same perspective as in a First Person Shooter game. In *Are You Human?* he produced a series of CAPTCHA codes to be placed on walls around town, while in *Open Internet* he created a mobile Internet Hotspot. Instead,

in *Map* and *WoW*, he transfers the virtual markers of Google Maps and the naming convention of the role-playing game *World of Warcraft* into the physical world – an 'over-load' spiced with humor.

CONCLUSIONS OF SPATIAL ART: THE PROBLEM OF PERPETUAL NEWNESS⁴²

The culture of ubiquitous information highlights the social peculiarities that can ensue. Mapped space overflows onto society, compelling contemporary artists to explore the relationship between art and social life, to find the intersection between the self and society, and to depict, directly and exhaustively, the features of the society in which they live. These artists represent contemporary thought in their way of representing ubiquity as a real condition of everyday life, transforming it into symbols of rich cultural connota-

tion. Ubiquity is a forceful display of the role that art plays in understanding a global world, where artworks reflect not only the artists' perspective on reality, but also shed light on our own experience of the world. We have looked at how and where the distinction between public and private space breaks down, at how new space and new territory for art are being opened up, at reactions to data-space. The concepts of art in public space, art as public space and art in the public interest have all changed, paving the way for a return of political activism in the social function of art. In this context, does it still make any sense to talk about public space and public art? Can we still speak of artistic universals?

The conclusions lie within the approach taken to the topic; an approach that is neither technological nor geographic, but rather driven by an interest in captur-

Tiananmen SquARed: Tank Man, 2011, 4Gentlemen, Location-based Augmented Reality, © 4Gentlemen, 2011. This is a two part augmented reality public art project and memorial, dedicated to human rights and democracy.



ing the cultural climate and a certain psychological and anthropological dimension of our perception of public space, of overcoming limits, of the concepts of material/immaterial, visible/invisible, real/unreal. Set off against the artists and the exhibitions described in this paper are the museums, venues or sites that already exist. What we have is not the definitive story of a movement but rather an account given by a series of individual works and by continuous links to real and virtual situations. The conclusions are given by the account pieced together by artistic works that make use of those elements that characterize reality as the continuous flow of states that we perceive as changes in life and in the space we live. The works are individual, shifting, subjective accounts, more from the point of view of an art world outsider than from an insider. This can be seen in Will Peppenheimer's *Skywrite AR: We Need Something*, which appeared virtually over Queens in New York throughout the Occupy Wall Street protests in 2012.

The game of claiming to be outside any official system or establishment is itself a strategy for earning one-

self a role as spokesperson of dissent, while it is also interesting as an expression of artistic freedom. The framework of the exhibitions described is shaped by the continuous friction between the individualism of the artists and the institutional nature of the events they target. It all turns on an ambiguous division that is technically ironclad as it overlaps the problem of perpetual newness that augmented reality and the New Aesthetic express. Changes in public space have become manifest in the augmented power of biopolitics, in the critical analysis of ubiquitous computing, in the question of surveillance versus inverse surveillance, in freedom of speech, in the permeability of boundaries, in locative media, in developments in the political and social environment, in the Panopticon, in interventionism in the art system (such as the Venice Biennale and MoMA invasions), in issues of democracy and privacy, in the tracking and profiling of data flows underpinning the growth of a database culture. All these changes have contributed to the construction of a new digital identity – but is it an identity that we really want? As this new identity shapes living conditions in urban and private life in the smart city, mobile com-

We Need Something, 2012, location-based Augmented Reality iPhone screenshot. © Will Pappenheimer, 2012.

This work was located over Queens, NY during the manifestation days of 'Occupy Wall Street' in 2012.



munications and handheld devices are erasing our personal presence, shifting the focus of accessibility onto the issue of digital inclusion/exclusion. A conflict has emerged between the individual and the community which itself is cardinal to the Art System and world of galleries and museums, which is substantially market-based. In this way, Spatial Art reflects the constant tension between the multiplicity of individual artists and the organizational unity of the system in general. There is no other unifying thread for Spatial Art, and as an element even it, perhaps, is paradoxically absent. All we have are clips, words, floating objects, statements, made-up chemical formulas, fragments of non-narrative accounts, elements without structure. What would appear to emerge is, on one hand, the figure of the artist as messenger and innovator of roles and meanings, championing an anti-establishment art; on the other, the artist as the teller of fragmented narratives of reality and immateriality. They are witnesses of a fundamental anthropological change because as artists they are outsiders to the art market and the system in general, taking on an ethical role on which their exhibitions are premised. Their standing outside the system in general makes them morally invincible and irreproachable, and if what they do is illegal, it means they are treading on fiercely contested ground.

Artwork that is secret, or invisible or in some way a 'revelation' in space also takes on an aesthetic element shaped by the artist's being an outsider to the Art System, to the world of art based on economic rather than cultural value. For mainstream art scenes, not producing for the market is ultimately the last real statement that the artist can make against the art world, a form of rejection of capitalism and its modes of production, which for some takes on an existential bent. These are artists who live in society and not in museums, who are in touch with social and political issues, which is why their art tends to revolve more around 'action' than around pieces of artwork. The picture is ultimately connected with the role and responsibility of the artist as a pioneer and critic, as a witness and as a futurologist in a certain sense – as a person who can bring about change even through simple, surreptitious gestures. This image of the artist may well be just a myth – but why reject it and the evocative appeal that it continues to command? ■

REFERENCES AND NOTES

1. Guy McMusker Official spokesperson for Les Liens Invisibles, e-mail message to the author, March 21, 2011.
2. William Gibson, "Google's Earth," *The New York Times*, August 31, 2010, <http://www.nytimes.com/2010/09/01/opinion/01gibson.html> (accessed April 20, 2012).
3. Gene Becker, "In Digital Anima Mundi," (from the SXSW 2012 session on PolySocial Reality and the Enspirited World), The Connected World's blog, March 17, 2012, <http://www.lightninglaboratories.com/tcw/2012/03/in-digital-anima-mundi/>, (accessed April 12, 2012).
4. Les Liens Invisibles, "The Apparition of the Unicorn, Pink and Invisible at the Same Time," Les Liens Invisibles' official website, April 24, 2011, <http://www.lesliensinvisibles.org/2011/04/the-invisible-pink-unicorn-art-overtakes-faith-in-imagination/> (accessed April 10, 2012). See also: Les Liens Invisibles, The Invisible Pink Unicorn's website, <http://invisible.unicornrosa.org/> (accessed April 10, 2012) and Les Liens Invisibles, Official Monument To The Invisible Pink Unicorn's website, <http://www.monumenttotheinvisiblepinkunicorn.com/> (accessed April 10, 2012).
5. Jack Huberman, *The Quotable Atheist: Ammunition for Nonbelievers, Political Junkies, Gadflies, and Those Generally Hell-Bound* (New York: Nation Books, 2007), 103.
6. Francesco Ianneo, "Meme. Generica e Virologia di idee, credenze e mode," (Rome: Castelvecchi, 1999), as discussed in Vito Campanelli, *Remix It Yourself – analisi socio estetica delle forme comunicative del Web* (Bologna: CLUEB, 2011), 30.
7. Richard Dawkins, *The Selfish Gene* (New York: Oxford University Press, 1976), as discussed in Vito Campanelli, *Remix It Yourself*, 31.
8. Les Lien Invisibles, "The Apparition of the Unicorn, Pink and Invisible at the Same Time."
9. Ibid.
10. Paola Antonelli, ed., *Talk To Me: Design and the Communication between People and Object* (New York: The Museum Of Modern Art, 2011), 7.

11. Bruce Sterling, "An Essay on the New Aesthetic," *Wired*, April 2, 2012, http://www.wired.com/beyond_the_beyond/2012/04/an-essay-on-the-new-aesthetic/ (accessed April 17, 2012).
12. Francesca Gallo, *Les Immatériaux, Un percorso di Jean-François Lyotard nell'arte contemporanea* (Rome: Aracne Editrice, 2008), 25.
13. Harold Rosenberg, *The De-Definition of Art* (Chicago: The University of Chicago Press, 1972); Italian translation, *La s-definizione dell'arte*, trans. by M. Vitta (Milan: Feltrinelli, 1975).
14. Lev Manovich, "The Poetics of Augmented Space," Lev Manovich's official Web site, www.manovich.net/DOCS/Augmented_space.doc/ (accessed April 17, 2012).
15. Lev Manovich, "The Poetics of Augmented Space."
16. William Gibson, "Google's Earth."
17. Lev Manovich, "The Poetics of Augmented Space."
18. Ibid.
19. 6th Share Festival, official website, "R.I.O.T./Reality Is Out There," 2010, http://www.toshare.it/?page_id=2923&lang=en (accessed April 24, 2012); Les Liens Invisibles, official website, "R.I.O.T./Reality Is Out There," <http://www.realityisoutthere.net/> (accessed April 24, 2012).
20. Sander Veenhof and Mark Skwarek, "We AR in MoMA," Conflux Festival official website, <http://www.confluxfestival.org/projects/conflux-festival-2010/we-ar-in-moma/> (accessed April 22, 2012).
21. Ibid.
22. Ibid.
23. Jay David Bolter and Richard Grusin, *Remediation. Understanding New Media* (Cambridge, MA: The MIT Press, 1999); Italian translation, *Remediation. Competizione e integrazione tra media vecchi e i nuovi*, trans. by B. Gennaro and A. Marinelli (Milan: Angelo Guerini e Associati, 2002), 249.
24. They Live, dir. John Carpenter, (Alive Films, Larry Franco Production), 1988. Based on the short story *Eight O'Clock in the Morning* by Ray Nelson.
25. See the Spatialist movement headed by Lucio Fontana, which took up advances in science and technology to overcome the fixed limits of the picture. "Be venturing into real space, Spatialist work defined itself ontologically no longer as an object, but as a site, subject solely to the spatial-temporal context of its enactment, of its being there, of its endurance as an action shaping a new environmental reality." R. Barilli, *L'arte contemporanea: Da Cézanne alle ultime tendenze* (Milan: Feltrinelli, 1984), 223.
26. Michel Foucault, *Naissance de la Biopolitique: Cours au Collège de France, 1978-1979* (Paris: Gallimard/Seuil, 2004); Italian translation, *Nascita della biopolitica*, trans. by Mauro Bertani and Valeria Zini (Milan: Feltrinelli, 2005), 261. Foucault explains the historical novelty of biopolitics in the celebrated passage, "For millennia, man remained what he was for Aristotle: a living animal with the additional capacity for a political existence: modern man is an animal whose politics places his existence as a living being in question," in Michel Foucault, *La Volonté de Savoir* (Paris: Gallimard, 1976); English translation, *The History of Sexuality. Volume 1: An Introduction*, trans. by Robert Hurley (New York: Pantheon Books, 1978), 143. Thus the distinction between *zoé* and *bíos*, as a necessary element in coining the concept, is brought into question, and it is within the space opened up by this distinction that Foucault places the relationship between life, history and politics. Foucault champions the historic nature of the notion of 'life'; it is an "epistemological indicator" characterizing the modern age in which only human life has entered history – the history of knowledge and of power. The regularities considered to define human nature need to be resuscitated "in the field of other human practices, such as economics, technology, politics, sociology, which can serve them as conditions of formation, of models, of place, of apparition, etc." Noam Chomsky and Michel Foucault, *The Chomsky-Foucault Debate: On Human Nature* (New York: The New Press, 2006), 29.
27. Joseph Beuys and Michael Ende, *Kunst und Politik, Ein Gespräch*, ed. Rainer Rappman (Wangen: FIU-Verlag, 1989); Italian translation, *Arte e politica. Una discussione*, trans. by E. Picco (Parma: Ugo Guanda, 1994), 8, 18, 32, 37.
28. Volker Harlan, Rainer Rappmann, and Peter Schata, "Soziale Plastik. Materialien zu Joseph Beuys," (Achberger Verlag, 1984) in Joseph Beuys and Michael Ende, *Kunst und Politik, Ein Gespräch*.
29. Mollindustria, official website, "Augmented Perspective," 2012, mollindustria.org/augmentedperspective/index.html (accessed April 24, 2012).
30. REFF-RomaEuropa FakeFactory's official Web site, <http://www.romaeuropa.org/> (accessed April 26, 2012).
31. REFF-RomaEuropa FakeFactory, "REFF AR Drug," The Invisible Pavilion's official Web site, <http://www.theinvisiblepavilion.com/flow/page/4/> (accessed April 26, 2012).
32. CONT3XT.NET, "Blemish," May 30, 2011, The Invisible Pavilion's official Web site, <http://www.theinvisiblepavilion.com/2011/05/30/pixelerror/> (accessed April 24, 2012).
33. James Bridle, "The New Aesthetic," Really Interesting Group's official Web site, May 6, 2011, blog <http://www.riglondon.com/blog/2011/05/06/the-new-aesthetic/> (accessed April 24, 2012).
34. Bruce Sterling, "Essay on the New Aesthetic."
35. Ibid.
36. Simona Lodi, "Curatorial Statement," The Invisible Pavilion's official Web site, <http://www.invisiblepavilion.com/> (accessed April 22, 2012).
37. Manifest.AR's official Web site, <http://www.manifestar.info/> (accessed April 22, 2012).
38. Manifest.AR's official Web site, "Announcement: Venice Biennale. AR Intervention by Cyberartist Group Manifest.AR," <http://www.manifestar.info/venicebiennale2011/> (accessed April 22, 2012).
39. Tamiko Thiel, e-mail message to the author, April 18, 2012.
40. John Craig Freeman, e-mail message to the author on April 9, 2012. See also Jon Craig Freeman's blogs: "Operation Greenrun II," <http://johncraigfreeman.wordpress.com/operation-greenrun-ii/> (accessed April 26, 2012); "Border Memorial: Frontera de los Muertos," <http://bordermemorial.wordpress.com/border-memorial-fronters-de-los-muertos/> (accessed April 26, 2012) and "Augmented Reality as Public Art, Mobile Location Based Monuments and Virtual Memorials," <http://johncraigfreeman.wordpress.com/category/lectures-and-presentations/> (accessed April 27, 2012).
41. Jonah Brucker-Cohen, "Public Space Interventions: Connecting the Online and Physical World," in *Aram Bartholl. The Speed Book*, ed. Domenico Quaranta (Berlin: Gestalten, 2012), 100-113.
42. Marius Watz, "The Problem of Perpetual Newness," in "In Response to Bruce Sterling's 'Essay on the New Aesthetic,'" ed. Julia Kaganskiy, The Creators Project's official Web site, April 6, 2012, <http://thecreatorsproject.com/blog/in-response-to-bruce-sterlings-essay-on-the-new-aesthetic/#3> (accessed April 24, 2012).

SIMONA LODI

interviewed by

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Is there an 'outside' of the Art World from which to launch critiques and interventions? If so, what is the border that defines outside from inside? If it is not possible to define a border, then what constitutes an intervention and is it possible to be and act as an outsider of the art world? Or are there only different positions within the Art World and a series of positions to take that fulfill ideological parameters and promotional marketing and branding techniques to access the fine art world from an oppositional, and at times confrontational, standpoint?

This question is premised on a fallacy from the outset: there is no 'Art world.' Art is part of the ordinary world; just like culture and knowledge, it is a public good. Art is not separate from the world or from society. There is, however, an 'Art System,' which is based on the market. The players in this system are conditioned by the market, so art has become a commodity to be bought and sold.

The border today is between being and not being part of the market. On one hand, there is the Art System, based on galleries, dealers, museum, foundations, magazines, blogs, auctions, art fairs, and collectors (private collectors, banks, companies and museums). On the other, there are artists who stay out of the art market – though not out of art – because the artists decide to be free and to opt out from buying and selling. Freedom of expression is a fundamental, intrinsic value of art, yet it is not accepted by the art system. Scandal is accepted, but it is really just a technique for raising market prices, and these sorts of scandals never have any real consequences – they do not mean anything real or interesting for culture or knowledge, or for art itself. A whole history of art could be written tracing economic cycles and the financial highs and lows of the art market speculation. In the early 1980s, for example, the Transavantgarde movement suddenly

popped up. It included some really great painters – don't get me wrong – but the point I want to make though is that when the economy is booming, the art system always responds with big art that grows with it such as installations, sculptures or experimental art, which become ornamental. The Art System is based on marketing, and it works very well as a system. It creates big exhibitions, coffee table catalogues, celebrities, and it makes money – lots of money. Charles Saatchi is a perfect example how to apply the rules of advertising and brand techniques to the Art System. But the cultural value of a work of art does not come from the market.

"In *The Truth in Painting*, Derrida describes the *parergon* (*par-*, around; *ergon*, the work), the boundaries or limits of a work of art. Philosophers from Plato to Hegel, Kant, Husserl, and Heidegger debated the limits of the intrinsic and extrinsic, the inside and outside of the art object." (Anne Friedberg, *The Virtual Window: From Alberti to Microsoft* (Cambridge, MA: MIT Press, 2009), 13.) Where then is the inside and outside of the virtual artwork? Is the artist's 'hand' still inside the artistic process in the production of virtual art or has it become an irrelevant concept abandoned outside the creative process of virtual artworks?

I don't think philosophers really understand anything about art – they love to speculate; they love words; they love ideas. They start from art, but it is only an intellectual expedient for philosophical theories. Anyway, the question is whether the 'hand' of the artist is still inside the artistic process in tech-art, and the answer is yes. Being 'hands on' is one of the most important statements of tech-art, but it has a rather different meaning.

This is a very contemporary conceptual leap beyond Walter Benjamin's aesthetic vision of the artist. Benjamin's vision is a legacy of the industrial age, a chronicle

of the time of the changing status of the artist – from the independent creator, tied to traditional artistic apparatus and one's own manual ability, to the artist as producer. In using photography, for instance, a typical art medium of the industrial age, the artist was perfectly part of the economic and production system undergoing radical transformation. Today, in a globalized and interconnected world, the artist uses the same IT tools that are widely available to everyone and appropriates not a technique, but a methodology – that of a 'process of expression' that takes on the aesthetic value of art, leaving the task of production to the curator and the museum. Thus, the artist expresses and the curator produces.

Virtual interventions appear to be the contemporary inheritance of Fluxus' artistic practices. Artists like Peter Weibel, Yayoi Kusama and Valie Export subverted traditional concepts of space and media through artistic interventions. What are the sources of inspiration and who are the artistic predecessors that you draw from for the conceptual and aesthetic frameworks of contemporary augmented reality interventions?

That's another idea that I disagree with. Tech-art – or 'new media art,' 'digital art,' 'software art,' whatever you prefer to call it – represents a clean break with the history of the avant-garde and 1960s/1970s art, both formally and in terms of content. Artists who create their work illegally (in 2010 I curated *Cease & Desist Art. Yes, this is illegal!* [2](#)), for instance, have nothing in common with Fluxus. 'Illegal art' is a form of aesthetic expression that conveys a strong realism and objectivism. And it's not the only example.

A lot of historic baggage is attached to virtual interventionists, which they need to free themselves of – or rather, art theorists do. Hybrid, multidisciplinary figures are emerging today who do not distinguish their artwork and political commitment from their

contribution to the net. A 3G culture is taking shape and shifting the paradigm towards the convergence of humanist and digital culture – a culture in which computer scientists, architects, musicians and graphic artists work together, often interchanging their roles, models and goals.

In the representation and presentation of your artworks as being 'outside of' and 'extrinsic to' contemporary aesthetics why is it important that your projects are identified as Art?

Curators are always asked the same thing: Is it art or is it garbage? I've been asked this question ever since the start of my career as an art critic and curator, especially when speaking about contemporary art. People look at Lucio Fontana's works and say, "What's this cut in the canvas? Is this supposed to be art? I can do better than that!" Or at Kazimir Malevič's abstract paintings and say, "It's just a black and white square!" So by what criteria, by what value system should art be judged? Should it be marketing, or the history of art or even personal tastes? You'll never get a straight answer from art critics. I once heard Achille Bonito Oliva, a world famous Italian art critic and founder of the Transavantgarde movement, say, "I have expert eyes and a strong heart."

More seriously though, art is an expression and reflection of the relationship between economics, technology and society. Artists have always used all sorts of technology; today they use technology as a language, or they use it to create a meta-language to construct a critical vision of technology and reflect on its relationship with culture and society. Visionary, presaging or anticipatory, though not supernatural in their power to see into the future, these artists contribute to the material process by which ideas from diverse fields feed into one another and become new cultural configurations. That means using the Web as a language, medium and subject; it is networking, interactivity,

activism, tactical media and media manipulation and collaboration, all tied strictly to the social context. These artists play an important role in developing ideas that have broad cultural ramifications for the way we view art. In this sense, they don't speak the same language – so having expert eyes is a help! It means going to festivals, museum exhibitions and galleries; it means reading blogs, listening to what's happening on the scene. All this is forming a new aesthetic, or rather the New Aesthetic is already here. This is a reference to Bruce Sterling's "Essay on the New Aesthetic,"⁵ which begins as a commentary on John Bridle's panel at South by Southwest 2012, but goes beyond Bradley's ideas. Every art critic needs a common umbrella under which to put new aesthetic criteria. Maybe this definition will have a longer shelf life than others. I like it, and you can discover it too by reading the article I'm writing for the LEA issue on the topic of "Note Here, Not There." ■

REFERENCES AND NOTES

1. Walter Benjamin, *The Author as Producer*, in *Thinking Photography*, ed. Victor Burgin (London: Macmillan, 1980).
2. Simona Lodi, "Cease & Desist Art: yes, this is illegal!" in *REFF | Roma Europa Fake Factory*, ed. C. Hendrickson, S. Iaconesi, O. Persico, F. Ruberti and L. Simeone, with a preface by Bruce Sterling (Milan: Derive e Approdi, 2010).
3. Bruce Sterling, "An Essay on the New Aesthetic," *Wired*, April 2, 2012, http://www.wired.com/beyond_the_beyond/2012/04/an-essay-on-the-new-aesthetic/ (accessed April 21, 2012).

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