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ACTIVIST MEDIA AND BIOPOLITICS

**Critical Media Interventions
in the Age of Biopower**

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INTRODUCTION

Media activism is a relatively new subject in media studies, although it is not new in media history. Over the centuries, people have always found tools to communicate with that which could not be controlled by the prevailing normative and political systems, reaching from the ancient Greek practice of *parrhesia* and early Graffiti to the bawdy and obstreperous forms of the European medieval carnival cultures; from illegal pamphlet printing to hacking computer networks. When digital technology and online access became readily available in the early 1990s, there was very little regulation in place that would go beyond the technical protocols necessary for computers to exchange data. An open space of communication became available that soon was settled by individuals and groups with an interest in both social change and a curiosity to explore the artistic, political, and social potential of computer technology. A generation of activists emerged that no longer shared the ‘bookishness’ of both the old and the new left, and that went beyond the left’s deep-rooted scepticism vis-à-vis new technologies, which can be traced from the early Luddites to the Frankfurt School.

Instead, they created media that made use of the new technologies in ways that were capable of introducing discontinuities in hegemonic discourses, and of surprising and disorienting the strategic system of powerful institutions, be they governmental or corporate. Tactical media was born, and has since widely been understood as synonymous with media activism as such. Opportunistically using the plethora of temporarily unregulated spaces that inevitably arose in a fast-changing technological environment, tactical media activism employed hacktivism, communication guerrilla tactics, radical media, electronic civil disobedience, and many other practices tested by people who were often surprised about the unexpected success of their own interventions. The top-heavy, old-media-based institutions and structures of power just seemed too easy to fool. Anything seemed possible in this cyberspace, where effective activism was not weighed down by the relative immobility of the body. Indeed, cyberspace was understood as a “land without bodies”, as John P. Barlow’s Declaration of Independence of Cyberspace asserted in 1996.

However, the rapid advance of research in biotechnologies made possible by global data networks and powerful information technology proved that the situation was more complicated. Bodies and information were coming together in a new way, in a way that seemed to create new beings. The work of Chris Hables Gray, Donna Haraway, Steve

Mann, Stelarc and others reflected a critical understanding of how this process of computerizing life affected politics, and the very political quality of people's actions. They began to translate this understanding into a form of activism that went beyond the angelic visions of an informational space purified of matter. Artists' groups such as the Critical Art Ensemble (*Cult of the New Eve*, 2000) and scholars such as Beatriz da Costa and Kavita Philip (*Tactical Biopolitics*, 2008) developed projects that intervened in a new, technological form of exercising power on the body. Collectives such as subRosa intervened in the construction of gendered bodies. Indeed, the computerization of life is apparent inside the body, transferring the exercise of power to the level of the cell and the molecule. As Michel Foucault (1982) has shown, political power has long articulated itself as subjection, as constructing its own bodies rather than exercising disciplinary power over bodies in the form of an external operation. The power thus exercised was, in Foucault's terms, 'biopower', and its politics one in which 'life itself' was at stake. In Petra Gehring's words, biopower turns away from consuming life (as in labour and wars), towards enhancing life as a resource: biopower is the invention of biological surplus value (Gehring, 2006, p.10).

With the emergence of biotechnologies, constructing beings according to designs that would be opportune in terms of maintaining a hegemony of power became a real technological possibility. In terms of political agency, subjection, or bringing forth subjects that are limited by and "passionately attached" (Judith Butler) to a biopolitical matrix of power began to articulate itself through increasingly sophisticated technologies clustered around an attachment to security and to production and consumption. Technologies such as biometry and surveillance were the material forms of subjection, while the translation of the signs of life into acts of production, consumption, and information about one's desires—the purpose of social media—promised the construction of predictable subjects barred from any possibility of understanding their politics.

Today, biopolitics holds significant business opportunities—genetically modified food, seeds, biopharmaceuticals, military technologies, biometrics, surveillance. Biopower suspends the traditional boundaries of the 'human', isolating a sphere of what Giorgio Agamben (2001) calls "bare life" as the leverage of the political, a sphere that is both within and outside the law, at the cost of a lived life, a political life. Activist interventions in biopolitical contexts, be they direct interventions in biotechnologies or disturbances of subjection, thus happen in highly securitized settings. While tactical media declined as a result of the normalisation of the Internet, biopolitical activism challenges the sphere of bare life where law is not fully in force and political agencies cannot be held accountable. Activism hits the electrical fence of the state of exception, as it must in order to be effective. The detention of Steve Kurtz (Critical Art Ensemble) in 2004 illustrates the level of violence applied at this boundary, and it shows just how little it takes to cause a violent reaction of a biopolitical state security apparatus inherently unable to distinguish

between criticism and terrorism: Kurtz was preparing a new project, *Free Range Grain*, to be exhibited in a modern art museum and was detained by US federal police as well as the Joint Terrorism Task Force and investigated for 'bioterrorism'. This example also shows how big an investment biopower has in governing life itself.

The purpose of this book is to bring together contributions that look at these issues from a variety of perspectives. We have grouped the contributions into four sections: Beyond Tactical Media, Borders and Boundaries, Politics, and Biotech.

Carolyn Guertin's contribution, "Mobile Bodies, Zones of Attention, and Tactical Media Interventions" looks at locative media as the third generation of activist media, following Net.art and tactical media. Locative media such as the Electronic Disturbance Theater's *Transborder Immigrant Tool*, which provides orientation for immigrants crossing the desert near the US-Mexican border, are more effective than previous incarnations of activist media as they "bring real, live bodies into the picture". With mobile technologies being part of the body rather than "merely extensions of eye or ear", a new kind of activism is emerging. Embodiment, mobility, and versatility are the empowering properties of locative media, allowing users to relate to the histories of a place, rather than reducing places to a disembodied calculus as previously. The second section of Guertin's contribution concerns interventions in the scientific process, such as Oron Catt's and Ionat Zurr's Tissue Culture and Art Project, which purposefully obliterates divisions between species, genders, races, the living and the dead.

The contribution by Cliff Hammett and Alexandra Jönsson focuses on the biopolitics of sexuality and its technologies of control over bodies: sex work. In a political setting that views the sex worker body primarily as a "site for the transmission of biological and social infection", the authors focus instead on the histories of the men and women working in this industry: often with a migrant background and limited knowledge of English, sex workers are particularly susceptible to the exploitative structures of the market. In their essay, Hammett and Jönsson introduce X_MSG, a telephony-based social software system that allows sex workers to create effective, affordable, and easily accessible communication networks via text messages. The system works with a telephony server on a recycled computer and allows users complete anonymity and a possibility to collectively alter the conditions under which they work. Thus, the "sex worker is no longer the secluded stigmatized body, but a potential switch of power in a socially and materially organized system."

Clemens Apprich's contribution describes another case of post-tactical media activism, a semiological intervention into biopolitical historical representations. His analysis focuses on the 2005 action of a group called Zellen Kämpfender Widerstand (ZKW), directed against Austria's right wing government and its lopsided representation of the country's Nazi history in the official anniversary celebrations of the country's liberation from Nazi rule in 1945. The government had commissioned a series of installations in

Vienna's public space called Twenty-five Peaces. These installations simulated what it was like to survive in Vienna during and shortly after the war, when the city's baroque gardens were turned into agricultural land on which to grow cabbage and graze cattle. The ZKW kidnapped one of these commemoration cows, using it as a hostage in order to force the Government to correct the official history-writing, and admit to its own right-leaning tendency in the official representations of the Nazi period. When the far-right government failed to meet these demands, Apprich tells us Rosa was killed.

Andreas Oberprantacher's essay opens a section of contributions focusing on biopolitical regimes around borders and boundaries. Oberprantacher engages in a philosophical critique of spatial regimes with reference points provided by Michel Foucault, Gilles Deleuze and Félix Guattari, Antonio Negri and Michael Hardt, Judith Butler, and Giorgio Agamben. He focuses in particular on the question of detention and borders as manifestations of biopower. These regimes, Oberprantacher argues in response to Butler, "secure life by discriminating its forms". Often run by private corporations, they materialize the "state of exception", where subjects are constructed as "life unworthy of life", alien, and unprofitable. However, as Foucault states in *The Will to Knowledge*, resistance is constitutive to power. Thus, in the second part of his contribution, Oberprantacher discusses a number of media interventions that articulate a locative resistance to biopower. These include the *Transborder Immigrant Tool* referred to above, and two other platforms: zone*interdite (www.zone-interdite.net) and Machsomwatch (www.machsomwatch.org). The former provides information on classified military locations, including 3-D models, challenging secrecy and lack of accountability; the latter is a tool for tracking Israel's "flexible border" with Palestine, referencing how soldiers are taught about the fluidity of borders by reading poststructuralist theories.

In Israel/Palestine, Roy Wagner offers a critical view of mobility-visibility regimes applied to sexuality and nationality. Addressing Israeli politics around LGTB parades in Jerusalem and Bil'in, Wagner shows the trade-off between visibility and mobility: "the stronger the elimination of mobility (as measured in arrests and damaged human flesh) the more media visibility protesters gain". The politics of sexuality influences the politics of nationality and vice versa. On the other hand, Palestinian non-citizens are forced to avoid visibility in order to survive in a placeless "state of exception", crossing the borders to Israel while circumventing the Panopticon of surveillance maintained by the Israeli army. What emerges is a "caste of beaten bodies" under constant threat of violence and death, used as a source of economic gain. Wagner identifies a range of elaborate activist practices of overriding the mobility-visibility trade-off, instead gaining mobility while retaining the visibility required for effective public action and yet avoiding detention. He analyzes them in terms of varying topologies: media coverage, law and order, and urban interaction. The latter allows for tactics of place-making that rely on opaque messages or the simple presence of testimony.

Focusing on the skin as the interface between the implicit and the explicit body, Jan Jagodzinski explores the activist potential of bioart. Taking up Gilles Deleuze's theory of the fold, Jagodzinski examines a number of bioart projects that work with skin as a membrane not just between the inside and the outside of the body, but between art and science, between individual and society, and between species. Exploring the work of artists like Stelarc, Kac, and Orland, Jagodzinski unfolds a rich questioning of some of the most radical forms of bioart, where politics avoid any solid signifier.

Online platforms, in particular social media such as Facebook or Twitter may currently be the most powerful media of subjection, bringing forth biopolitical subjects that are both consumers and labourers and whose autonomy is reduced to the constant generation and processing of personal data. The only effective way of regaining some political agency and to reclaim one's life altogether against this background, as Geoff Cox suggests in the first of three contributions in the politics section, is to obliterate the very subject thus created, engaging in strategies of refusal rather than protest. As Butler suggests, turning away from the law that constitutes subjection—and in the online environment, that would be primarily the law of social media platforms—requires a “readiness not to be” (2001, p. 122). One radical way in which activists articulate such a readiness is virtual suicide: the deletion of one's user profiles and data on social media platforms, which may, as Franco Berardi states, be the “decisive political act of our times” (2009, p. 55). It is not surprising, then, that tools of virtual suicide such as the Web 2.0 Suicide Machine or Seppukoo, which make it easy for users to delete their data on several platforms at once, immediately encountered a legal reaction from the companies targeted. Such companies often do not provide for user data to be deleted and are thus put into peril by radical strategies of refusal.

Biopolitical issues are not only addressed by liberal or left-wing activism. With its anti-abortion, pro-death penalty, and anti-stemcell research politics, the right has its own biopolitical agenda—and, as Joshua Atkinson's and Suzanne Berg's contribution shows, its own activism. Critical media studies, Atkinson and Berg argue, must become aware of how the political right creates its own alternative media networks to advance its agendas.

The third contribution in the politics section deals with critical (subversive) practices coming from within mainstream TV. For a young, media savvy, radically globalized generation, television as a platform for news has lost momentum. Ironically however, in a media landscape with a variety of news providers competing for audiences and trust, television news parodies like *The Daily Show with Jon Stewart* and *The Colbert Report* attract new audiences as they seem to fill a gap. How can it be that a comedy show succeeds in promoting reason and gets young people to stand up for more sanity in politics and culture? And how do they work differently in comparison to the subversive practices of tactical media and media activism that question the methods of biopower? Claudia Schwarz' and Theo Hug's paper examines several responses to the (more and less serious)

calls for action of the two shows and discusses their delicate role as entertainers, watchdogs, and activists for reason, sanity, and what is left of ‘truth’ in the media.

With ‘race’ being one of the persistent and perhaps most violent concepts in biopolitics, the oppression of both Native Americans and African Americans in the US reveals the workings of biopower. Eddie Glenn shows how the Cherokee Nation used for their own purposes the melodramatic narrative applied by mainstream US culture to the tribe. This was done in response to the widespread criticism that followed the removal of voting rights for former slaves in the Cherokee Nation in 2007, when the tribe itself was accused of racism. However, as Glenn shows, the appropriation of melodramatic narratives in a film launched to influence legislation, although failing to criticize the biopolitical *dispositif* of blood percentage determining tribe membership was an “act of sovereignty, strategically implemented for political purposes”.

The last section of the book contains three contributions that revolve around biotechnology. In his contribution on garage biology, Alessandro Delfanti shows how practices of media activism, such as hacking and free software, are alive in noninstitutionalized biological research. Garage biologists work in an environment that combines the hacker ethic with a radical anti-institutional approach to the life sciences, denouncing ‘Big Bio’ for its monopolization and exploitation of knowledge that should be freely available. But the story is more complex than a simple opposition between the rebel garage laboratory and well-capitalised hi-tech research. Often, Delfanti finds, garage biologists are in an ambivalent relationship with Big Bio: “Most of them are not interested in a critique of academic capitalism or biocapitalism, but rather in the possibility of opening up new markets where smart, small scale and open source models could compete with Big Bio and its Hulking Giants.”

In “Pests, Monsters, and Biotechnology Chimeras”, Pau Alsina and Raquel Rennó show how the biopolitical obsession with governing life, securing security, and creating markets cannot but generate its own monsters. What seems to mark the fringe of the biotechnological quest thus appears to occupy the oblique centre of the biopolitical mastery over life itself. The bioart-works described by Alsina and Rennó translate this seeming paradox into a readable code: from Eduardo Kac’s fluorescent rabbit, Alba, to Critical Art Ensemble’s *Molecular Invasion*, artists and activists question the opacity of the politics of life. According to Alsina and Rennó, by creating works that play with the cultural shadow of biotechnology, bioartists show that “life sciences are political sciences and geneticized life is biopower, the result of matter and semiosis interwoven within power relationships.” Such works inaugurate perspectives on the technologies of life that are capable of challenging biopower, which means they attack both the hyper-objective claims within the life sciences, and the essentialist, reactionary responses to them that are sometimes mistaken for criticism.

The boundary between life and death has been at the core of biopolitics and the various forms of control over subjection it has brought forward, along with a preoccupation about where the subject begins and ends. In their contribution, Valerie Hartouni and Etienne Pelaprat bring together pop culture narratives with the claims of neuroscience around the question of the threshold between life and death. Advances in neuroscience have created a new subject: the cerebral subject, described as a form of subjectivity that takes on contours once in the process of dying—today a “particular stage of life” surrounded by a set of legal, ethical, and economic issues. The boundary between life and death has become a matter of a neuroscience bent on identifying the brain’s function as producing biological consciousness, reducing being to the technical existence of a machine that can think, leaving aside the wider cultural and social implications of the end of life. “The framing of cerebral subjectivity offers narratives of hope, belonging, and eternal life”, Pelaprat and Hartouni conclude, “abetting the rational instrumentalization of human life in the name of ‘freedom’.”

Most of the contributions compiled in this book were first presented as conference papers at the Activist Media and Biopolitics conference organized by the Innsbruck Media Studies research group in November 2010 (<http://medien.uibk.ac.at/amab2010/>). The conference was conducted by the editors and Felix Stalder as part of a research project on media activism funded by the Austrian Science Fund (project P21431-G16). The editors wish to thank Max Söllner for his invaluable help in preparing and organizing the conference; Gerhard Ortner for maintaining the conference website; Victoria Hindley for her work on the manuscript and her masterful work in designing the book’s cover; Birgit Holzner and Carmen Drolshagen for their publishing support; and our sponsors and partners, namely the Austrian Federal Ministry of Science and Research, the Austrian Science Fund, the University of Innsbruck, and the Federal State of Tyrol. With English having become the *lingua franca* of international academia, we chose to allow both British and American English in the book (applying one single style within the individual essays).

Wolfgang Sützl and Theo Hug
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BEYOND TACTICAL MEDIA

MOBILE BODIES, ZONES OF ATTENTION, AND TACTICAL MEDIA INTERVENTIONS

by Carolyn Guertin

“In the very near future, billions of people will be roaming the planet with GPS devices. Clouds of network connectivity are forming over our major cities and will inevitably coalesce. The geo-aware web isn’t a product we buy; it’s an environment we colonize.”

—Udell, *in fadgy4*

Over the last few years, we have seen the arrival of the Internet of data and the Internet of things, and now the Internet of actions or of bodies-in-motion are here. As a part of this constellation of data, things, and embodied actions, we might think of activist media as having had three incarnations so far. Net.art was the 1.0 version. It arose in Eastern Europe in the early 90s in the wake of the fall of the Berlin Wall. The major players were Vuk Ćosić, Jodi.org (a duo comprised of Joan Heemskerk and Dirk Paesmans), Alexei Shulgin, Olia Lialina, and Heath Bunting. (Bunting was also a member of irrational.org, which also included Rachel Baker, Minerva Cuevas, Daniel García Andújar, and Marcus Valentin). These artists defined their projects as one of social responsibility and fought against what they deemed the myth of democracy co-existing with capitalism. While Internet communications were being promoted as the triumph of the democratic subject, they felt the network was in the process of being co-opted by capitalist forces as a tool to expand consumer culture. As the free Web loses more and more ground, these net.artists have been proved largely right.

Net.artists focused not on buying and selling, but on the early Web as a public space, collaborative tool, and a distribution medium. As a result of its focus on flows and art-as-process, one of the remarkable things about net.art was its uselessness. Net.art often generated nondestructive server hacks to send back messages. Or, as with the hack-Mac, (which was an advertising campaign for a bulletproof, ergonomically designed clamshell Apple laptop with militaristic camouflage styling), net.art can go off like some combination of fashion accessory and incendiary device (Jaschko, 1999). The hack-Mac campaign revolved around the slogan “think weapon” alongside the Macintosh font and

logo. The computer, of course, was never made, but its guerrilla marketing strategy was designed to launch the Ora-ito agency, and that it did; but it also raised the possibility of a tool that might be designed to dismantle or destroy (or deconstruct?) the product that inspired it. This is the conundrum that tactical media, or the Web 2.0 wave of online activism, also grapples with. The next wave of networked culture, media tactics, are not strategies, for strategies are goal-oriented. Tactical media instead use reverse engineering, open access, collaboration, and hacktivist approaches to disturb. Tactical media “are pliable and that pliability allows for on-the-fly critical intervention: statements, performances, and actions that must continually be altered in response to their object, ‘constantly reconfigured to meet social demands’ ” (Raley, p. 6). Tactical media use peer2peer methods to attack or critique corporate or political power. Designed to destroy or attack, their Achilles’ heel is that they rarely build anything new.

Social networking is a tool that can be brought into play in tandem with activist tactics but, as Geert Lovink puts it, “social movements do not emerge out of the Web. Their beginnings lay somewhere else, not in the act of online communication” (2008, p. 218). While they can make the personal political until it is blue in the face, actions continue to speak louder than words. And activism itself is dead, or so Michael Hardt and Antonio Negri would have us believe. They say in their book *Multitude* that in our times “basic traditional models of political activism, class struggle and revolutionary organization have become outmoded and useless” (p. 69). Tactical media were very effective at starting, for instance, a so-called Twitter revolution in Iran in 2009 and used a variety of means to create accounts that could be used from within that country to get information out; however, the issues and their protest were entirely drowned-out when Michael Jackson died shortly thereafter. Tactical media, in other words, are highly effective at pure protest—calling out the lies of the Spanish government, for example, when they tried to pin the violence on Basque separatists in the wake of the Al-Qaeda bombings, but such actions are not very good at sustaining themselves and are easily led astray. Coco Fusco bemoaned activism’s weaknesses. She said, “It is as if more than four decades of postmodern critique of the Cartesian subject had suddenly evaporated....In the name of a politics of global connectedness, artists and activists too often substitute an abstract ‘connectedness’ for any real engagement with people in other places or even in their own locale” (in Tuters, p. 360).

Unlike detached tactical media, the third wave of Web culture—locative media—are “situated software” (a term coined by Clay Shirky) and foreground networked bodies. Shirky has observed that “The anywhere and nowhere of the Internet is challenged by site-specific software art that addresses a particular community or location” (in Lovink, 2008, p. 221). Locative media are everything that net.art was not and that tactical media wanted to be. Locative media are flexible, versatile, embodied, and portable. They are designed to find alternative approaches, to reimagine old spaces or problems, and to invent new

viruses or other organisms to do a better job. Locative media are an antidote to consumerism and a celebration of embodied experience. Where the *flâneur* was replaced by the shopper, mobile bodies are an antidote to sedentary, stationary technologies. Mobile technologies are transforming our use of space and place, but they are also recontextualizing, repoliticizing, and rehistoricizing our awareness and engagement with the inhabited neighborhoods of the world. For a measure of the disconnectedness and difference between net.art and locative media, for instance, compare Heath Bunting's 1990s *BorderXing Guide* to the Electronic Disturbance Theatre's *Transborder Immigrant Tool*.

We are used to an open Web, one that anyone—by definition *everyone*—is able to access. By contrast, *BorderXing* was the opposite. You had to go to one of only two particular computers in order to be able to access it at all and even there a user had to register to be allowed in. It redefined access in the narrowest possible way, like a keyhole in a door. At the *BorderXings* website, Bunting published accounts of his experiences of illegally crossing European borders. In tandem with his narratives, he also included directions for the best routes for walking, photographs, maps, and lists of suggested (and dangerous) equipment. Bunting, in short, enacts the experience of closed borders and raises “questions about immigration, illegality” and the nation state; he also makes others live the experience of restricted access and taxing or impossible registration procedures through a needle's eye approach (Jaschko, 1999).

Ricardo Dominguez and his team (collectively known as the Electronic Disturbance Theatre) were not concerned with the impossibility of borders so much as with orientation once one has crossed. Inspired by Brett Stalbaum's *Virtual Hiker* project, which reads terrain and creates a hike around the topography of that area, Dominguez and his team wondered if they could adapt this GPS-based tool to assist people crossing the Mexican-US. border and the desert that lies on the northern side of that divide. And so *The Transborder Immigrant Tool* was born. Dominguez went looking for a cheap cell phone that had GPS functionality without a data plan. He found the Motorola i455, which retails for about forty dollars, and used it to crack the GPS system. The tool had to be so universal that any user—literate or illiterate, Mexican or Chicano, Spanish-speaking or not—could use it. The interface was designed to resemble a compass, and is more pictorial or iconic than textual. The tool is also a virtual divining rod, vibrating when it approaches water or safety beacons, and alerting the user when she nears a road. The group had funding to build 500 tools and has been working with border organizations like Border Angels, who deliver water to walkers in the desert, to alert groups and would-be walkers to the existence of the device. The tool is not a finished product, but a work-in-process that is being developed one functionality at a time. The first step was to map the borderlands with great accuracy using a Global Positioning System (GPS); next, careful research was conducted on transborder networks (including those of organizations like Homeland Security, the Minutemen, Halliburton) and other infrastructures; thirdly, a list was

compiled of the food and water drop sites established by humanitarian communities; next, an algorithm was developed and the GPS coordinates rigorously tested; a bilingual English/Spanish interface was designed along with instructions for use; next, the tool was tested and distributed to migrant communities (Ho, 2008). By providing the gift of access to stolen satellite data, the tool endows the user with agency in a world increasingly constructed of virtual and augmented geographies. By hacking into the GPS grid, users are endowed with augmented vision and free navigational abilities that are generally 'free' only for those affluent enough to afford the hardware in the new rising geographic economy. The *Transborder Immigrant Tool* enables access in addition to providing "an intelligent agent algorithm" that selects "the best routes and trails on that day and hour for immigrants to cross this vertiginous landscape as safely as possible" (Ho, 2008). The best routes include the necessary information to dodge scheduled patrols.

Orientation is continually a problem in this border zone between the two countries (it is a desert and there are no distinguishing landmarks on the horizon) where movements are traced and behavior surveyed. *The Transborder Immigrant Tool* reveals that "simply to know one's location is a privilege" (Ho, 2008) and demonstrates how dangerous taking charge of one's own mapping and route really is. While Dominguez and his team define the device as a humanitarian tool designed to help save lives, it is not surprising that the American extreme right has viewed it as a declaration of war. Named one of the most interesting people of 2009 by CNN, Dominguez is a tenured professor of Visual Arts at the University of California at San Diego. He has not only been threatened with criminal action, but he has also received death threats. His project is perfectly legal and it builds on previous philosophical schools of thought like psychogeographic perambulations and:

a long history of walking art, border disturbance, and locative media. At issue here is an interesting linkage that is made between humanitarian value and artistic value. While...Dominguez states, "All the immigrants that would participate would in a sense participate in a large landscape of aesthetic vision" due to the multiple layers of communication (e.g., iconic, sound, vibratory) and the way the tool's algorithm would help the user find a "more aesthetic route," I would suggest that the artistic value emerges from its very linkage with the humanitarian aspect. The *Transborder Immigrant Tool* subverts the usual idioms of locative and interactive media (such as "virtual reality") to... (Ho, 2008)

reveal the very tangible nature of the unspoken politics that govern such callous laws and heartbreaking results for those who attempt to cross the desert. That reality that hides just out of sight is the unspoken truth: the Americans and Mexicans are engaged in virtual war.

It is the act of bringing real, live bodies back into the picture that makes the ethical issues so apparent in locative media. Plug those bodies into mobile technologies and an entirely new kind of activism emerges. Adrian Mackenzie in “Wirelessness as Experience of Transition,” says that the “experience is very much tangled up with things, objects, gadgets, [and] services” and also, “Wirelessness is a contemporary mode of inhabiting places, relating to others, and indeed, having a body” (Mackenzie, 2008). Being embodied means that we can relate to the histories of a place. It is in using a portable device that technologies become a “mode of embodiment” for that place (Richardson, p. 7). Mobile technologies are part of the body, and not merely an extension of eye or ear. The technologies themselves are so integrated into our consciousness and our behavior that they function as prostheses. More than that, we have a long history of engaging with screen technologies and, on the surface, mobile devices *seem* to be the same. In fact, they actually invert our usual relationship to screen space.

The television screen and cinematic screen, like their cousin the Renaissance painting with its fixed perspective, assume a stationary viewer. It is the conscious act of shutting out the smell of popcorn, the crinkling of candy wrappers, the coughing or talking of the people around us that works to make the screen so compelling. We actively put the world on hold and ignore those “zones of inattention” to give the film or program as much of our attention as we can. Laura Singer, in her analysis of cinematic vision, says that historically we have focused on screens only when surrounded by such an area of inattention (Singer, p. 55). This is a willful act of immersion. The computer monitor is different from the cinema screen. The computer monitor is a work surface. It is a window. It is a membrane between the private and public spheres, shutting us off from our senses and from others, we ignore what goes on around it, too. With the computer though, we do not look at the monitor; we look through it, so that we can interact with the virtual 3D content at a distance with our cursor. Now, the touch interface alters all of this again. With the mobile phone, we become mobile and the world becomes our zone of attention once more. The wifi-enabled mobile interface resituates us back out onto the other side of the screen. GPS and augmented reality technologies invite us to look through them, like the computer monitor, but, unlike the computer monitor, they reconnect us to our senses and to the world we see as an interactive, augmented world both outside and beyond the frame.

What the new mobile technologies (including augmented realities) offer to activism is the ability to reconnect with the world in DIY kinds of ways. Mobile technologies invite us to customize, just like Web 2.0 wanted us to do, but the big difference lies in the fact that with mobile technologies we have already dragged our hind ends out of our seats. While tactical media threatened to become point-and-click activism dissociated from real world effects, locative media by definition start with us back in the center of things.

It is precisely this issue that Julian Bleeker and designer Erik Loyer grappled with when they set out to create the *Wifi.Bedouin*. Their premise was that they could create a

portable Internet, but not an Internet that connects to the Web. Instead they wanted to create an Internet of people: a psychogeographic space that you can wear like a shell on your back. Assembled from over-the-counter materials, the *Wifi.Bedouin* sets out to question the five most pressing issues that resonate in any kind of urban planning or psychogeographic exploration: location, community, proximity, connectivity, and mobility. A wireless alternative to the Web, their tool is a portal designed to draw people in to acquire or appreciate the hacker (or wjacker) aesthetic at play in the work. Bleeker says it is designed to raise questions about the “location” of URLs; and about the source of networks and alternative organizations and structures. In the introduction to the work in *Vectors*, Steve Anderson explains: “Bleeker’s device is perhaps best understood as a cognitive tool, a means of creating conceptual and technical possibilities rather than a discrete object unto itself. The Bedouin also merges the ordinarily disparate worlds of the tinkerer-hacker-slasher with that of the academic or cultural investigator.”

Along with the DIY directions for how to create your own *Wifi.Bedouin*, the project ultimately challenges its users not to unplug per se, but to plug back into their own bodies, lives, lived-in-spaces, and neighbors. It is intriguing, too, to note that gadget sites that cater to early adopters like *Travelizmo*, assume that this object is a commodity to be purchased rather than one to be assembled by yourself.

Another locative media project, *In.Fondo.Al.Mar (Under the Sea)* by David Boardman and Paolo Gerbaudo, asks the user for a different kind of commitment. Compiled primarily from official data in public databases like Netzfunk (an open network for politically-minded artists), this work maps the known locations of a host of “eco-mafia crimes perpetuated in the Mediterranean Sea” and plots the sites where ships laden with toxic waste have been sunk by pirates (Cangiano, no date). The project’s inception was the result of Paolo Gerbaudo’s exploratory work researching new sinkings that were not yet public knowledge in the Lloyd’s of London archive—where all documentation on the sunken ships is kept. Gerbaudo felt great urgency at making this information known and so he contacted his friend, David Boardman at the Massachusetts Institute of Technology. Initially they thought they might write some more articles together, but almost immediately realized that they could compile a database that would save bodies and lives instead. They did this very quickly thanks to readily available open source tools. Their vision to plot additional data including routes and the specifics of the cargos’ proportions proved too unwieldy, so they kept it simple. Gerbaudo explains, “In journalism, infographics have been used to summarize certain kinds of news for the last few decades” (Cangiano, no page). This story was far too complex to be rendered with such simplistic tools. Instead they discovered that the process of mapping the materials did not become a “substitute for the ‘story’...instead it [became] a layout for the story and stories” (Cangiano, no page). At this site, they chart the sinking of an astronomical seventy-four ships and catalog each ship’s launch date, the date it was decommissioned, its service

history, and the narrative of how it came to such a poisonous end. This is what they call “data-driven journalism,” similar to Wikileaks. Data visualization tools make it possible to appreciate the magnitude of the crimes at a glance, but making this information more publicly accessible also made it possible to make it interactive. Photographs of each ship prior to its sinking, have been donated by users of the site, and so have patterns in the data about what routes they took, details of their cargo manifests, the chronology of events (often as documented by survivors). It thereby becomes possible to identify where the Mediterranean mafia is most active and where the sea becomes deep enough just outside territorial limits to conceal crimes of this magnitude. Just mapping the data as a timeline also reveals some of these secrets, such as during what years the sinkings were most intense, and how changing laws affected these kinds of incidents—in particular every time laws have been relaxed it has resulted in a flurry of new sinkings (Cangiano, no page). What had previously been written off as coincidences start to emerge as specific patterns, and some crowdsourced information including corrected coordinates on the sinkings (where it can be corroborated from external sources) has also been included. Another collaborative aspect that emerged was the creation of the free augmented reality prototype application for smart phones by Mauro Rubin. Rubin loved the project so much that he wanted to be sure that the information was available to people at sea. *In.Fondo.Al.Mar* has also led to a citizen-generated monitoring network that allows people to report crimes.

Another locative media project that has been widely celebrated is Esther Polak and Ieva Auzina’s *MILK*, winner of the 2005 Golden Nica at Ars Electronica and the Golden Nica for Interactive Art. The project uses the crisscrossed paths of GPS-mapped journeys to reconnect to the land, and to the experiential aspects of production. Their network is, in the end, translated into galley art or an aestheticized version of the data as they trace the path of milk as it travels from rural Latvia to a cheese shop in the Netherlands. In an age of poisoned seas and the use of Bovine Growth Hormone on cows and in our foods, the ability to track the path of a product’s production may well become not simply a project for activists, but a survival skill. Then again, given the rate that we are poisoning our home ecosystems and our planet, being an activist may well be a necessary survival skill in its own right.

French philosopher Michel Foucault realized that teeming populaces, population control, and a rising concern with territories were biopolitical problems. Furthermore, as our maps get smaller (think genomes) and infinitely larger (think of the mapping of the universe), biopolitics become something that our scientists seek no longer just to control, but to manipulate in the transgressive manner of that first fabled bio-artist, Dr. Frankenstein. Within the rising field of tactical biopolitics, scientists, artists, activists, and writers explore not just politics through biology, but politics with a biology. “Bioartists articulate life to make biology an object of recognition and concern for all; activists reconfigure lines of authority, knowledge, and regulation to change how concern about life

operates” (Dumit, p. xii). This prefigures what Dumit calls a DIY-science that ranges from massive government projects to “ancestral DNA testing to bioterrorism to bioengineering” (xii-xiii). The political dangers of this kind of activism—especially when used as a tool of protest or for public education—have been made abundantly clear through Steve Kurtz’s arrest, imprisonment, trial, and ultimate dismissal in relation to his participation in Critical Art Ensemble’s alleged “bioterrorist” experiments, which were designed to make consumers aware of the presence of genetically-modified foods in their diet. Tactical BioArt projects cut a bit closer to the activist bone still. These are organic projects that seek to create a new science—a science that combines art with activism, animal husbandry, and chemistry. I had become aware of many activist-led BioArt experiments in my reading, but it was Allison Carruth, a food culturist at the University of Oregon who introduced me to the concept of this work as a field in its own right. The field of tissue culturing is about creating living tissue, usually kept alive in test tubes and Petri dishes, from live human and animal donors that can then be harvested for food or other uses. According to Carruth, the field is driven by two pressing concerns: the first is with creating sustainable foods for both human tastes and organic ecosystems, and, the second, with creating ethical food that is just as appetizing as the real thing.

The first project I want to discuss is the idea of an organic *Extended Body* presented by The Tissue Culture and Art Project. The duo (Oron Catts and his partner Ionat Zurr) created “The Extended Body” as:

an amalgamation of the human extended phenotype and tissue life—a unified body for disembodied living fragments, an ontological device, set to draw attention to the need for re-examining current taxonomies and hierarchical perceptions of life. The Extended Body is a tangible metaphor for the Victimless Utopian ideal; at the same time, it paradoxically is an embodiment of the sacrifice of the victim. (Catts and Zurr, no date, p. 1)

Other recent tissue culture projects include grown houses, “tissue-engineered meat (sometimes wrongly referred to as violence-free meat),...complex research models, and art” (Catts and Zurr, no date, p. 1). Catts and Zurr say that unknown quantities of cells, tissues, organs and other parts are harvested from the newly dead and the living for transplant, or are frozen for potential future uses. Others still are manipulated and reintroduced into other living organisms—not necessarily of the same species—for experimental purposes. The semi-living do not reside only in the lab either. They live, more or less, at your fish market, your butcher shop, and as road kill, which can survive “even without technological intervention...for hours and days after the organism is considered to be dead (meat)” (Catts and Zurr, no date, p. 2).

This is the stuff of nightmares out of which Mary Shelley's *Frankenstein* was born, for, Catts and Zurr propose "not just to represent scientific research but *to advance new scientific knowledge*" (Carruth). Under what taxonomy do we classify these liminal lives? Where do we draw the line between living and dead, species, gender, race? While claiming to produce products that have a victimless foundation, can this really be considered the case? *Victimless Leather*, for instance is a prototype grown in the lab "presenting a miniature leather-like jacket grown out of immortalized cell lines (a mix of human and mouse cells) that cultured and formed a living layer of tissue supported by a biodegradable polymer matrix in a form of a miniature stitch-less coat" (Catts and Zurr, no date, p. 5). Corporations have been in touch about the potential for commercializing this market. Another project, the *DIY De-Victimizer*, allows those of tender conscience to grow their own food from tissue culture so that they know it was raised humanely.

Allison Carruth says that tissue culture dates as far back as 1910 and that Winston Churchill in 1932 reputedly imagined that animal protein would soon be grown in-vitro rather than raised in feedlots. Catts and Zurr call this category of animal or food source the "Semi-Living." To them, the Semi-Living is a boundary being that occupies the space between the animate and inanimate, between the biological and the engineered, and "the object and the subject" (Catts and Zurr, in Carruth, p. 10). "While the Semi-Living relies on the vet and the mechanic, the farmer and the artist, the nurturer and the constructor to care for them, they are not human imitations nor do they attempt to replace humans" (in Carruth, p. 10). The "Semi-Living" are instead a new class of beings, according to Catts and Zurr, or perhaps more accurately, class of things, living objectified entities that (or who) exist apart from the born and the bred. Thousands of tons of this organic matter exist around the globe and it is probably no accident that Catts and Zurr call this an "extended body." We might think of these parts as prostheses or as the dissolution of boundaries between animals and humans. It might bring to mind, too, John Perry Barlow's 1990s distinction between "meatspace," the material world, and cyberspace, the virtual world; he took no trouble to conceal, like so many philosophers before him, his *contempt* for meatspace and all that it encompassed. Tissue culture also points to the shadow looming on the horizon indicating that in the near future biotechnologies may well encompass not just our food, clothing, and organs, but that our computers and houses might become living, breathing beings as well.

In November and December of 2010, independent research groups from the Chinese University of Hong Kong and the University of Tokyo announced that they had achieved bioencryption. Researchers had organized bacteria into massively parallel structures and enabled them to solve logic puzzles and perform problem-solving feats, including Sudoku. Along slightly different lines but also in November 2010, researchers at the University of Newcastle announced that they had sprouted bacteria that could colonize concrete and germinate an adhesive that would repair cracks in its structure (NDMnet, 2010). Clearly

this is an emergent trend in the scientific community and, if we look at architecture, it is apparent that that field's visionaries are dreaming a whole new generation of sustainable housing ideas. The environmentally-conscious New Mexico architect Michael Reynolds (a.k.a., The Garbage Warrior) has been creating self-sustaining structures since the 1970s using everything from bottles to tires for building materials, but he never imagined anything like 3D printers, "meat houses," or the merging of DNA with architecture.

While 3D printers are already printing everything from car parts to food to skin, Architect Mitchell Joachim of Terreform is creating organic houses made from living matter. Advocating the use of "pleaching" or practicing the ancient geometric art of inosculating trees into a woven vascular network, he says that whole villages—what he calls Fab Tree Habs—could be created. Entire villages that consume carbon emissions could be grown in as little as seven to ten years. Similarly, architect and designer Matthias Hollwich seeks to change humankind's relationship to architecture through nature, and says that through the DNA sequencing of organic matter it should be possible to create "powerplants" or entirely organic tree-based buildings that power themselves as early as 2026. Joachim also takes the notion of a green structure one step further by proposing In Vitro Habitats also known as "meat houses"—organic structures grown in test tubes. Using a blending of "regenerative medicine and tissue engineering" means that architecture and biology could meet each other halfway. Joachim and his team use modified pig cells and a 3D printer to print cellular geometry or what is known as "victimless meat." Meat houses repurpose fatty cells as insulation, musculature as support structure, cilia to lend aerodynamic properties, and sphincter muscles as orifices for entry and exit, light, air and circulation all grown around recycled PET plastic (polyethylene terephthalate derived from bottles) scaffolding (Joachim).

Does the work of The Tissue Culture and Art Project and Mitchell Joachim's In Vitro Houses constitute activism? Where lie the zones of attention in a society that allows such work to continue with little regulation or publicity? Who will police the source of this organic material and ensure that the growth and harvesting remain humane? While these may be so-called victimless forms, do these organisms have rights or consciousness? How do trees feel about being grafted into architectural shapes? Might future architectures contract colds or viruses? Might they be contagious to humans? Might future swine flu epidemics, Dutch elm, or mad cow diseases threaten the health and welfare of whole cities? Perhaps we can only map the movements through different kinds of activism and hope that such watchdog organizations continue to spring up to protect us from unethical uses of industrial or architectural living matter no matter what hybrids or future paths loom. As Gilles Deleuze said, "There is no need to fear or hope only to look for new weapons." May all of our weapons be benevolent and our media interventions honorable.

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X_MSG: UNFOLDING HISTORIES OF SEX WORK AND SOFTWARE INTO INVISIBLE ACTIVIST MACHINERY

by Alexandra Jönsson and Cliff Hammett

Media Ecologies: Some Contested Channels of Infection

In the UK, sex workers are nomads, moving from flat to flat, from area to area, and from city to city. A worker might stay for three months or less before moving on to another location in order to keep up with the demands of the commercial market. The majority of sex workers in indoor prostitution in London are migrants who normally intend to stay for two to three years. The market structure of sex provision pits most women as individual sellers in competition with one another. Like many areas of work, working together as a co-operative tends to be the exception and not the rule. The legal restrictions that come with working in the sex industry are such that they compromise the ability of sex workers to operate safely; for instance, it is illegal for two women to work together in the same flat, despite the obvious protection this affords them.

A number of projects operate in this context, offering support to those working in the sex industry. Some, like the Open Doors drop-in centres in Hackney, London, are a part of the National Health Service. Some receive funds through other state and interstate instruments; TAMPEP, a project that produces health leaflets for sex workers, is financed under a public health initiative by the EU. Others are sustained through charitable donations and philanthropic foundations. A great deal of this energy is focussed on maintaining the sexual health of the sex worker. In 2009, a user-led and politically engaged sex-work project in Edinburgh had much of its funding withdrawn because NHS Lothian deemed female sex workers to no longer present a substantial risk of HIV transmission.

In this twenty-first century funding scenario, traces of a historical discourse around the dangerous sex worker body persist. It is a discourse framing and guarding this specific body as a site for the transmission of biological and social infection. Managing the risks of transmission that the body of the worker presents becomes an overriding concern for the contemporary welfare state and its organisation in order to practice its discipline.

There are numerous barriers for the subjects of the discourse around the sex-worker body: health, money, safety, and language. Most women working in the sex industry

speak limited English, which not only prevents them from negotiating with clients but also presents a barrier to organising in their own interest. x:talk, a sex worker-led co-operative (www.xtalkproject.net) is a self-organised group that develops services in favour of sex workers. They provide English language lessons for migrant workers in the sex industry, take part in feminist and anti-racist initiatives, and campaign for the rights of sex workers in local, national, and international contexts. Ultimately, they use language and communication as a tool for creating change and empowerment. For the past nine months, we have worked with x:talk to build a telephony-based social software system for women in the sex industry.

In our practice, we tinker and play with technology, from commercial services and systems to open-source software and free-media hardware. We intervene in sex workers' unrecognised media ecologies as well as media initiatives from the UK government targeting the weakest in society. Mostly, we try to think about things from the wrong end of the line. We attempt to speculate who and what might govern and maintain the visibility and rights of sex workers by unlocking material media systems through a multitude of technical, social, political, and gendered origins. This paper seeks to unfold the questions raised by our research project, *X_MSG* by using three different modes of writing to allow speculative historical, technical, and health-political stories to intersect, produce new questions, and bring overlooked culturotechnical processes to the fore.

Invisible Software Machines: Rethinking Historical Materialities

The processes *she* led go unrecognised as politics. She transformed the telephone — reserved for office messages of the utmost importance—into a social medium by only chattering into it. She kept channels of communication open by introducing bedsides as a key machine for switching on and off communication. However, these strategies are still predominantly regarded as trivial, repetitive, and abundant activities, hence they have been socially invisible. How does this social invisibility manufacture safety and control for women living under the radar and how are these strategies reproduced outside the spectrum of the conventionally 'visible'? Sex-work technologies, telecommunication technologies, and software technologies intersect in a web of manufactured control through media systems and thereby integrate the operations of telephony switchboards, telephones, software, looms, and other networked ecologies. They were indeed systems inhibiting the complete displacement of margins and social hierarchy, while in fact infectious media were appearing everywhere around her, though recognised nowhere.

Ada Lovelace articulated the first abstract conception of the software machine in the nineteenth century at the same time that the prostitute-bed ecologies comprised a growing infrastructure for circulation of confidential communication in an overpopulated Victorian London. "Women came to mediate exchange. Communication flows through them,

graphically or otherwise enhanced; information travelling along class lines collocates in them; the mechanism of mass cultural transfer of libidinal, commodity-desire are set-up with ‘woman’ as the switch point” (Wicke in Hayles, 2005, p.83). In the same way that the technical and social spaces of the switching centres and warehouses have remained largely unexplored as cultural sites of female technologies, software’s role in contemporary telecommunication systems has been largely unexplored relative to power production and maintenance. Software is literally the contemporary telephony switchboard operator allowing or denying access by the binary structure of on/off, hole/no hole, zero/one in networks of text messages, conversations, binary files, and red lights. Inevitably, this switch position of the operator, sex worker, and software, is pointing to an unrecognised practice of power. Software and sex workers inhabit this space at once, kept in the dark, in order to disguise the potential and danger of the operations and functions they perform. They are heavily regulated legally and socially through mythical, biological, and political tales about their opposite.

Infections are passed through systems of sexual fluids, secret couplings of machine and woman, free-flowing lovemaking, and bastard productions forming the indecent repopulation of the world. On December 10th, 1815, Anne Isabella Milbanke gave birth to the English poet Lord Byron’s daughter, Ada Lovelace. Regardless of whether Byron and Milbanke’s relationship meaningfully differed from those generated by Byron’s philosophy of free love and recursive polygamy, the conception of their daughter bore witness to an infection of chaos, desire, and love that Byron passed on to his aristocratic wife. It was not long before Milbanke regained control and cut all connections with Byron, leaving Lovelace to be raised in a Victorian single-parent family.

The amateur mathematician Lovelace became a switch point for histories of infection, poetical science, single mothers, and futuristic software machines. Through this circuit ran unfolding strategies for the regulation of bastardism and the transmission of free love represented by Byron; the social risks that sex workers today expose; and the normative histories that displace women from technical machines and technologies.

Lovelace dreamed of making mechanical flying machines, but in her 1843 annotations of Charles Babbage’s Analytical Engine, allegedly the first computer in the world, her interest in automation instead led to the first articulation of software machines as we understand them today. She created a discourse of poetical science to engender the conceptual and material zero/one machines layered in history, boding the processes of contemporary software machines. While sex workers’ bodies are controlled by the social and material ecologies of stigma, criminalising laws, exploitive employers, and hostile immigration—software is often held hostage by the history of a culturally-specific technical production invented in the 1960s and 70s by military laboratories, male computer scientists, and amateur enthusiasts. However, while the thinking behind software was conceptualised by Lovelace in 1843, the production that anticipated software

in communication networks came into being through the cyborg practice of operating the telephony switchboard, interlacing and coordinating telephone calls between caller and receiver. Notably, software based on networked environments, such as X_MSG, relies on the binary operation of interlinking and coordinating data that structures the network. Women operated the majority of calls in the UK in the 1970s, but when Queen Elizabeth on December 5th, 1958, made the historic call from Bristol to Edinburgh with the first subscriber trunk dialling (STD) connection, the cyborg practice of the operator proceeded to fold into the future software machines of telecommunication.

The female is inevitably at the nexus of these machines as well as the software embedded in this social history. As this information emerges from these social environments, it increasingly brings into question the boundaries of technology and exposes the untold histories it engages. It is this questioning of boundaries that led to the creation of the X_MSG telephony software. We are not so much interested in the technical software itself, or in an assemblage of software and hardware; rather, we focus on the questions produced from this socio-technical coupling, which help us unfold the social and technical materialities between sex workers, software, telephony switchboards, red lights, and health institutions.

A Free Media Text Message Server: Exploiting Commercial Services and Reinventing the Phone

The social software platform we developed is a many-to-many text message server, which is capable of redirecting texts to networks of members for the price of a single message.

The system operates through an inexpensive DIY telephony server. It uses a second-hand mobile phone with an ‘unlimited’ texts contract, radically reducing the charges for operating the system when compared with commercial services. This phone is connected through a USB cable to a recycled computer that operates the server. The value goes beyond cost; in using familiar personal mobile technology, the hardware set-up operates two processes. The first is demystification—the technology is accessible, it encourages tinkering and reprises (albeit in a limited sense) the role of the switchboard operator for the women who use and maintain it. The second, by contrast, is one of subversive performance: it enacts the breaking down of technological norms by rewiring tangible everyday hardware to create new forms.

This software assemblage, developed in consultation with x:talk, is coded to behave according to the following four social premises: each individual is anonymous, even without having a username; anyone with the telephone number for the system can create a new network, networks can be localised for different language groups; and, barring the system operator, no one can see what other networks exist.

The software design's foundation is based on the specific social norms and conditions encountered and created by sex workers within London. This serves to maximise the software's social scalability within the context of the sex industry, without reference to other contexts and uses. Scalability normally refers to how well a piece of soft/hardware functions when the volume or scale of a piece of soft/hardware is increased, however social scalability here is a measure of the ability of the software to deploy itself effectively in the greatest number of social contexts. So while the X_MSG software is at present primarily used for the internal organisation of the x:talk group, its design already contains the potential for the creation of other networks in the sex industry. For instance, the complete anonymity of users found on the network may not be an obvious match with the context of the activist group, where most members would know each other on a first name basis, but it is a crucial feature in the wider context of the sex industry. This relates to the very real fear of exposure among sex workers, especially to their family and friends in their country of origin. Likewise, the core membership of x:talk can speak English and had no real need for the language features, but this is not the case within the sex industry at large, where the workers in the UK are predominantly migrants with limited English language skills. The software has the potential to build upon the real and latent bonds between members of a language group and add a layer of language barriers against unwanted intruders on the network.

Inside the computer is an assemblage of available free software applications and home-crafted amateur coding. First are the applications Gnokii (<http://www.gnokii.org>) and Gammu (<http://wammu.eu/>), free software/open source mobile telephony applications designed to enable PCs to interact with and control mobile phones. They make closed-off mobile phone functions programmable once again. Next is the MySQL database that stores telephone numbers and distribution lists in a many-to-many relation, allowing unlimited communication structures to be formed. These applications interact through the X_MSG software, which was created in Perl, a flexible programming language that can coordinate the data exchange between different applications, allowing them to act together.

Figure one represents the interlinking performed by Perl as a flow through the mobile phone to the database and back again. Properly speaking, this is a fiction. Control of the program passes up and down levels of the software assemblage, forming a triangle with the control loop at the very top. However, it serves as a useful metaphor, making clear each component's function and placing it in proximity of the components with which it interacts. In a sense, this is the system seen from the point of view of the text message.

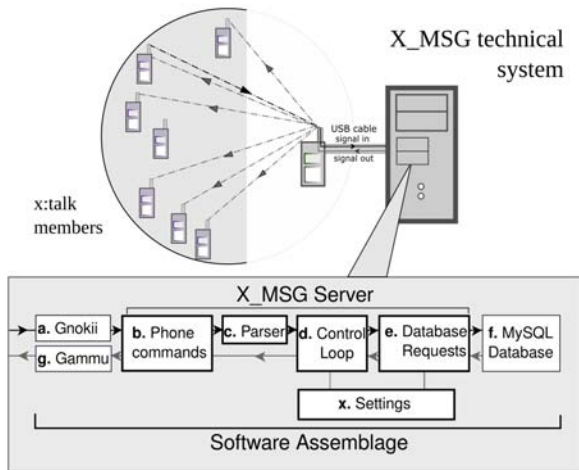


figure 1: One possible conceptualisation of the X_MSG system.

When a message is received by X_MSG's mobile phone, it is picked up through Gnokii (a.), a free software/open source mobile telephony application designed to enable PCs to interact with and control mobile phones. The X_MSG server itself is a set of scripts written in the programming language Perl (<http://www.perl.org/>). The Phone Command script (b.) provides tools to utilise and control the Gnokii application as well as Gammu (g.), a related application that is used for sending messages back out. This is, in turn, controlled by the Control Loop script (d.), which uses the Phone Command script to retrieve messages and passes them to the Parser script (c.). The Parser identifies user commands, telephone numbers, and the messages themselves from the stream of text data. Based on this information, the Control Loop uses the tools provided by the Database Requests script (e.) to update and retrieve data from the MySQL Database. (f.) This database contains three tables of data: a table of members' numbers, a table of networks, and a table that connects members to networks. The Control Loop uses the retrieved data, for example, a list of numbers for a network, to issue instructions to the Phone Command script to send out messages through Gammu. The functions of the Parser, Control Loop, and Database Requests operate under the system's Settings module (x.), which configures the connection to the MySQL database and all of the language features of the system.

The intention behind the software design is two-fold: to delineate the boundaries of the technology; and to challenge the structures within technologies that privilege the Western (Anglo-Saxon) knowledge-worker over other possible users. For instance, the commercial text messaging services we experiment with have no support for accented and special characters used in many languages utilising the Latin alphabet. When placed

within a communication system, this software application would arguably embody a hierarchy of language, with English being the ‘default’ or ‘natural’, and all others semi-supported aberrations. A single line in the Settings script of our software—*use encoding "utf8"*—removes this. Before this discovery, accented characters could even crash our software entirely. Automated messages (such as the message you receive when you make a mistake, or join a network) are available in Polish, Portuguese, French, Spanish, Russian, and English, which can be set for specific networks or individual users. The value of this feature in terms of pure utility is limited, as automated messages form a limited part of communication traffic within the systems. However, the attention paid here ensures that the system does not simply rearticulate the hierarchy we sought to remove. It means that the users of the network can configure their network to be specifically for them. This development process is by no means over. The system’s dependence on the closed system of the mobile phone network may reveal certain boundaries that cannot be overcome, but may nonetheless be exposed. Identifying these boundaries is of crucial importance to our research.

It was, in fact, a challenge to make a system that operated on a many-to-many basis. Phones (including mobile phones) are primarily geared to one-to-one communication and the commercial services around them are similarly configured. The networks the phone creates, of course, are anything but one-to-one. This is made clear in Mongrel’s *Telephone Trottoire* (<http://www.mongrel.org.uk/trottoire>), which employs a ‘pass the parcel’ method for distributing voice messages. This project, along with Jean Demar’s *FreeMob* telephony project, were important forebearers of the system. What the X_MSG software brings is consistency and, more importantly, speed to existing communication practices. This is not just a conceptual understanding, rather it is true on the level of hardware, operating as it does on a single mobile phone that can send messages only one at a time. For the end user, this acceleration is transformative. When users are separated geographically, there is no indication that the messages are sent out sequentially rather than simultaneously. The system is then both old and new, or rather one potential form which was always present within the SMS framework. Curiously, a primary use of the system for x:talk has become interconnecting existing communication structures such as meetings, lessons, and email lists, with messages directing attention to sources of critical information. In linking together these structures, the system parallels the Perl programming language that binds together other software components.

In other respects, the X_MSG system takes advantage of the values and forms built into and around telecommunication and computer technology. By operating precisely at the level of a personal mobile number, it easily falls into the social norms and restrictions surrounding mobile phones and becomes accessible only through networks of trust. A key principle of our original system design—that each user can create his or her own communication network on the system, which others can join—stems from the structure

of the relational MySQL database where this information is stored. It is accurate to attribute the creation of the network creation feature of the system to the many-to-many form of the relational database, rather than our own innovation, x:talk's input, or the structure of the sex industry at large.

The software uses a simple protocol whereby users can contact different networks by inserting a special symbol and the network name at the beginning of the message. The user creates a new network simply by attempting to contact a network that does not exist yet. Moreover, the users are not able to gain an overview of the present networks—like the mobile phone number, this information is passed on informally. This set-up allows for the creation of free-form communication structures within the database, with different possible message channels that users might not be fully aware of, and the possibility of the accidental creation of new links through common misspellings of existing networks. It thus adds indeterminacy to the system by allowing for the creation of new and unexpected channels of communication splitting off from the agreed upon structures.

Material Enclosures: Strategic Telephony and Herstorical Unfoldings

In the conjunction between the social and the technical, it makes little sense to place the software components in a fixed hierarchy, as changes in any part can be transformative. Nevertheless, the control loop in the X_MSG software can still be conceived of as the mother algorithm of the program, administrating where the text message can go and how it is passed through the system. This is not only pure mathematical data, but also a complex process of algorithmic interlacing of text message content, mathematical functions, and social organisation shaping between x:talkers. In the same way, the social organisation between women and machines in the switchboard station has individual transformative power, the complete operation of all calls is directed by a main protocol for the whole station. Software, which positions itself as an interface to social relations such as the X_MSG software or the telephony switchboard centre, is hence in constant negotiation between the mother algorithm and the user behaviours. In this sense, the programming language Perl is not only a mathematical language, but also a social organiser between the incoming and outgoing text messages and the underlying technology. It glues the distinct technologies and components together into an automated system that, crucially, facilitates the social operations between the members of x:talk. Hence, the X_MSG software aims to replace the coding aesthetics of efficiency, elegance, and functionality with an exploration of social aesthetics springing from the relations and communal exchange between the programmer and the user. This has made it possible for us to tap into an existing informal organisation mode in the x:talk group that relies on a need to send out alerts, re-plan meetings, send reminders, and so on. Likewise, the software utilises what is already present in its environment, rewiring the organisational

mode it finds into a new technology. This is an attempt to subvert technologies by unlocking their potential in experimentation. In addition, the software assists the communication and activism of the x:talk collective, integrating our system into those strategies that seek to unlock and shift positions of power.

This software plugs directly into histories where women occur as a medium of exchange or switch point, and through this process technologies are exposed in a new manner. The sex worker is no longer the secluded, stigmatised body, but a potential switch of power in a socially and materially organised system, literally administering streams of information while embodying historical channels of chaotic social and biological infection. However, it also casts a new light on government health politics and the increasing surveillance and criminalisation of sex workers' bodies, provoking us to interrogate the discourses haunting and controlling people who embody the channelling of sexual fluids, free love, social infections and with that, the potential of the new.

As a child of Lord Byron, Lovelace also became a bearer of this infected history. She became the switch to turn on and off histories interlacing the operations of zero/one machines as she described the data processes performed by the Analytical Engine as beautiful, abstract, and peculiar as the advanced woven patterns of the loom. In fact, she articulated the networked fabrications of the loom as highly advanced data storing processes, completely enmeshed in secretive female culture. But secrecy and invisibility have always been directives for female cultures of knowledge, as much celebrated within cultures as exploited by histories of technology. Literally, women occupied the position of power—plugging in and out everything from international corporate calls to secret calls between lover and housewife—controlling the switching board in order to coordinate the networks of conversations embodied in these machines. Her position has, however, been largely under explored as a part of the history of technology and a precursor for software-based models of data networking.

This gives us a great opportunity to disregard any order and chronology in these histories and look only at the unlikely points where they nevertheless collide. Returning to the questions of invisibility, when faced with the technical story of interlacing data with programs such as Perl, MySQL, and mobile telephony software, many respond with indifference simply because the language is not saturated with cultural meaning, as opposed to the sex worker body. These data processes in software are deeply layered in a history of cyborg practices and, hence, they hold the potential for interventions that will bypass channels of power and surveillance.

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BIOPOLITICAL INTERVENTIONS IN THE URBAN DATA SPACE

by Clemens Apprich

Taking as a point of departure the acknowledgement that tactical media work has lost in importance over the past ten years, this paper addresses the question of divergent political, artistic, and cultural practices as they relate to the overall themes of activist media and biopolitics. Against this background, it is the modern city and its hybrid of physical and digital space that potentially offers new fields of action. With its architectural form overlaid by a large number of data streams, it could be the site of an entirely new aesthetics of crisis, criticism, and resistance. Vienna's Public Netbase has been among the pioneering institutions in Austria and Europe who made the digital world accessible for critical media work, taking issue with surveillance and control in this data *space*. Looking back, it is possible to identify positions of interest and outline their relevance for a future artistic and cultural practice. This paper will focus on the art project Zellen Kämpfender Widerstand/Kommando Freiheit 45 (ZKW) as an exemplary intervention into symbolic spaces of dominance. This project was created as part of a critical engagement with the Austrian Year of Anniversaries 2005, where the biopolitical utilization of public space went hand in hand with historical representations of statehood. Looking back upon the work of Public Netbase makes it possible to create a context for the activist deconstruction of official imageries and biopolitical sign systems, while contributing to the debate on possible points of connection for tactical media work.

Virtual Street Theatre

“Those who don't fight will die step by step. We therefore must attack the current strategic projects of the symbolic formation of Austria's revisionist system!” (ZKW, 2005A). This is a passage taken from the claim of responsibility released by Zellen Kämpfender Widerstand/Kommando Freiheit 45, the group that on the night of 9 May 2005 forced its way into the gardens of Vienna's Belvedere Palace with the intention of kidnapping a cow. The cows grazing in the palace's meadows were part of the series of government-commissioned commemorative installations called Twenty-five Peaces. The celebration was initiated during Austria's Anniversary Year 2005, commemorating the sixty-year

mark after the end of WWII, fifty years of Austria's State Treaty, and ten years of EU membership. The series of events and installations included light and sound installations illustrating the destructive force of warfare; McCare parcels provided in collaboration with a global fast food chain; and Vienna's historically charged Heldenplatz presented as a vegetable field. Thus, the cows in the Belvedere gardens represented only one among twenty-five 'pieces' of the one-year historical spectacle created by Wolfgang Lorenz, director of the Graz 2003 Cultural Capital, and Georg Springer, head of the Austrian Federal Theatres.

According to ZKW, the cow was to be a political prisoner whose fate would depend on the Federal Government's recognition of deserters and partisans during the War. This seemed necessary in as much as questions that might be politically sensitive were excluded from the official programming for the Austrian Anniversary Year 2005. For example, one might ask what is wrong with a country where a member of the Federal Council may freely and publicly slander deserters as "murderers of their comrades" during this Anniversary Year, and, arousing little protest, repeat the statement on one of Austria's state broadcasting channels. Siegfried Kampl, the mayor of the Carinthian town of Gurk (and member of the Austrian Freedom Party, FPÖ, and its later breakaway formations Bündnis Zukunft Österreich, BZÖ, and Freiheitliche Partei Kärntens, FPK) delivered a speech in the Austrian Federal Council on 14 April 2005 in which he referred to Wehrmacht deserters as "in part murderers of their comrades" and spoke of a "brutal persecution of Nazis" after WWII.

Another sensitive question might have been about the importance of partisan struggle in freeing Austria from Nazi rule. However, such questions would stand in the way of the frictionless 'identity search' towards which the Austrian government's pageant was geared. Indeed, it seems easier to drive cows onto palace gardens in order to remind the public of the latter's use as grazing meadow when food supplies were scarce after the end of the war.

Contrary to the government-prescribed perspective on history, which builds on a victim-myth widespread in Austria, the 'kidnapping' was meant to encourage a critical engagement with official representations of history. The Austrian 'victim thesis' goes back to a passage in the Moscow Declaration of 1 November 1943, in which the Allied powers refer to Austria as the "first victim of Hitler's typical politics of aggression", declaring the annexation of Austria by Nazi Germany in 1938 "null and void". While this declaration was originally intended as a gesture of support for the Austrian anti-Nazi resistance, it later became the motto of the Second Republic, resulting in a collective suppression of Austria's shared responsibility in the crimes of the Nazi regime. It was not until 1991 that Federal Chancellor Franz Vranitzky became the first representative of the Austrian state to apologize for the crimes committed by Austrians during the Nazi period. This official recognition of Austria's shared responsibility in war crimes and the Holocaust was

relativised by the later Chancellor Wolfgang Schüssel (of the conservative People's Party, ÖVP) in an interview with the Jerusalem Post on 9 November 2000 (pogrom commemoration day), who once again referred to Austria as the first victim of Nazi Germany. It was in keeping with this view that the right wing government's commemoration programme focused on the signing of the State Treaty in 1995, rather than the liberation from Nazi rule in 1945.



figure 1: The political prisoner in the hands of her kidnapers, <http://zkw.netbase.org/>

In contrast to the million-Euro history spectacle commissioned by the Federal Government, the activists used only a few well-placed images and information to carry out a one-week kidnapping drama (<http://zkw.netbase.org> and <http://netbase.org/t0/zkw>). The four communiqués published by the activists attracted attention on blogs, television, and in the print media, providing a place for dissident opinions to be voiced. Aesthetic codes borrowed from the urban guerrilla, and an oblique visual language reminiscent of the nineteen-seventies opened a discursive space from which an attack against the symbolic rule of the ‘system’ was to be launched. When on 15 May 2005, Austrian Chancellor Schüssel and Monika Lindner, Director General of the Austrian Public Broadcasting Corporation ORF declined to publicly admit to having “mislead and nationalistically incited the people with historical lies in 2005” (ZKW, 2005 b), the ZKW saw themselves forced to slaughter Rosa, using 1.5 kilograms of Semtex explosive.

The virtual street theatre was a fake action from the very beginning, masterminded by Public Netbase, the Viennese media culture platform (1994–2006). Assuming an ironic distance, the activists questioned Austria’s victim myth as well as the role that biopolitical history writing played in constructing a hegemonic sense of everyday reality. In times when a critical engagement with the past is relegated by the spectacle, and political gestures are belittled as individual opinions, there is a need for tactical tools capable of attacking cultural hegemonies. Re-articulating symbolic spheres and deconstructing official imagery through dissonant practices have proven themselves to be effective forms of media-activist interventions. The virtual cow kidnapping action performed by Kommando Freiheit 45 may therefore serve as an example of how far media activism is capable of questioning, at least in the short term, that which is taken for granted within these hegemonies. Against the background of the Anniversary Year 2005, the fake kidnapping appeared to be a powerful means of countering the remaking of the Austrian victim myth, and of highlighting the relationship between the power of interpretation of history on one side, and governmental claims to power on the other.



figure 2: ZKM, <http://zkw.netbase.org/>

Such a strategy of ‘armed propaganda’, put into place in order to reflect upon the victim myth that had come back to life in popular opinion and the media, is a conceptual heir to the communication guerrilla of the 1990s. Motivated by disappointment about their own political projects, and by a desire to develop a non-essentialist social critique, some sections of the left began to develop forms of political action appropriate to the current situation. Because of these efforts, a non-dogmatic approach beyond old-style activism emerged, with tactical media as the most innovative idea. Consequently, activism became more global, connecting many different struggles with one another. However, this type of activism often seemed strangely detached from people’s everyday life, given that the new

space of media technologies remained largely untouched by the nitty-gritty details of political controversies. But strategies that claim to guide action must not remain stuck in a virtual parallel space—they have to be diffused not just in activist media, but also in the mainstream media, if they aim to achieve a counter-public, however short lived. The frontal attack against Austrian everyday consciousness carried out by Kommando Freiheit 45 was therefore not just a “semi-humorous media guerrilla concept” (Weber, 2005, p. 3), but also an attempt to intervene into the parameters of official politics.

Symbolic Hegemony

In view of a comprehensive, computer-supported *dispositif* of control and security present in the core of liberal societies, it is necessary to look for new forms of dissent. However, ever since Foucault demonstrated that power relations are of an immanent nature (1983), this issue cannot be addressed by a resistant outer sphere; instead, it has to be negotiated within the forms of current media. Channelling virtual streams of data into the material scenery of (urban) life turns urban space into a possible field of action where an entirely new aesthetics of crisis, criticism, and resistance might develop (Debord, 1980, pp. 41–56). It is the modern city, then, that constitutes itself as a (virtual) space of potentialities, with biopower acting as a regulatory technology of the (urban) populace. The political form corresponding to biopolitics is the liberalism that developed in conjunction with the modern state, itself tightly connected to the ancient dream of the governable city. The question, then, is what are the possibilities, but also the dangers, of using the ‘new media’ for critical media work, and how might they influence a new kind of artistic practice. Today, the term ‘new media’ in its wider sense is generally applied to information and communication technologies that use data in digital form. In its more narrow sense, it refers to services accessible through the internet (such as email, the WWW, and video streaming). However, the term itself is not as new as it might seem. Over the past decades, it kept reappearing wherever media technologies promised to transform people’s everyday life in a revolutionary way (radio and TV broadcasting were termed new media, as was *Bildschirmtext*, an interactive videotex system that seems to have disappeared from our collective memory). The term has served various business models in promoting their technologies as absolutely new and indispensable. In spite of this rightful criticism of the term, it is used here in order to carry forward the 1990s debates and make the origin of current practices of resistance visible. Twenty-five Peaces, with its events such as simulated nightly air raids and its occupation of entire squares with advertising media, could be disrupted by playful interventions, and the symbolic landscape reclaimed by strategies of re-appropriation.



figure 3: Kommando Freiheit 45 in action, <http://zkw.netbase.org>

Today's city contains a hybrid of physical and digital space and an architecture that is overlaid by multiple data streams. In addition to mobile communication technologies, this "urban data space" (Jaschko, 2007) is made-up of an ever-expanding array of surveillance systems as well as advertising media penetrating the urban visual space more deeply each day. The symbolic dominance of the spectacle is based on a cultural grammar that may be understood as an ensemble of socially accepted codes. These codes represent particular systems of symbols, and their definition ensures the dominance of symbolic hegemony over common sense. Thus, the urban data space offers a more or less open screen for individual and social practices, ways of life, cultural patterns, knowledge, and power, including the aforementioned structures of dominance. Given the rapid advance of the new culture technologies in all areas of social life, artistic practices that work with electronic media are gaining in importance. Urban space represents the field of action upon which new publics can be created through confrontation, agitation, and intervention.

Media activism represents only a specific segment within a wider spectrum of strategies used by the communication guerrilla (autonome a.f.r.i.k.a. gruppe, 2011, pp. 8–9.). Everyday forms of face-to-face communication and societal behavioural patterns that produce and reproduce power relations are at least as relevant as the technical means of communication. What they all have in common is an understanding of the semiological guerrilla as outlined by Umberto Eco in the late 1960s (Eco, 1985). From this perspective, the guerrilla serves as a metaphor for questioning dominant discourses with means other

than argumentation. Accordingly, the subversive character of the communication guerrilla rests in its capacity to disrupt power relations on the level of social discourse, undermining the supposed naturalness of the existing order. According to the autonomous a.f.r.i.k.a. group's manual, "[the communication guerrilla's] project is the critique of the non-questionable character of what exists; it aims to transform hermetic discourses into open situations, where in a moment of sudden confusion any naturalness is put into question" (2001, p. 7). A cow as a "political prisoner"? And why not.



figure 4: The bloody end of the kidnapping drama, <http://zkw.netbase.org/>

Kommando Freiheit 45 utilized the subversive energy of the absurd in order to intervene critically into the symbolic order of dominance, in this particular case, the biopolitical exploitation of public space connected to a historical display of statehood. In relation to the latter, the cow kidnapping seemed to be less false than the display of the Austrian victim myth. In a country in which historical oblivion forms a significant part of its vital power, and which continues to mystify the *wirtschaftswunder* of the post-war years while negating any continuity from the Nazi period, it makes sense to turn the politics of history itself into the central location of biopolitical claims to dominance. In as much as this is the case, Kommando Freiheit 45 may be an example of a practice of resistance that provides a connection to the tactical media activism of the 1990s. We may expect that engaging symbolic representation and hegemonic sign systems will in the future not be less, but more frequent. Consequently, the new forms of action will be

required to adopt a historically conscious perspective and learn from previous forms of protest in order to be able to develop effective strategies. In Austria, the struggle around the politics of symbols is not over. The sacred cows of the Austrian victim myth have yet to be blown-up—if only symbolically.

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BORDERS AND BOUNDARIES

OFF LIMITS: ELASTIC BORDER REGIMES AND THE (VISUAL) POLITICS OF MAKING THINGS PUBLIC

by Andreas Oberprantacher

“The ordinary practitioners of the city live ‘down below,’ below the thresholds at which visibility begins. They walk—an elementary form of this experience of the city; they are walkers, *Wandersmänner*, whose bodies follow the thicks and thins of an urban ‘text’ they write without being able to read it.”

—Michel de Certeau, *The Practice of Everyday Life*

“It is, in fact, obvious that monuments inspire social prudence and often even real fear. The taking of the Bastille is symbolic of this state of things: it is hard to explain this crowd movement other than by the animosity of the people against the monuments that are their real masters.”

—Georges Bataille, *Architecture*

Bodies on a Crane

In her seminal essay “We Refugees” first published 1943 in *The Menorah Journal*, Hannah Arendt analyzes the conditions of Jewish *refugees*, who refuse to be called such, by linking the fate of two “sons of the nineteenth century”: that of the “conscious pariahs” and that of the “social parvenus” (Arendt, 1943, p. 77). She concludes that due to the National Socialist persecution, the “status of outlaws” was eventually forced upon both (ibid.). But while the latter, that is, the parvenus, “don’t understand the wild dreams of the former and feel humiliated in sharing their fate,” those “few refugees who insist upon telling the truth, even to the point of ‘indecent,’ get in exchange for their unpopularity one priceless advantage: history is no longer a closed book to them and politics is no longer the privilege of Gentiles” (ibid.).

Commemorating Arendt’s words, this essay is dedicated to one story in particular (out of the many calling for our critical attention) that is as much “indecent” as it is confirming the insistence of a “few refugees” who contest actual politics in expectation of another history. On Saturday, October 30th, 2010, nine ‘irregular immigrants’ from India,

Pakistan, Senegal, Egypt, and Morocco climbed on a crane located at Piazzale Cesare Battisti, right in the center of the Lombard city of Brescia, and publicly went on hunger strike (see the blog of *Senza Frontiere*, <http://senzafrontiere.noblogs.org/>). In the midst of all those scenes of social unrest, police repression, and the extensive media coverage that followed, four of them held out for sixteen days, until they finally ended their hunger strike on November 15th, descended from the crane, and surrendered to the Italian authorities. As a political act, this hunger strike might not have “reached the decisive point in the political” Carl Schmitt so fervently imagined in his book *Der Begriff des Politischen* (2007, p. 39). Still, it has effectively disturbed the very sense of *location* and *territory* upheld by nationals and may be considered an *incisive* act of emergent politics.



figure 1: Global project—a “few refugees” on a crane in Brescia, <http://www.globalproject.info>

The nine men decided to climb up the crane after it had become clear that there was no intention by the ruling political elite, neither on a provincial nor on a ministerial level, to meet any of the demands made by the local *presidio permanente*, that is, the Permanent Encampment set-up by concerned residents to express their dissent against discriminatory migration policies and demand political change. Especially the vice-mayor of Brescia, Fabio Rolfi, of the infamous political party *Lega Nord* lived up to widespread populist expectations by insulting and threatening the activists of the *presidio permanente* and by making absolutely no concessions on the *sanatoria*, that is, the Italian practice of

occasionally granting an extraordinary residence permit to irregular migrants. In fact, precisely this practice of retroactive legalization, the *sanatoria*, had once again become a major political controversy, because a recent circular letter signed by Italy's chief policeman, Antonio Manganelli, stated that according to article 14:5 of the so-called *legge Bossi-fini*, none of those 'aliens' may be eligible for an extraordinary residence permit that have been frisked twice by the police and—as a consequence—convicted for not having voluntarily left the country. Apart from the blatant and random discrimination of people sharing comparable living conditions, but perhaps not the same skin color or work space—circumstances, which make some of them more susceptible to police operations than others—it soon became clear that the *sanatoria* was nothing but a trap of self-denunciation: those who submitted a request for an extraordinary residence permit and paid their arrears to the ministry of finance without being aware of the exact legal preconditions and their precarious status as formally convicted 'illegal aliens' were put on an index, and it is more than likely that their payments are being used for balancing Italy's direful budget.

What seems to have provoked the local authorities of Brescia to tear down the barracks and *presidio permanente* with heavy equipment was mounting evidence that in the face of a dehumanizing body politic some silenced subalterns neither remain quiet nor comply with the orders given, but instead occupy, irradiate, and transform spaces from which they are legally banned. In this sense, the act of climbing up the crane and going on hunger strike is a confirmation of Rancière's thesis stating that:

Politics exists because those who have no right to be counted as speaking beings make themselves of some account, setting up a community by the fact of placing in common a wrong that is nothing more than this very confrontation, the contradiction of two worlds in a single world: the world where they are and the world where they are not, the world where there is something "between" them and those who do not acknowledge them as speaking beings who count and the world where there is nothing. (Rancière, 1999, p. 27)

And what better confrontation with the Brescian authorities regulating "the privilege of speech" (ibid.) than by expressing dissent at a square that is dedicated to Cesare Battisti—a prominent figure of Italian *Irredentism*, who was hanged and garroted after an Austro-Hungarian Empire's court martial sentenced him to death in 1916 for high treason?

Fortunately, there is no prospect of high treason in the case of the dissenters on the crane, for such a sentence would already presuppose what people from the association *Diritti per tutti*, Rights for All, are also fighting for: (legal) recognition. What might become possible, however, is anticipated by the activists' own slogan: "Se permesso non

sarà, resteremo sempre qua”—“If no permit is granted, we will always remain here” or, in another reading, “If it won’t be permitted, we will always remain here”—a slogan that announces the fierce disposition of a “few refugees” to challenge the discursive securitization and effective segregation of (urban) spaces by insisting on a counter-hegemonic politicization of their bodies.

In view of this and similar events occurring in the ‘hearts’ of *our* cities, the following question may be raised to introduce what will follow as essay: what if these bodies on a crane in Brescia succeeded in invalidating the aesthetic tradition that was so magnificently framed by Charles C. Ebbets’ photograph *New York Construction Workers Lunching on a Crossbeam* (1932)? And, what if they eventually liberated us from our obsessions with the *splendeur* of the modern metropolis? What are we to discover beneath our feet, in the basements of our supposedly democratic dwellings?



figure 2: Charles C. Ebbets, NY, *Construction Workers Lunching on a Crossbeam* (1932), © Bettmann/CORBIS.

The Problem of Emplacement

Let me turn this story's page for a while and instead refer to the premonition of a "new archivist" (Deleuze, 2006, p. 3) who might be of help to uncover what possibly lies beneath. Only one year after the publication of *Les mots et les choses*, Michel Foucault worked on a lecture given on March 14, 1967 to the Cercle d'études architecturales. The lecture notes remained largely unedited for approximately twenty years until they were published in 1984—the very year of Foucault's death—under the title "Des espaces autres." Despite their marginal surface on the fissured oeuvre of Foucault, these notes may nonetheless be crucial for understanding a significant shift occurring in the author's excavation activities at the end of the 1960s: questions of power with regard to the organization of social space gain in importance. Foucault commences his lecture by proclaiming that the

great haunting obsession of the nineteenth century was, as we know, history.... The present epoch would perhaps rather be the epoch of space. We are in the epoch of simultaneity; we are in the epoch of juxtaposition, the epoch of the near and the far, of the side-by-side, of the dispersed. We are at a moment, I believe, when our experience of the world is less that of a great life developing through time than that of a network that connects points and intersects with its own skein. One could perhaps say that certain ideological conflicts animating present-day polemics take place between the pious descendents of time and the fierce inhabitants of space. (Foucault, 2008, p. 14)

With the phrase the "present epoch would perhaps rather be the epoch of space," Foucault is neither insinuating that space had no history until the recent past, nor is he denying that there was or is no "fatal intersection of time with space." Rather, he seems concerned with understanding what he calls the "anxiety of today" which, in his view, "fundamentally concerns space, no doubt much more than time" (Foucault, 2008, p. 15).

While the medieval space may be characterized as a "space of localization"—as a "hierarchic ensemble of places" in which some things "found their emplacement and natural rest" while others "had been violently displaced"—Foucault suggests that the modern age was an "infinitely open space," a space of extension with things in continual movement. As Foucault furthermore argues, the modern space of extension was also superseded, this time by the contemporary effort of organizing space as an *emplacement* "defined by relations of proximity between points or elements" (2008, p. 15).

The embryonic political dimension of Foucault's early archeology of spaces becomes evident when considering his declaration that:

the problem of place or emplacement arises for mankind in terms of demography. This problem of the human emplacement is not simply the question of knowing whether there will be enough space for man in the world—a problem that is certainly quite important—but it is also the problem of knowing what relations of propinquity, what type of storage, circulation, spotting, and classification of human elements, should be adopted in this or that situation in order to achieve this or that end. We are in an epoch in which space is given to us in the form of relations between emplacements. (Foucault, 2008, p. 15)

And what better emplacement to exemplify these “relations of propinquity” than a crane with irregular migrants on hunger strike on its top?

It has become a cliché to state that the spaces we inhabit are all but flat. Following Gilles Deleuze and Félix Guattari’s rhizomatic studies collected in *Mille Plateaux*, I will further demarcate the problem of emplacement, as drafted by Foucault, by emphasizing the manifold operations and procedures that allowed for “smooth (vectorial, projective, or topological) space” (Deleuze and Guattari, 2004, p. 399), inhabited by countless people in movement, to become subsequently amalgamated with “striated (metric) space” (ibid.), that is space turned into a grid or, as one may also say, into computable and transferable properties, not least according to the—sometimes persuasive, sometimes militant—logic of capitalism (see Deleuze and Guattari, 2004, pp. 399–430; 523–552).

At the time of writing *Mille Plateaux* in the late 1970s Deleuze and Guattari knew well enough that “smooth spaces are not in themselves liberatory” (Deleuze and Guattari, 2004, p. 551), and thus it would at best correspond to a belated romantic fantasy hoping for the advent of an urban nomad or a “cave dweller” (ibid.) who could solve the spatial riddles of an apparently striated modernity. On a similar note and almost at the same time, Foucault amended his analysis of disciplinary regimes by saying that “it is clear that in the future we must separate ourselves from the society of discipline of today” (in Hardt, 1995, p. 41). And what are we witnessing these days if not a seismic shock running through the very foundation of those institutions that once defined sovereign emplacements and allowed for civil subjectivities to emerge on nationalized terrains? Are *our* states not engulfed by a continual flow of informational capital generated by spectral entities such as the ever-invasive global financial market in alliance with multinational corporations? While pertinent answers to these questions may be found in *The Information Age*, a trilogy authored by Manuel Castells Oliván, it is equally important to remain critically aware that Foucault did by no means argue that the end of “the society of discipline of today” would imply the dissolution of disciplinary practices as such.

All but accidentally, Michael Hardt and Antonio Negri cross Deleuze and Guattari’s threads of thought with Foucault’s in their book *Empire* by arguing that:

the collapse of the walls that delimited the institutions and the smoothing of social striation are symptoms of the flattening of these vertical instances toward the horizontality of the circuits of control. The passage of the society of control does not in any way mean the end of discipline. In fact, the immanent exercise of discipline—that is, the self-disciplining of subjects, the incessant whispering of disciplinary logics within subjectivities themselves—is extended even more generally in the society of control. What has changed is that, along with the collapse of institutions, the disciplinary dispositifs have become less limited and bounded spatially in the social field. (Hardt and Negri, 2001, p. 330)

If it is true, then, that the production of a consumer-oriented, cross-border *normality* results from the comprehensive management and continual folding of smooth and striated, intra- and international, military and civil spaces, then it is at least as true that as a “technique of government” these spatial operations do not target everybody indiscriminately and that they are mostly removed from public scrutiny. On a closer look, in fact, one may even contend that the production of a global semi-militarized economic space is paralleled by the emergence of new forms of extra-legal, ‘abhorrent’ subjectivity: the orange-dressed ‘detainees’ of Guantanamo Bay may well be understood as the exemplary and effectively dehumanized expression of an indefinite extension of “lawless power” as Judith Butler states in her essay “Indefinite Detention” (2006, p. 63), but they are far from the only ones subjected to the biopolitical regime of securing life by discriminating its forms. Put otherwise: blue cards or green cards for the ‘lucky’ few deemed to be valuable *human resources* in the logic of competing economic zones, and a red pill for those who will try to make it across the Mediterranean Sea or the Mexican border with nothing but their hopes and their family’s debt.

It is indeed necessary to extend one’s critical attention to those increasingly outsourced and de-territorialized border regimes and detention centers—termed *reception centers*, *refugee homes*, or *deportation centers*—that have become an almost undisputed or even integral part of most, if not all, social democratic or liberal democracies. All the more disturbing because many of these state practices contradict in general or in part either national or international law, revealing that under biopolitical imperatives the *nomos*, venerated by Schmitt as “the unity of order and orientation” (2003, p. 186), allows for an extra-legal confinement of those considered to be a potential ‘risk’ to the local population. In view of these political transformations, Butler concludes that:

Governmentality is the condition of this new exercise of sovereignty in the sense that it first establishes law as a ‘tactic,’ something of instrumental value, and not ‘binding’ by virtue of its status as law. In a

sense, the self-annulment of law under the condition of a state of emergency revitalizes the anachronistic ‘sovereign’ as the newly invigorated subjects of managerial power. (2006, p. 62)

It is, amongst others, this transformation of ‘exercises’ that is followed up by Giorgio Agamben. In his writings, especially in his books *Homo Sacer*, *Quel che resta di Auschwitz* and *Stato di eccezione*, Agamben argues for a comprehensive reconsideration of Foucault’s main theses regarding the advent of modern biopower. By reconnecting to Arendt’s study of the camp and her idea of a “naked natural givenness” (1966, p. 241) and to Walter Benjamin’s understanding of “mere life” (2002, p. 250)—which Agamben combines into *bare life*—on the one hand, and by referring to Schmitt’s *Der Begriff des Politischen* from a critical distance on the other, Agamben tries to leap over the gap ripped open by Foucault’s genealogies by arguing that:

[t]he birth of the camp in our time appears as an event that decisively signals the political space of modernity itself. It is produced at the point at which the political system of the modern nation-state, which was founded on the functional nexus between a determinate localization (land) and a determinate order (the State) and mediated by automatic rules for the inscription of life (birth or the nation), enters into a lasting crisis, and the State decides to assume directly the care of the nation’s biological life as one of its proper tasks....Something can no longer function within the traditional mechanisms that regulated this inscription, and the camp is the new, hidden regulator of the inscription of life in the order—or, rather, the sign of the system’s inability to function without being transformed into a lethal machine. (Agamben, 1998, pp. 174–5)

It is this utterly ambivalent machine, welcoming to some, lethal to others, which has as its primary target the *population*. Not in the sense of a population ‘naturally’ comprising all those residing within or those that are subjected to a determinate sphere of power, but in the sense that the very population—*the People, das Volk, il Popolo*—is produced by a complex process of incorporation (*normalization*) of life through separation (*exception*) of its forms. As Agamben points out, in exemplary fashion, the ‘vitality’ of the phantasmagoric Aryan body of Nazism was obtained and secured by means of selecting those whose lives were considered ‘worthy’ and by eliminating those identified as ‘unworthy of life’—as both alien and unprofitable. What is important to keep in mind, is the circumstance that the very exclusion did not occur at the outskirts of the Nazi-state, but on its very ground. Thus, Agamben concludes that life “can in the last instance be implicated in the sphere of law only through the presupposition of this inclusive exclusion,

only in an *exceptio*” (Agamben, 1998, p. 27), meaning that the “camp—and not the [Foucauldian] prison—is the space that corresponds to this originary structure of the *nomos*” (Agamben, 1998, p. 20).

Following this line of reasoning further while recollecting some of the previous thoughts, I would like to argue that the very transformation of the ‘society of discipline’ from an institutional arrangement to a flexible, self-centered configuration goes hand in hand with a shift within the biopolitical order of modernity itself. One of the defining traits and dividing lines of the contemporary practice of biopolitical hegemony directly cuts through the ‘veins’ of our national spaces and goes by the name of *detention center*. With due respect to the suffering of those detained, one may well say that such places are truly spaces of exception where ‘valueless’ lives are being kept and administered, more often than not, by private enterprises—like European Homecare—that are favoring a racism without races.

Locative Resistances

I shall be turning pages one more time by first of all expressing a caveat: as much as the proposition of a generalized “state of exception” is a brilliant diagnosis of the contemporary crisis and transformation of sovereignty that allows us to discern the folding and unfolding of various spaces and techniques of exerting power, on a macro- as well as on a micro-level, it holds also the genuine risk of reproducing victimizing procedures by means of their academic reification. Against such a defeatist use of public reason Foucault argued in *La volonté de savoir* that “[w]here there is power, there is resistance” (Foucault, 1990, p. 95), and even though Herbert Marcuse’s “Great Refusal” (Marcuse 2002, p. 66) was no option for him, he nevertheless believed in “a plurality of resistances, each of them a special case: resistances that are possible, necessary, improbable; others that are spontaneous, savage, solitary, concerted, rampant, or violent; still others that are quick to compromise, interested, or sacrificial; by definition, they can only exist in the strategic field of power relations.” (Foucault 1990, p. 96)

In the sense of this caveat then, I will portray and discuss in the final part of my essay three particular “resistances” that have built up against the *plasticity* of contemporary border regimes and that place in common the passion of engaging in the heterodox politics of generating in/visibility by displacing spatial regimes.

Transborder Immigrant Tool

In the inventors’ words, the *Transborder Immigrant Tool* may be referred to as a “border disturbance art project” (Cardenas et al., 2009, p. 1) that consciously reflects but also acts on the shift “from Tactical Media to Tactical Biopolitics in contemporary media art”

(ibid.). In this sense, the *Transborder Immigrant Tool* is actually a “locative media” (ibid.) device that was designed and developed by the Electronic Disturbance Theater (EDT), a collective of cyberactivists and performance artists that formed in 1997 (see Dominguez, 2002, pp. 379–396).

Against the background of the violence occurring along the United States-Mexican borderlands that might have caused up to 10,000 deaths in the last decade according to the San Diego-Tijuana based humanitarian aid group Border Angels (see Cardenas et al., 2009, p. 2), the project aims at “reappropriating widely available technology to be used as a form of humanitarian aid” (ibid.). It is important to note, however, that even though it is already in use and frequently criticized by exponents of right-wing politics in the United States, the *Transborder Immigration Tool* is still a work in progress.

Transborder Immigrant Tool Project
 JASON NAJARRO, Graphic Design, Science, UCSD, RICARDO DOMINGUEZ, Visual Arts, UCSD, BRETT STALBAUM, CAM, MICHA CARDENAS, Visual Arts, UCSD

Background
 Each year, thousands of people attempt to traverse the arid, shifting desert terrain that makes up the United States-Mexico border. Hundreds of those migrants lose their lives to the elements due to the inability to discern where they are in relation to where they have been and which direction they need to go.

Migrant Deaths Along U.S.-Mexico Border
 Map showing migration routes and death locations.

Objective
 The goal of the project is to help reduce the number of deaths along the border by developing a common cell phone device into a navigation tool that will help migrants locate life saving resources in the desert such as water caches and safety beacons.
Motorola i455
 > GPS Enabled
 > Inexpensive (\$40)
 > Supports J2ME Applications
 > No service required for GPS functionality

Research
Understanding the Context of Usage
 In order to see how the tool must operate in hands of users who are inexperienced with mobile devices, in the context of extreme weather conditions and a tense social environment, significant time was spent researching the context of usage to help guide the design for a cell phone software application. Here is some of what was learned:
 > The non-literacy rate among migrant populations is high.
 > Not all speak Spanish but also various indigenous languages.
 > Device most likely to be used at night.
 > Humanitarian groups need to keep their water stations protected.
 > Border patrol will arrest those who they suspect of being guides.

Design Inspiration
 "Howling, or water witching, refers to practices which some people claim enables them to detect hidden water, metals, or other objects usually obstructed by land. The movement or vibrations of the apparatus, such as a Y-shaped twig, are used in the practice."

Design Advantages
 > Provides user with greater situational awareness.
 > Drawing paradigm better maps to users' preconceived notions of how GPS technology functions.
 > Depth of menu navigation is reduced, a major benefit for non-literate users.
 > While traveling, tactile feedback frees user from phone display interface, allowing user to concentrate on the surrounding environment.

Results
 A beta version of the Transborder Immigrant Tool was programmed on the J2ME platform and deployed on a Motorola i455 cell phone. Below is a demo of the tool's main operation.

1. Normal Navigation
 While walking with the device in hand, the mobile interface represents a traditional compass interface.

2. Course Alteration
 If the user changes his or her direction of travel, the compass face will adjust to represent the user's new course.

3. Waypoint Detection
 When the direction of travel is equal to angle between true north and the position of some life-saving resource, an alert will appear with information pertaining to the resource ahead.

4. Target Destination Set
 When the user chooses to search for a resource, an arrow on the compass face will always guide the user to the destination even when the user changes his or her course.

figure 3: Jason Najarro, Ricardo Dominguez, Brett Stalbaum, and Micha Cardenas, *The Transborder Immigrant Tool*, <http://va-grad.ucsd.edu>

So how does it work? In a nutshell, one may say that on a technological level the tool combines an inexpensive cell phone—equipped with a GPS chip—with a custom Java-

based software written by Brett Stalbaum. This tool provides important contextual navigational information to the user on his or her journey through the borderlands: such as the exact location of aid or water sites along the route or the positions of law enforcement units. The custom map was developed in close collaboration with the faith group Border Angels who try to organize support for the people moving in the perilous desert terrain along the United States-Mexican border. On a theoretical level the tool stands in the tradition of “Lygia Clark’s performative therapeutic objects” and as such it might on the one hand “serve as a nexus of desire and an unveiling of the logics with which borders are dealt with” (ibid.). On the other hand, it can also “serve as a tactical intervention of distraction and disturbance in the supposed order of transnational corridors” (ibid.). On a performative level the project is far from an individual action: first, the Electronic Disturbance Theater refers to itself as a collective; secondly, the tool exemplifies how a re-imagination of knowledge production on the basis of Boal’s and Sandoval’s Theater of the Oppressed becomes possible when ideas are developed and actions are planned in concert with social movements.

What is important to note, finally, is that the *Transborder Immigration Tool* does not just provide navigational capabilities: it tries to create a “space of hospitality” (Cardenas et al., 2009, p. 3) for those on an arduous journey across no man’s land by playing a few lines of poetry after given temporal intervals. As the collective points out:

Layered as a wish for a post-neoliberal geopolitics (e.g., they “speak” on the lower frequencies of the iconic, the sonic, the vibratory, the concrete, the performative, the poetic), the tool’s algorithm will aid users in tracking sustainable routes, new Nazca lines-of-flight/arco-irises across literal and imaginative post-NAFTA borders. All who utilize this technology will in a sense participate in a larger landscape of the para/literary/aesthetic. In this regard, they will keystone, build a bridge between Thoreau’s foundational fictions: his “Walden pondering” and “civil disobedience” to transcend self-/collective reliance. (ibid.)

zone*interdite

zone*interdite (<http://www.zone-interdite.net>) is an art project stimulated and coordinated by the two Swiss born artists Christoph Wachter and Mathias Jud. The project was started in 2000 when both activist artists came to realize that in contrast to what the mainstream permissivist ideology of consumer capitalism makes us believe—both Marcuse and Slavoj Žižek characterized our present condition as one of Repressive Tolerance (see Žižek 2006, pp. 151–182)—there are genuine biopolitical “blackouts” (Wachter and Jud), that is, strategic omissions and maskings of perceptions in a world that is being rebuilt to first of

all please and appease shoppers' desires. In Wachter and Jud's words: "When observing military restricted areas, our attention got blurred" (ibid.). While the *Transborder Immigrant Tool* was conceived to disturb the hegemonic administration of borderscapes and to incise alternative *parcours* through nationalized territories, zone*interdite serves mainly as a corrective device, as an open 'archive' that allows for reframing a strategically distorted imagery.



figure 4: Christoph Wachter, Mathias Jud, zone*interdite, www.zone-interdite.net

By collecting and assembling data that is sparsely available on the internet or that was provided to them legally, the two have located and marked approximately 1,200 spaces that fit the military designation "restricted area"; and by doing so they made secluded and hidden military zones—at least in part—public again. But the platform zone*interdite does not only list such areas by providing essential information that allows users to "reconstruct the terrain which our reflection has been deprived of" (ibid.), as Jud and Wachter put it, it also grants visual access to particular zones by means of a digital 3D-model that can be explored on PCs. The most notorious "restricted area" that was modeled so far is that of Guantanamo Bay with its prison camps. Wachter and Jud also provide an imagery of the Bagram Airbase, along with its secret prisons, as well as a digital model of an Islamic training camp in Sudan. Doing so, the two explain that:

[t]he power of the project lies in the disarming and lapidary view of a world of military power. Individual imagination and the joy of

discovering occurs, i.e. spotting, replacing the patriotic and pacifistic duty of a knee-jerk avowal, and undermining censorship, as well as the restriction of perception. These virtual tours enable expeditions to take place on a terrain where sovereignty no longer belongs to the national state but to each human being. (ibid.)

In Benjamin's and Agamben's terms one could even speak of an act of *profanation* — military spaces are re-consigned to us without a new or predefined use or trade value (see Agamben, 2007).

An example may help to illustrate how zone*interdite unfolds its interventionist potential by locating, visualizing and reconfiguring some of the “holey spaces” (see Deleuze and Guattari's analyses of the ambivalent superposition of “holey spaces” in the smooth and striated in Deleuze and Guattari, 2004, pp. 456–459) that pervade the internet due to its inherent overdetermination, which can never effectively be checked by controlling powers: the website *The GITMO Days* (see <http://gitmodays.homestead.com/>), run by a United States veteran who was stationed in Guantanamo Bay, documents the life of the military personnel when they were off-duty. Apart from reporting romantic escapades, the site is also using an aerial view of Windmill Beach as a background image, and by doing so, it unknowingly provided the first evidence of the existence of the Camp Iguana, which was allegedly used as a prison for children in 2003. Wachter and Jud used this first photographic evidence of Camp Iguana along with other information they had gathered to interpret an additional picture, which was accidentally provided on the homepage of the US Department of Defense.



figure 5: Christoph Wachter, Mathias Jud, Camp Iguana; homepage, US Dept. of Defense, <http://german.berkeley.edu>

At first sight, nothing suspect is revealed by this blinding photo, just a happy bunch of ‘boys’ from the United States playing volleyball on Windmill Beach. On closer look, however, one can distinguish the contours of what might be further evidence of Camp Iguana. Not surprisingly, the moment the US Department of Defense realized what it accidentally had on public display, this photo was immediately deleted (see Huszai, 2006).

Machsomwatch

In his book *Hollow Land*, Eyal Weizman further refines his earlier classification of Israel’s politics of occupation as a Politics of Verticality, namely, the authorities’ highly integrated attempt to control three spatial levels at once—the ground, the air, and even the subterranean level—in order to efficiently manage the (settlement and circulation of the) Palestinian population (see Weizman, 2002). One of the most interesting and disturbing findings of Weizman is that the battle over space does not just involve military technology but also a great deal of critical and post-structuralist imagery that is eventually re-contextualized to meet specific tactical purposes. When interacting with Israeli military institutions, Weizman found out for example that they were using reading lists that include writings of theorists such as Guy Debord, Deleuze, and Guattari to refine their military strategies of social and spatial control in territories that are nominally Palestinian. Weizman contends:

[T]he frontiers of the Occupied Territories are not rigid and fixed at all; rather, they are elastic, and in constant transformation. The linear border, a cartographic imaginary inherited from the military and political spatiality of the nation state has splintered into a multitude of temporary, transportable, deployable and removable border-synonyms—*separation walls, barriers, blockades, closures, road blocks, checkpoints, sterile areas, special security zones, closed military areas, and killing zones*—that shrink and expand the territory at will. These borders are dynamic, constantly shifting, ebbing and flowing; they creep along, stealthily surrounding Palestinian villages and roads. They may even erupt into Palestinian living rooms, bursting in through the house walls...Elastic territories could thus not be understood as benign environments: highly elastic political space is often more dangerous and deadly than a static, rigid one. (Weizman 2007, pp. 6–7)

If Machsomwatch, which is an “organisation of peace activist Israeli women against the Israeli Occupation of the territories and the systematic repression of the Palestinian nation” (<http://www.machsomwatch.org/en>), has a location, then it is probably a shifting

location: shifting along Israel’s highly elastic political space so lucidly framed by Weizman. Strictly speaking, the members of Machsomwatch are monitoring Israel’s “boundary regulators” (Hallward, 2008, p. 27), but by doing so they define their work as challenging geographic, political, and social separation and discrimination, that is, their focus on checkpoints as gatekeepers, which are regulating who can cross and how, entails also contesting discourses of state morality. By on the one hand documenting soldiers’ actions and on the other hand intervening when necessary “to ensure that the human and civil rights of Palestinians in the Occupied Territories are protected” (Machsomwatch in Hallward, 2008, p. 27), Machsomwatchers expose themselves physically by showing “Palestinians the face of Israelis who are neither soldiers nor settlers, who work to end the occupation and thereby challenge certain stereotypes” (ibid.). As Maia Carter Hallward points out in her essay “Negotiating Boundaries, Narrating Checkpoints”: “The very basic function of Machsom Watch counteracts the territorial tendency of *displacing*; by observing, they very purposefully shift attention back to the relationship between the controller and the controlled and away from the purportedly neutral regulation over who is permitted to cross (those with permits)” (2008, p. 27).

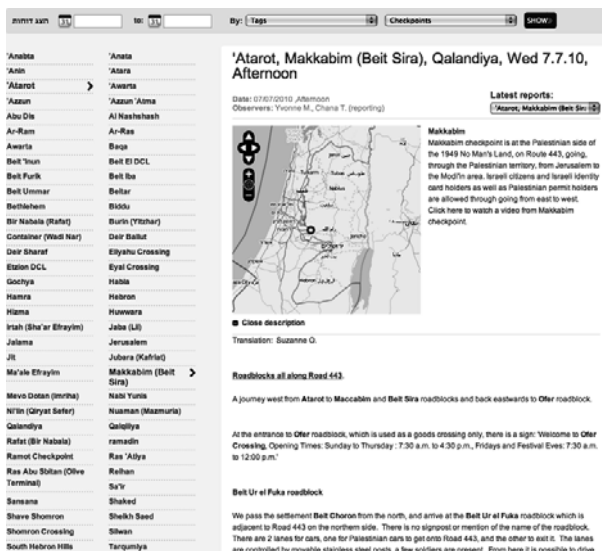


figure 6: Machsomwatch’s check, www.machsomwatch.org

It is important to remark that Machsomwatch does not so much concentrate on the single soldier’s behavior, rather it crafts *zones of attention* that remind all actors involved of their agency and accountability in terms of how to or when not to follow orders. Thus, Machsomwatch’s intervention is a highly personalized visual as well as spatial practice

that exposes the function of checkpoint procedures as mechanisms of segregation, rather than security. In addition to reporting, Machsomwatchers are conducting and disseminating investigations on the bureaucratic procedures that are necessary to obtain a permit; moreover, they are also speaking to the public by making use of “their own positional power as citizens of the controlling power” (Hallward, 2008, p. 30). But even here, in the heart of peace activism, we encounter a terrible dilemma, as some of the members of Machsomwatch are critically aware: the more humane the checkpoints become, the more difficult it will be to overcome the checkpoint system as such (ibid.).

Learning to Perforate and to Deform

Four people have been holding out for sixteen days on a crane in the city center of Brescia—hungry, cold, weakened and demanding the impossible: a radical revocation of discriminatory practices invested in the very logic of contemporary spatial regimes. I wish this essay would have found a different story to introduce the subsequent argument, but I hope even more so that this particular story will eventually find an ending that is better than the one suspected: at the time of writing these lines, many of the “few refugees” who dared to challenge the Brescian authorities by imaging another history and by practicing a different politics on top of a crane are either facing serious legal charges or have already been sentenced to deportation. The stakes “to be counted as speaking beings” have indeed risen to a stunning height.

Locative media resistances against *our* biopolitical ‘state of things’ are flaring up and new counter-hegemonic devices are persistently developed in the face of the well-known risk of unpredictable oppressive manipulations. What is first and foremost needed though is perhaps not even an unleashed activism, but rather an unprecedented sensibility for imagining a comprehensive decolonization of the spaces we currently inhabit as well as a topology where order and orientation cannot possibly coincide—a sensibility for which Agamben found the following words: “It is only in a land where the spaces of states will have been perforated and topologically deformed, and the citizen will have learned to acknowledge the refugee that he himself is, that man’s political survival today is imaginable” (1995, p. 119).

One may only wish that we will be haunted by such a fierce imagination.

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SEXUAL AND NATIONAL MOBILITY-VISIBILITY REGIMES IN ISRAEL/PALESTINE, AND HOW TO CROSS THROUGH THEM

by Roy Wagner

This text studies the relationship between the *mobility* and *visibility* of people marginalized by heteronormativity and ethnocracy in contemporary Israel/Palestine. By reviewing motions on either side of the 1967 Israel/Palestine ‘border’ *and* across it, by discussing together, despite the obvious differences, sexuality and nationality in an analysis of segregation and passing, this text highlights some under-researched aspects of Israeli governmentality. More importantly, this text reconstructs some techniques available to people marginalized by heteronormativity and ethnocracy for resisting their stationary exclusion from view.

By *visibility* I refer not simply to being optically discernible, but to being *seen as* marked by certain identities—specifically, national or sexual identities such as ‘Palestinian’ or ‘gay.’ I will discuss visibility in urban spaces, while crossing borders, and through media coverage of political activism. By *mobility* I refer to the ability to move through space and take place. More specifically, I will discuss the (in)capacity of marginalized subjects to move through urban spaces and across borders.

My purpose is to understand the Israeli mobility-visibility regime in Israeli/Palestinian queer and national contexts, and the opportunities and limitations of various forms of resistance to this regime. Note, however, that as a gay Israeli citizen the orientation and balance of my research is obviously limited, and should be complemented by people writing from other positions.

Three Parades that Did Not March: The Tradeoff between Mobility and Visibility

To get a concrete idea of the issues at hand, let us consider Jerusalem’s 2006 LGBT pride events as vignette. The public debate concerning these events started with the initiative to host the 2005 World Pride in Jerusalem. The initiative suffered strong homophobic objection that spread from Jewish ultra-orthodox religious groups to the municipal council, other religious groups, nationalist groups, and liberal groups claiming that the sensitivities of Jerusalem’s multi-cultural population must be respected. These objections

were compounded by security concerns due to the concurrent Israeli ‘disengagement’ from Gaza, and resulted in the postponement of the Jerusalem World Pride to the following year. In August 2006, the parade was postponed again due to the war in Lebanon and northern Israel (other scheduled World Pride events did take place). The organizers, Jerusalem Open House (NGO), obtained court permission to march in November. But then the Israeli army killed twenty-two Palestinian civilians in Gaza two days before the projected parade. The Police stated they could not simultaneously protect the Israeli population from Palestinian retaliation and pride marchers from homophobic opposition. The parade was replaced by an event in a confined stadium, which was separated from the rest of Jerusalem by several security circles (concerning how the security discourse took over, marginalizing ethical and liberal-democratic debates, see Arbel, forthcoming). This was the first of three pride parades that did not march in Jerusalem on November 10, 2006.

This example demonstrates not only how sexual and national politics keep bumping into each other, but also traces Israel’s regime of mobility and visibility. LGBTs did move through the streets of Jerusalem on November 10, 2006, but those who moved through Jerusalem had to make a choice: either move about as city folk ‘lacking’ sexual orientation, straight by default, or be visibly proud and queer in a tightly secured off-center stadium. Reduced mobility allowed the participants in the stadium event to assert some forms visibility: media visibility and visibility among participants. They were forced to trade off mobility for visibility.

Further evidence for a visibility-mobility tradeoff is provided by the attempt of some thirty activists to assert both mobility and queer visibility in Jerusalem’s urban space at the same time as the stadium event took place. The activists resolved to march inside Jerusalem despite police prohibition. This was the second parade that did not march that day. It resulted in a violent group arrest. As the activists’ mobility was more violently repressed than that of participants in the stationary stadium event, they gained media visibility disproportionate to their number, in comparison to the thousands of participants in the stationary event.

To start tying together the regimes of mobility-visibility as they operate through sexuality and nationality, I would like to point out a similarity between two scenes where uniformed state agents deny demonstrators’ mobility: the attempted pride parade that ended in violent arrests, and the weekly demonstrations in Palestinian villages such as Bil’in, where Palestinians, accompanied by Israeli and international supporters, have been demonstrating weekly since 2003 against the separation wall that appropriates Palestinian lands for Israeli settlers and contractors. In both kinds of demonstrations, state agents violently deny demonstrators’ mobility—through the streets of Jerusalem or across the separation wall. In both kinds of demonstrations the levels of demonstrators’ persistence, the authorities’ ‘trigger-happiness’ and the corresponding level of injuries, predict the

level of media coverage. In both cases, our tradeoff is manifest: the stronger the elimination of mobility (as measured in arrests and damaged human flesh) the more media visibility protesters gain.

But connections between anti-wall demonstrations and the attempted Jerusalem pride parade of November 10, 2006, are not restricted to those structural similarities, which in fact extend far beyond the local context, and form part of a general logic of media visibility. In Jerusalem and Bil'in there is a substantial intersection of Israeli activists, as well as a shared ideology. Indeed, the activists who wrote the email invitation to the attempted Jerusalem pride parade make the sexual-national connection explicit: "We won't tolerate threats in Jerusalem, and won't be silent concerning the massacre in Gaza [where twenty-two civilians had been killed two days earlier]! Sexual freedom and gender equality are inseparable from political, economic, social and religious freedom and equality." Those who oppose protestors make the sexual-national link explicit as well. The former national soccer coach Shlomo Scherf explains: "They're doing the march of the gays in Jerusalem of all places, why specifically there, in the holy city?... There's no place in Tel Aviv?... Do you know where I'd do it? In Eilat, near the [Israeli-Egyptian] border, I'd get them across the border and wouldn't bring them back" (*Ha'ir*, April 20, 2007, p. 53).

But while keeping these relations between sexuality and nationality in mind, one must not forget that in Bil'in the army shoots tear gas and bullets, while Jerusalem LGBT activists suffered 'only' bashing and bruises, and that the Israeli oppression of Palestinians is generally much more violent than that of queers. This means that the possibilities open for citizens and for Palestinians in the context of sexuality are not identical to those open in the context of nationality, and that the transfer of techniques from one context to the other is limited.

To conclude this demonstration of mobility-visibility tradeoff, note that the mobility-visibility regime is sensitive to who is trying to move and to what is made visible. Indeed, the mobility-visibility tradeoff is much more relaxed, if Jerusalem is replaced by Tel Aviv, where pride parades are a Western-style routine. On the other hand, things become much stricter if Palestinians replace Israelis. Indeed, on the day of the two parades that didn't march a third attempt was staged. But the "group of gay Palestinian Americans canceled [the] planned pride march in East Jerusalem...after one of them was beaten unconscious by a local man who said he was from the Waqf Muslim religious authority" (*San Francisco Chronicle*, November 11, 2006). Whereas Israeli pride demonstrators who were stabbed by a religious Jew a year earlier received substantial visibility in Israeli media, the attacked Palestinian organizer received no Israeli media coverage whatsoever. Few Israelis have heard of this third parade that didn't march. Palestinian gays can gain mobility in Jerusalem by being invisible, but they can't gain visibility even when their mobility is violently denied.

For another attempt to make the intersection of sexuality and nationality visible, let's go back to August 10, 2006, the originally scheduled date of the Jerusalem 2006 World Pride. The parade was postponed due to the war in Lebanon and Northern Israel, and replaced by a smaller stationary vigil. The vigil started quietly with the police watching over. But once local and international Queeruption activists joined in with banners and slogans linking Israeli homophobia and militarism, the police attacked (the 9th Queeruption, which took place in Tel Aviv, was defined by activists as an “anti-commercial, non-hierarchical, DIY gathering aimed at creating a safe open space for workshops, music, art, activism, parties, sex, shows, etc.”; *Queeruption 9 Collective*, 2006, p. 2. An analysis of earlier Queeruption events was published by Brown, 2009). The violent dispersal of this demonstration, however, did not result in substantial media visibility. Tami and Ishai, two Queeruption activists, summarized the lesson they learned: non-political “gays dancing in a thong next to a telecom sponsorship ad—pass; gays who think that the Occupation is corrupt—break their bones” (*Queeruption 9 Collective*, 2006, p. 8).

We see that hypothesizing a tradeoff between visibility and mobility can only serve as first approximation for describing Israel's visibility-mobility regime. Gay Palestinians and anti-war queers are left out of sight even when they are made immobile.

Caught in a Panopticon

Above we saw how activists gain visibility by being denied mobility. But to get a more complete picture of the mobility-visibility tradeoff imposed by the Israeli regime we should observe not only activists, but also Palestinian non-citizens who avoid visibility to gain mobility.

Sari Hanafi (2004) describes the Israeli control system as “spatio-cide”: an attempt to leave Palestinians in a placeless state of exception without prospects. Given this reality, it is not surprising that many Palestinians have to cross into Israel for their livelihood. But given the visibility-mobility tradeoff, crossing depends on passing unnoticed. The video report *Catch Me* (2007) by the Israeli human rights NGO B'tselem shows the Israeli army preventing Palestinian workers from reaching work inside Israel. The army's elaborate technologies of seeing (binoculars, choppers) turn the open hillscape into a Panoptically supervised prison. As in a Panopticon, the filmed Palestinians cannot tell whether they're seen or not—until, that is, they hear a warning shot.

Palestinian LGBTs, regardless of whether they work in Israel, also cross the Panopticon described above to participate in the gay life of Jerusalem and Tel Aviv, which, for better and worse, are more Western-like than in the Occupied Territories (in terms of sexual categories, meeting places, pop culture, etc.). Once in Israel, however, workers and/or LGBTs must maintain low visibility under pains of expulsion, fines, imprisonment, and sometimes even death (B'tselem, 2007). I won't relate the stories of

Palestinian LGBTs here because my access to sources is limited, and because circumstances are ripe for gay Palestinians to access the means, opportunities, and strategies for publicly telling their own stories (see Palestinian groups).

Before investigating techniques of passing through the Panopticon, let's note how Israel applies it for economic control. One must understand that the Panopticon does not prevent Palestinian entry into Israel. Indeed, many Palestinians enter Israel in ways considered illegal by authorities. For instance, the estimated number of Palestinians employed illegally in Israel is approximately 20,000–30,000 (in addition to a similar number of legally employed Palestinians). Palestinians expelled by security forces exceed 100,000 annually, including, of course, many repeated expulsions of the same people (B'Tselem, 2007, p. 22).

The Panoptic technology, which makes it expensive, difficult, dangerous and potentially lethal—but not impossible—for Palestinians to enter Israel, enables the exploitation of Palestinian workers. Israel's policy of intermittent repression and turning a blind eye with respect to Palestinians working in Israel creates a threatened and highly exploitable body of workers (Kav LaOved, 2006). This visibility-mobility regime generates a caste of beaten bodies under constant threat of violence and death, in constant hiding, with no certainty over their comings, goings, and livelihood, which is unusually cheap (for more information on the impact of this mobility regime on Palestinian life, kinship, and economy, see Kelly, 2006; Handel, 2009; Parizot, 2006; and Gutman, 2003).

Attaining Mobility by Realigning Visibilities

After this glimpse at the Israeli visibility-mobility regime, it's time to study the means available for marginalized individuals to subvert this regime. The obvious technique for confronting a mobility-visibility regime is, of course, *passing*. Passing as manipulation of visibility to gain mobility is well researched, especially in the context of identity formation and its politics (see, for example, Sanchez and Schlossberg, 2001).

The term passing emerged from the US racial context (people of partly colored ancestry who managed to be temporarily or permanently taken for white). Later, this term was applied to gender and sexuality as well. Passing indeed fits well the notion of a tradeoff where one suppresses visibility to gain mobility, as in the previous section. But the literature shows that a binary division into those who do and do not pass is false, and that passing depends on a complex economy of doubts, denial, and partial knowledge (Garfinkel, 1984; Sedgwick, 1991). Following this insight, I'd like to focus here on techniques for retaining mobility that do not depend on passing unnoticed.

The first technique comes from the context of the Israeli policy (which has since been revoked) not to deport and detain children of migrant workers and single custodians of such children. As a result:

children started serving as shields for their parents against arrest and deportation. Babies and toddlers were often brought to my meetings with African community leaders....“I don’t dare to leave home without my daughter” a participant in such a meeting apologized while trying to soothe his one-year old daughter. “As her father I must protect her, but here she protects me.” (Wurgaft, 2006, pp. 140–141)

By keeping close to his child this man passes as father (hence non-deportable) rather than as migrant worker (hence deportable). I will refer to such passing as *passing by association*: changing one’s visibility to gain mobility by associating with a person who is allowed to pass.

Passing by association is relevant for the Occupation context as well. In 2007, I made a short trip from Tel Aviv to the Palestinian town of Qalqilia and then to the industrial zone of Jewish settlement Barqan as an activist for workers’ rights with the NGO Kav LaOved (Worker’s Hotline). Such a trip cannot be taken for granted under current political circumstances. The visibility of my colleague, a hijab wearing Israeli Arab, allowed us to pass the Qalqilia checkpoint. But entering Barqan, my colleague insisted that I, a full member of the colonizing power, take the front (more visible) seat. A mutual passing by association allowed us to complete the journey.

The next form of passing through Israel’s visibility-mobility regime should perhaps be termed *double-passing*. To illustrate it, consider Budi, a young gay Palestinian from Ramallah, who visited Jerusalem regularly, and even performed as a drag queen. In the documentary *Jerusalem Proudly Presents* (2007) he testifies:

When I go to Jewish Jerusalem, it’s clear that I go illegally, it’s clear. And it happened more than once that the military detained me. And then I showed them my Palestinian ID, and told them that I was going to the Shushan [Jerusalem’s only gay bar at the time], and explained that I go there for one day to live my life as a gay person. And they would tell me, OK, you can go.

In this testimony, a person, who acknowledges that he is not allowed mobility, manages to gain mobility by making visible another immobilizing feature: his sexuality. Since the soldiers can’t see a person as both gay *and* Palestinian, Budi’s visible gay identification erases the threatening aspect of his visibly Palestinian identity. And since, as observed in the comparison of gay and Palestinian activism above, gay mobility is more tolerable than Palestinian mobility, Budi crosses through.

A similar form of double passing applies to Palestinian gays seeking refuge in Israel. Gay Palestinian visibility in Israeli media is restricted to those who state that they would

be persecuted for their sexual orientation or their association with Israelis, if they returned to the Occupied Territories (for example, the news article “Gay Palestinian Seeks Residency in Israel on Humanitarian Grounds” by Dana Weiler-Polak, *Haaretz*, September 29, 2010). These gay Palestinians profess that their gayness is negatively marked on the Palestinian side; therefore, according to the binary logic of the Occupation, this gayness becomes a positive mark on the Israeli side, sometimes leading to temporary residency in Israel or refuge abroad. The occasional display of such spectacular ‘liberalism’ allows the Israeli regime to dissimulate its own routine exclusion of Palestinians of all sexualities and its own homophobic and racist violence.

Subverting the tradeoff system presented earlier in the essay, passing is not reducible to erasing visibility to get mobility. But we must bear in mind that not everyone has access to sophisticated passing techniques, and those who do are in constant danger of failure.

Attaining Mobility and Visibility by Moving through a Different Topology

The last couple of sections focused on Palestinian non-citizens and their passing techniques. Now I would like to study an example of how queer activists who are citizens of Israel manage to retain both mobility and visibility.

The case study discussed here is one parade not mentioned so far, which did cross through Jerusalem on November 10, 2006, the very day when the three parades discussed in the first section failed to march. I bring the description of this event as recounted in an email sent by one of the participants a day after the event (Peleg, 2006):

One other small event took place yesterday in Jerusalem between the ‘demonstration’ that I’d rather not comment about [the stadium event] and the action in the Bell Garden [the mass arrest]. Noa K. said in our last meeting on Thursday that we’re being led into a rehearsed scenario. We’re coming to get beat up and arrested....

Four people...marched through King George—Jaffa Street [West Jerusalem’s high street] in the morning for a short while. At noon we climbed up the entire Gaza Street....Each of us held a banner: I am a gay Jerusalemite, I am a trans Jerusalemite, and I am a friend of Jerusalemites. Not a single person or vehicle failed to stop and watch, curse, give the finger, smile with embarrassment, and very few to cheer....And of course the cops. The streets were littered with those.

In the morning we could tell the policeman, who humiliated us and threatened to tear up our banners, that we were just on our way to the march [the stadium event]. They followed us to the car and unwillingly let us through. Then in Gaza [street] the cops told us: you can’t be here.

Only where you're told. After a pointless argument we put down the banner for a few steps and picked it up again.

When we finally made the Women in Black place we joined some 'black-pinks' [anarcha-queers] who were already waiting there.... We set to circle the place (seven times?) singing the partisan hymn.... Some avant-garde person yelled from a window "Lesbian Arafat fuckers." At two o'clock we left each to his and her own permitted life.

Why weren't we arrested? It's true, we tried not to, and we marched in the streets of the bourgeois Rehavia neighborhood. But that's not the main point. We marched with heads high and high heels as queers.... Of course, the struggle is not over. And it must continue well before next June. Next week....

Before we started marching with the banners I was terribly frightened. I'll be frightened next time too. That's the way it is. There's reason to be afraid.... And again I was afraid and again I depend more on the kindness of strangers.

This text records an exploration of mobility-visibility boundaries. Its success depended on local knowledge and manipulations of the visibility-mobility regime: where to cross, when to put banners down, group size, secrecy with respect to police and the media. These activists walked between the lines, rather than through police lines. They gained full visibility, but were not identified as illegal demonstrators. This activity was about embodiment, fear, trust, community, and nationality (note the reference to the Israelites' sevenfold circling of Jericho that brought its walls tumbling down and Jewish partisan resistance to the Nazis), as opposed to the passivity of the big stadium event and the prescribed violent dispersal of the second attempted march. This march obtained visibility and mobility where the other attempts had to sacrifice one for the other (or, in the case of the gay Palestinian attempt to march, attained neither).

A possible objection: The bigger events—those that received mass media coverage and were presented to millions of TV viewers—were those where mobility had to be restricted. This small group gained mobility, one might claim, simply because it had negligible visibility. But such an objection, I maintain, is wrong.

This parade that did march, did not gain its mobility due to its negligible size (in fact, the number of people who eventually reached the Women in Black place was close to that of the activists in the mass arrest). Its visibility was not smaller than that of the media covered events—their visibilities, I claim, are incomparable.

The parade that did take place took its place in a topology different from that of the two parades that did not march in West Jerusalem. The stadium event and the mass arrest were measured in terms of the quantity and quality of their media coverage, in terms of

the security rings that surrounded them, in terms of police violence, and in terms of the twists and turns of the legal battle that was held to try to make them happen. In other words, the visibility and mobility of these two parades were assessed mostly in terms of media coverage and law and order topologies. But that is not how the parade that did march was measured. This parade was viewed mostly in terms of the reactions of passers-by, in terms of the sense of fear or security of walking Jerusalem's street while manifesting pride, and in terms of community interaction. In other words, the visibility and mobility of this parade were assessed in terms of the urban interaction topology.

Comparing the visibility-mobility of the two West Jerusalem parades that did not march and the one that did is a comparison of apples and oranges. They have different senses and are subject to different measures. The parade that marched visibly approached people in terms of urban interaction topology, but remained practically invisible in terms of law and order and media topology. That is why the visibility-mobility of the parade that did march managed to bypass the tradeoff between visibility and mobility.

Locally savvy Jerusalem queer and LGBT activists managed to turn the above parade into a replicable, ongoing, and yet, police-free event. Every Friday for over a year a dozen or so activists rallied in Zion place, at the heart of Western Jerusalem and marched through the adjacent pedestrian street. Throughout a year of vigils, activists recorded only two minor violent incidents, and even those took place only when the 2007 Jerusalem pride parade approached. Most Israelis with whom I discussed these rallies expressed disbelief at their almost peaceful weekly existence. Those who observe Jerusalem in terms of mass media topology see only the clear and distinct lines of the dominant visibility-mobility regime. But these parades take place through the urban topology, where lines are often (but not always) less strictly drawn, and where visibility and mobility can concur.

From Visibility to Opaque Place-making

To better understand the potential of mobility and visibility in urban topologies, let us consider the interactions between demonstrators and passers-by in the above urban vigils. Some passers-by expressed support, some experienced silent encouragement, some expressed hostility (directing demonstrators to protest in Arab villages, linking sexual and national exclusion even in a vigil that said nothing about the Occupation), but many passers-by expressed bewilderment as well. An older woman, who sat next to an activist, expressed support, but asked, "what am I supposed to do?" Another woman, a young soldier, approached, and asked, pointing to a banner, "what's homophobia?"

Something in the presence of these LGBT and queer activists was opaque. The message was unclear. The activists were visible, but their purpose was not. Such opacity is not restricted to gay vigils in Jerusalem. For example, during a Tel Aviv anti-war demonstration in August 2006, anarcha-queer activists joined in, carrying banners and

chanting slogans with messages relating sexuality, militarism, and the war. The slogans ranged from “No pride in Occupation” to “Dan Halutz don’t you brag, one day we’ll see you wearing drag” (a take-off on “Dan Halutz don’t you brag, one day we’ll see you trialed in Hague,” suggesting that the Israeli chief of staff should be trialed by the International Court of Justice in the Hague). In response, an observer wrote an article published on the Israeli communist party website stating “that the anarchists protest in a colorful and interesting manner, but...it is not clear what the anarchist messages are, and what a ‘black block’ and pink ribbons have to do with the war” (Adi Livni, *Hagada Hasmalit*, August 10, 2006).

Similar criticism was encountered from the opposite direction, when some of the same black-pinks (Queeruption activists) participated in the Jerusalem anti-homophobia vigil mentioned earlier. The black-pink slogans, such as “In Beirut and in Sderot Lesbians should not get shot” (Sderot is an Israeli town near the Gaza border suffering Palestinian missile attacks since April 2001), were seen as overshadowing the anti-homophobic context, and rendering the demonstrators’ message inaccessible and opaque.

This opacity brings me to my final point. Opaque messages are usually viewed as failures to get the message across. Rather than successfully affirming the connection between different aspects of oppression, black-pinks were accused of alienating co-demonstrators. But alienation, as Brecht taught, may bring people to thoughtfully reconsider their world view.

In some discursive situations, subversive messages are foreclosed and cannot be expressed, or cannot be expressed without being reappropriated by dominant discourses. In such situations, one can only leave a trace of subversion by representing the contradictions and difficulties that this foreclosure generates. When confronted with such traces in the form of opaque messages, people may sometimes find that the discourse through which they frame an issue is inadequate. The opaque message may lead observers (though not always, not any observer, and definitely not under any circumstances) to rearrange the field of positions they are acquainted with in order to make sense of the opaque message (see Wagner, forthcoming).

But there is more to opaque performances. While sometimes, indeed, the inability to communicate a clear message (because dominant discourse forecloses its convincing formulation) yields opaque statements, one should also consider the possibility that there is no (or not only a) message; that the queer political performance does not always seek to communicate anything. Indeed, Amalia Ziv (2010) has analyzed the non-communicative aspect of queer activism in the context of Israeli LGBT anti-Occupation group Black Laundry. She pointed out the impact of the group’s political performances not only on observers, but also on the activists themselves, generating an experiential bond between the performers and the performed situation (for example, in a performance of handcuffed and blindfolded Palestinians). This impact is, indeed, related to the performative

experience of the activist who documented the parade that did march in the email quoted in the previous section: political performance allowed this activist to “depend more on the kindness of strangers.”

The queer activism discussed in this text (in the contexts of sexuality and nationality alike) is largely about confronting visibility-mobility regimes, and also about attempting to pass through. It is largely about making statements, and also about disrupting a discourse that forecloses convincing formulations of queer claims. Confronting something as strong as Israel’s racist, homophobic, and militarist technologies may sometimes leave activists with little choice between banging heads against walls and contingent, non-replicable, and dangerous opaque actions.

But, that is not all there is. Beyond opposing and avoiding policing, beyond making clear or opaque messages, a politics of performative formations of communities and space takes place and takes a/part. Rather than valid statements, the performances dealt with here may be testimonies (the passions of *martyrs* and *shaheeds*, but also the acts of bystanders and passers-by): performances that may be hard to believe or understand, but which bear an undeniable force on self, space, and discourse; performances that affirm co-participation, *taking a part* (taking part, taking apart) in public space. *The* public, in turn, may try to reclaim this part, but can no longer deny this part/icipation, whether they understand it or not (for what can be reconstructed as place-making activities and opaque versus discursive techniques of migrant workers in Israel see Kemp et al., 2000; and Wagner, 2010. For a discussion of how Palestinians from the West Bank living without permits in Tel Aviv turn their experience of the urban topology into a safer and more communal place, see Topaz, forthcoming, Tel Aviv University).

The four queer activists who marched through Jerusalem on November 10, 2006, those who attended LGBT & queer visibility vigils (and, in other ways, Palestinian non-citizens living without permits in Tel Aviv as well)—they are all reformers of selves and space. To reform their ability to express, they chart topologies and spaces where, briefly, sometimes singularly, they take a/part in public. The place they take does not necessarily depend on a sender-addressee relation with *the* public; they partake whether they are understood or not. But these parts and places that they take are not delineated (unlike the official Jerusalem pride parades) by security circles and police lines. They are taking a/part in public, partaking in places they have never taken before.

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SK-INTERFACES: TELEMATIC AND TRANSGENIC ART'S POST-DIGITAL TURN TO MATERIALITY

by jan jagodzinski

There is a remarkable scene in *Star Trek: First Contact* (1996, figure one) wherein Data is bound and shackled to what appears to be a torture rack so that the Borg can extract the encrypted codes within his circuits, which would provide easy access to the spaceship Enterprise. The Borg Queen knows that she must find his weakness in order to ensure such a possibility. She offers Data what he has always desired: the possibility to ‘feel,’ and hence to grasp what it ‘means’ to be human. She grafts human skin onto his circuits and gently blows on it, making the hairs stand on edge, giving Data his first libidinal experience. “Was that good for you?” she coyly asks, as Data’s body undergoes an orgasmic shudder.



figure 1: Data of Star Trek being tortured; film still from *Star Trek: First Contact* (Jonathan Frakes, 1996).

The grafting of skin with artificial intelligence raises the specter of yet another *Brave New World* at the turn of the twenty-first century, for skin is the focus of renewed interest, both theoretically and materially, as a *medium* of ‘wet’ or ‘moist’ technological and artistic experimentation in what has been termed telematic and transgenic art. The line between art and science now has become questionable. Telematic artworks recognize that transformation is conditioned by new information technologies and electronic

communications, while transgenic art (also bioart) refers to the employment of genetic engineering. In the latter case, post-digital organic *presence* of life replaces the emphasis on representation and simulacrum as the visualization of data, which has become the dominant view in an information age.

In this essay, I explore the social and psychoanalytic implications of such technological life-science experimentations by a number of prominent artists, drawing on Jens Hauser's groundbreaking explorations, especially *Sk-interfaces: Exploding Borders—Creating Membranes in Art, Technology and Society* (2008a; Hauser 2008b). This is the name of an exhibition and a book publication presented at the Foundation for Art and Creative Technology (FACT) in Liverpool, England in 2008. The small coterie of artists who were involved can be found on the website: <http://humanfutures.fact.co.uk>. The book's cover was designed by Zane Berzina (2008, pp. 147–149) who explores the biomedical, interactive, tactile, and aesthetic characteristics of human skin as an analogue system from an artist and designer's perspective. It serves as a model and metaphor for her responsive, active, or interactive membrane systems that feel, look, and behave like skin. These systems respond to pressure, sound, light, fluids, heat, electricity, chemical, and mechanical stimuli (see Lupton, 2002). Berzina addresses the embryonic link between skin and brain (they are formed from the same membrane, the ectoderm) by employing a thermochronic sensitive pigment to the book's cover. The orange skin-like color changes with body temperature as various 'white' patterns are temporarily formed from the heat of the palms and fingers, which then disappear leaving no traces. The 'skin' of the book thus acts like a visual thermometer reacting to the heat levels initiated by the human hand as it holds the book with a certain intensity and duration (figures two and three). This reinforces the metaphor of the sk-interface between reader and book.



figure 2



figure 3

figure 2: Before applying touch, *Sk-interfaces* book cover by Zane Berzina, 2008.

figure 3: After a few seconds of pressure, *Sk-interfaces* book cover by Zane Berzina, 2008.

Hauser introduces the neologism [sk-interfaces] as a process of *becoming* where the hyphen between skin and interface takes on the burden of carrying the interval of time and transformation. The bio-artists in question propose a ‘skinless society’; the metaphor addresses a society where boundaries have increasingly merged in such a way that the interfaces have become porous membranes rather than barriers to the exchange of affection most often delivered through contagion—such as epidemics and infection, but also radiation. Such borders are not simply crossed or transgressed, and not even *negotiated*, for unquestionably skin has become increasingly vulnerable to environmental pollutants. Screen fantasies of penetration from the outside and the eruption of rage and revenge from the inside have left little doubt that skin is no longer a membrane of separation but a medium of connectivity, as well as being intensely over-coded by media bombardment. The ‘dermal’ sculptures of Kiki Smith like her ‘skinned’ *Virgin Mary* (1992) or *Blood Pool* (1992) (see Blocker 2004, p. 110), even Mel Gibson’s 2004 film, *The Passion of the Christ* address this exposure of the visceral body.

Re-signing Skin

Consider the importance of the skin's potential for *negotiation* through a passage from Deleuze and Guattari's *Anti-Oedipus* (1983). Paraphrasing Nietzsche they write, "The organization, which traces its signs directly on the body, constitutes a system of cruelty, a terrible alphabet" (p.144). To deterritorialize this 'cruelty' that straightjackets and maps the body through the alphabetized signifier (see Abrams, 1997) requires the grasp of the sensate body of *aisthesis* and not *aesthetics*, or rather an entirely different 'logic of sense' as Deleuze (1990) tried to work out, which goes beyond the naked/nude dichotomy of logocentric thought. Skin raises the 'biology' of communication, by this I mean its 'materiality' or the *physicality* of communication pointing to the exteriority of language that was lost or overlooked given the overwhelming success of Anglo-deconstruction; the reduction of Foucault's oeuvre to 'discourse' in the Anglo-context; and the hermeneutic paradigm, which remains hegemonically based on Ferdinand de Saussure's linguistic sign wherein the (material) signifier and the (spiritual) signified are inseparably related as *presence* in the many ethnographic studies that promote cultural populism. Yet, it is the sign's *physicality* that offers access to the signified. The exploration and recognition of the sign's materiality—its pre-symbolic dimensions—is explored by a different semiotic line of flight initiated by Louis Hjelmslev wherein due attention is given to the materiality (physicality) of expression, not only to form and content.

Skin may well be the in-between or hyphen of Hauser's sk-interfaces, as exemplified by the explorations of bio-artists, enabling complex negotiations between these established dualities given that *its surface is bilateral*. The prospect of such a position is advanced if we take its bilateral surface to be the 'bar' between the signifier and the signified wherein, as a membrane, skin negotiates between the implicit and the explicit body; the implicit body being the body schema, Merleau-Ponty's *schéma corporel* as flesh (which has been mistranslated as 'body image' by Colin Smith throughout *The Phenomenology of Perception*) and the explicit body, which is the over-coded, represented, and inscribed body of the signifier, which can perform its institutionalized cruelty today as did the mutilated, tattooed, ritualistically and physically inscribed bodies of the pre-Enlightenment. When it comes to the explicitly represented body, body image does indeed apply; it shapes a striation that creates institutionalized homogeneity.

Being ambiguously both a metaphorical and metonymical 'bar,' the skin acts as a porous membrane rather than the Saussurean 'bar' that represents either a *union* between signifier and signified, or a psychic *resistance* as in Lacan's deconstruction of the Saussurean sign. These two directions remain as binaries that do not give enough attention to the *transversality* between signifier and signified as a medium of intersubjective connection. It is more helpful to think of the topological *plane* of the skin as a *mixture* of smooth and striated space, following Deleuze and Guattari (1987) in *A Thousand Plateaus*. Skin allows desire to be negotiated through the intensities that pulse through the

body as energy—that is, unmediated deterritorializing *zoé*, which then becomes institutionalized *bios* by organizing the motility of the body in a specific way. The bilateral space of skin—as a mixture of smooth and striated space, is thus more of a translucent *field*, a film whose surface negotiates the implicit and explicit bodily senses (see Marks, 1999, 2002). There is no figure/ground distinction onto which intensities and events are staged. It is haptic rather than optical, textured rather than confined to any one point. The skin crawls, creeps, perspires, and shivers *allover*.

Psychoanalytic Considerations

There are a number of competing psychoanalytic theories (besides those of Deleuze and Guattari) that attempt to negotiate the materiality and ideationality that this paradoxical liminal nature of the skin offers as an interface with the external (always already technologized) world, as well as the mysterious ‘secret’ that is imagined to be inside the body. This ‘secret’ has usually been designated as the ‘soul,’ but in this essay it is the unconscious. Hermeneutics, in general, is the way this ‘soul’ or ‘unconscious desire’ is contained—that is, stratified—by the signifier of language. This modernist dichotomy lends itself to what might be called the ‘onion-skin’ notion of the self that can lead to infinite regress. If the skin is imagined to be ‘outside,’ containing an ‘inside’ within it, then peeling it away leaves yet another ‘outside,’ which in turn can be peeled away to get at the inside. This will eventually lead to discovering some sort of essence, the true kernel or soul of the person.

It is well known that Lacan overturned this Cartesian *cogito* as a ‘presence’ inside wo|man by maintaining that the subject is a secondary construction of the signifier, which has *material* import. Lacan (1981) reaches back into the recesses of prehistory when he writes, “The subject himself is marked off by a single stroke, and first he marks himself as a *tattoo*, the *first* of the signifiers” (p.141, added emphasis). Tattoos, as permanent as they seem to be, also *negotiate* the passage of time between the inside and outside world. Their meanings and interpretations are subject to change, thereby resisting permanent signification. The ‘symbolic subject,’ categorized by the big Other in the Lacanian paradigm, what Deleuze and Guattari refer to as *subjectification*, is assigned a role in the instituted structure to *fix* the signifier and its signification. Skin color, for example, becomes discriminatory only when a social group becomes constituted. It is not because one’s skin is *necessarily* black that enslavement takes place, rather as a slave you *become* Black even if you have light skin (Guillaumin, 1995). The subject is named on the skin, raising the question if the contemporary practice of gentrified tattooing (and piercing) indicates a crisis of failed embodiment of subjectification, becoming now a second protective skin, one which does not and cannot participate in the free circulation of commodities, for tattoos cannot be exchanged (Fleming, 1997; jagodzinski, 2002). The

contemporary tattooed and pierced body finds itself in an entirely different social location, perhaps still abject, but quite unlike its former criminal stigma or ritualistic status. It can be further argued that this practice of mutilation through technology creates a particular Body without Organs (BwO) in Deleuze and Guattari's terms, encompassing a particular somatechnological body, as a direct confrontation with the Real (see Lodder, 2009).

The ego as distinct from the symbolic subject of institutionalized subjectification, on the other hand, belongs to the imaginary register, which may or may not be at odds with symbolic subject. The body image is applicable here as process of idealization, which is stratified by the hegemony of social institutions (schooling, medical profession, law, etc.). The well known psychoanalytic theory of Didier Anzieu (1989), who was a student of Lacan but dissociated from him, has been influential in his claim that the 'Skin Ego' is the seat of consciousness formed during primary narcissism as a protective envelope with the mother's skin. By Skin Ego he means "a mental image of which the Ego of the child makes use during the early phases of its development to represent itself as an Ego containing psychical contents, on the basis of its experience on the surface of the body" (p. 40). Skin-ego can be thought of as an enfolded space. The skin membrane is a 'lining,' which mediates the intrinsic-extrinsic body as a fold (*pli*). The fold has affinities with the Möbius strip. For Deleuze, the Möbius figure negotiates the fold of sense and non-sense. "It is rather the coexistence of two sides, without thickness, such that we pass from one to the other by following their length" (1990, p.22). For Lacan, the Möbius strip is a well-known figure mediating the imaginary and the symbolic, whereas the Real 'outstrips' it.

Obviously, acupuncture, piercing, tattooing, scarring, wounding, cosmetic surgery, sexual reconstructive surgery (see Prosser, 1998) and so forth change the body image, and with it the psyche. For Lacan, the ego can never escape fantasy. It is trapped forever by the veil of representation, always subject to the effects of *méconnaissance*. Yet, is there not an 'excess' or 'remainder' of the signifier which carries its very own physicality as a 'language of the body' registered on the skin? Jean-Jacques Lecercle (1985) identifies this 'remainder' (*délire*) of the signifier as "wildly imaginative" and "painfully literal." "There are no longer any clear frontiers between words and things" (p.162).

The material excess of the signifier replaces the search for essences by maintaining that the center of the onion is better typologically envisioned as an enfolded space where inside-outside are intertwined. There remains a paradoxical absent presence that belongs to the implicit body—the virtual Real body of a complex web of affects and past memories that is neuronally wired, which unconsciously generates the fantasy space of reality as images as Henri Bergson had articulated. The world is 'one' with images, perhaps holographically stored throughout the neuronal networks of the body-brain. In philosophical terms this is the Kantian preconscious noumenal dimension, what Deleuze and Guattari named as a 'plane of consistence' as the chaos of formed matters of every kind that generate an acceptable transcendental network of fantasmatic coordinates, the

transcendental representational ideas. The psychic Real manifests itself in anxiety, when the subject falls out of the fantasy space of the Imaginary and is confronted by the very *materiality* or *physicality* of the unknowable *objet a* in Lacan's lexicon. *Objet a* is more of an affect rather than an actual object. The skin (as bar) in this formula mediates the world of materials between 'gold' and 'shit,' as attraction and repulsion. Material as a sublimated substance of fetishism and fantasy is drained of desire (*bios*); uncoupled it becomes desublimated raw material (*zoé*) during a confrontation with the psychic Real. Objects are either too close or too far away, they can never be attained as they 'are.' When this happens, there is a rupture in 'reality' as time is 'out of joint.'

So, now go back to the opening scene. Data, who is 'cognitively' invested to become human, already lives in the inhuman Real. Symbolically, he is the *implicit* human body who experiences things as they really 'are' (as if that were possible for a machine, like Diega Vertov's disembodied 'Kino eye' that records in and by itself independently of a human body). Data's desire to be human suggests that within his circuitry traces of raw perceptions about what it means to be human exist—like the alien Spock on *Star Trek*, but his human traces are genetic—are already there to be activated. There are many scenes throughout the series where *Star Trek's* Data is attempting to 'learn' to be human. Data can play the violin with great skill, but cannot 'feel' the music. The human skin as a partial object that becomes attached to his servo-circuits is 'activated' by the *materiality* of the air from the Borg Queen's breath. She literally breathes life into him like a Pinocchio effect. This confronts him directly with the sense of reality as human fantasy. He is protected now, as it were, from the affects of the Real—the unimaginable non-existent Being or non-Being. But the Real is teeming with 'life' that we neither know nor are able to consciously communicate with. String theory in particle physics, for instance, posits ten dimensions of reality. Metaphorically, Data, the servo-mechanism that functions by itself, has been covered over with 'human' skin now making him both vulnerable but also paradoxically protected from 'raw' reality. All of the sudden, Data's entire worldview changes, induced by Borg-technology that has enhanced this potential for machine existence. In one sense, Data, a-cephalically standing in place for the implicit body of information flows, now needs to be renamed or reborn for another BwO has been created. He has become the Borg Queen's Adam who has bitten the forbidden fruit. The Borg collective, who represent the unbridled drives (*Triebe*) of the body, (like the body's drives, the Borg never sleep, merely regenerate), their 'machinic' desire trumping any claims to ethical and moral human values in terms of outright assimilation, present the paranoid fantasy of technological superiority. Their ship consists of a cube, the least aerodynamic spaceship structure, suggesting that they maintain their territory as well as marking the relentless stubbornness of the drive (*Trieb*) to capture its goal, but being satisfied by the missed failure of this aim itself. It's all in the 'hunt.' Corporeal intensification (*jouissance* in the Lacanian lexicon or *intensity* in the terms of Deleuze and Guattari) felt on the skin

is ambiguously registered as pleasure-pain. This intensity is ephemeral having a short life span, a momentary release that demands *repetition* as the zone or the orifice undergoes stimulation, its trace marking a pathway (*frayage*) that never repeats itself quite the same way. Data will only want more ‘skin’ to be grafted on, just like there is always a place for yet another tattoo, another body-binding, another fetish, and so forth—endlessly.

To arrive at this potential thesis of the skin’s double-sided fold (*pli*) and twisting interface value (sk-interface), its capacity of turning inside-out the outer (technologized) world into inner objects as boldly articulated by several artists, I first undertake an historical examination of skin as a concept to arrive at the notion of ‘creative skin,’ a skin that is ‘inversed’ from its usual protective and categorizing (racial, ethnic, gendered) functions as defined by a number of Ovidian myths, especially Apollo flaying the Satyr Marsyas and Nessus causing Hercules to rip off his own skin. Perhaps, not surprisingly, this *minitorian* position of skin’s tactility has been historically over-coded as feminine to maintain the masculine/feminine divide in terms of acceptable bodily movements, emotions, and feelings. The level of the implicit biological body would need to be disturbed by “substituting forgetting rather than anamnesis [and] experimentation for interpretation” (Deleuze and Guattari, 1987, p.167) to send the masculine/feminine dichotomy into a ‘queer line of flight’ as a future potential for the proliferation of n-sexes (see Sullivan and Murray 2009). This would supplement or rather modify Didier Anzieu’s (1989) well-known and often quoted thesis that the skin is memory that has been turned outward. Remembrances are tied concretely to the presence of skin perceptions and hence the above quotes by Deleuze and Guattari directly address this skin-ego in the way it mediates the subject and world as a double interface in order to *make* a ‘body without organs.’

Haut

“The skin is faster than the word.” —*Brian Massumi*

In her lauded book by European scholars, Claudia Benthien’s *Haut* (*Skin* 2002; 1999) follows a similar track established by historians like Barbara Duden (1991; 1987) and Thomas Laqueur (1990). She demonstrates once more, the perpetual becoming of the body as our ‘species being,’ which is continually *drifted* and *modified* (‘individuated’ in Simondon’s terms, 1992) through various forms of inventive technologies—including language—that do indeed ‘mould’ the body into a *representative* ‘molarity,’ to use the language of Deleuze and Guattari (1987). It is only by Benthien identifying epistemological moments, literary and artistic representations, cultural practices, medical interventions and technologies that lead her to present a broad grasp of the symbolic recoding of the skin, what Nobert Elias (1972) termed ‘the civilizing process.’ The

transformation of the body as subject to the *longue durée* becomes somewhat possible to grasp, but impossible to predict. Broadly, Benthien provides a glimpse of this transformation from the Middle Ages (the ‘grotesque body’ as famously presented by Mikhail Bakhtin, 1984 through François Rabelais) to the Baroque, through the Enlightenment, reaching the cusp of the neuronal body explored by cybertechnologies, explorations of cybersex and cyber teletactility as exemplified by the well-known experimentations of the Australian artist Stelarc, whose developments Benthien maintains perpetuate male fantasies of narcissism through the feedback loops generated by the body as experienced through cybersuits; in short, a form of self-masturbation, perhaps the defining libidinal experience of designer capitalism—perpetual self-gratification. Telematic art presents the post-digital extension of this last development—skin as the interface of touching and touch at once as a Deleuzian ‘fold’ (1993) where there is no inside and outside continuously modified by emergent prosthetic technologies.

Succinctly put, Benthien’s thesis maintains that historically, figurative speech about skin presents (unsurprisingly) a duality between thinking about the self *as* the skin and the self *in* the skin. In Rabelais’ world, the self *is* the skin. The skin metonymically stands for the whole human being. It is porous with all the orifices open and exchangeable with the world, as are the boundaries between individuals—the artistic logic of the grotesque concentrates on the body’s excrescences and orifices. With enlightenment rationality, the skin encloses the self and is imagined as a protective and sheltering cover. The authentic self lies *beneath* the skin, hidden inside the body, and with this comes concealing and deception. The notion of the skin as a *wall* becomes the canonical body image through the processes of rationalization and objectification during the century of Enlightenment—the construction of *Homo clausus*—“a little world in *himself*” as Norbert Elias (1978, p. 249, emphasis added) summarized it.

This duality of self and skin (in the skin/as the skin) *still* treats the body ‘naturally,’ that is phenomenologically as heterosexual, as a subject caught between the contradictions of seeing and touching—by an erotic proxemics of distancing and nearness (the extremes of class-status prohibitions of being looked at or touched, as respectively an ‘untouchable’ and an ‘unseeable’ body), of concealment (visual masking, cosmetic, sartorial dress) and revealment (touching, intercourse, fighting, skin against skin). This establishes a nude/naked distinction (Pollock, 2002), the nude being a costume—the zero degree of dress, while the latter is the complete exposure of self, open to touch and vulnerability. Such a straight phenomenology can, of course, be ‘queered’ by spatially orientating it otherwise, re-designing its ‘natural’ compulsory design of how orifice to office are said to ‘relate’ and under what sanctioned socio-cultural circumstances is such coupling permissible—like the transgressiveness of the ‘barebacking’ culture practiced by select members within gay communities. Within this practice the body without organs (BwO) is

remapped and reorganized in ways that intimacy and social risk are no longer institutionally or symbolically contained (Dean, 2009).

In the past two centuries, the model of the skin as a *garment* (subject *is* the skin) was eventually replaced by skin *as* a house—the body being a hollow inhabitable space that ‘houses’ the (Christian) soul, where human perception is through a window. From the middle of the eighteenth century to nineteenth century with capitalism and its accompanying individualism, come a number of unveiling techniques at the *fin de siècle* to expose this hidden ‘self’: physiognomy, eugenics, pathognomy, criminology, and psychoanalysis—all techniques to get at the authentic self and make it immediately visible to the observer. It seems to me that these two notions of the subject (self *is* skin and self *in* the skin) divide-up along gender lines. Transgenic art, as developed in the last section, has the potential to again disturb such a dichotomy.

Creative Tissue: Becoming Animal, Becoming Vegetal

Given this historical assessment of skin, along with some of the telematic artistic concerns, what can transgenic art add to the questioning that can disturb the overemphasis on logocentric representation, which, given the hegemony of the enlightenment, continues to prevail in terms of gender and sexual categorizations, racial divisions, and so forth? One place to start is to raise questions by first discussing the Greek myth of Apollo flaying the Phrygian satyr Marsyas, which has been explored by a host of writers (Benthien, 2002; Dumas, 2008; Kay, 2006; Richards, 1994). The advantage here is that the myth opens up the obvious repressed feminine in Western thought. As Stéphane Dumas explores it, Apollo flays the skin off Marsyas on account of a music contest where Apollo by singing on the cithara (lyre) outdoes Marsyas playing the aulos (oboe). The gravity of the punishment does not seem to fit Marsyas’ crime of trying to measure up to a god. What it does show is the Apollonian agency of the “I” as a signifying voice of logos that triumphs over purely instrumental music. The Renaissance turns this myth into an allegory of “know thyself.” The skinned body of Marsyas becomes the object of anatomical exploration that reveals the essence of things. The myth remains paradigmatic of a recurrent ‘crisis’ of representation that lies inherent in the Platonic tradition: Western art sets out to represent what it cannot, while at the same time dismissing the actual body’s capacity to grasp the impossible representation (Schefer, 1995). Marsyas is basically the *skinned implicit body—the bio-body that is virtual in its potential* to act and ‘be’ otherwise. It is coded as the repressed feminine in Western thought. Historically, images of a flayed woman could not be shown—only men appear anatomically skinned. The flayed woman thus represents a threat to the inner and outer border that constitutes the masculine ego. Here the usual figure of the castrating woman manifests itself as Medusa, witch, and *femme fatale*.

By *inverting* Apollo's skin, or what amounts to the same thing, and tapping into the virtual bio-body through telematic and transgenic art, a new topological potential emerges, a folding over of the skin between the virtual (non-represented implicit body) and the actual (the represented explicit body). Such folds act through a paradoxical logic as explored by Deleuze's doctoral dissertation, *The Logic of Sense*. Flaying or (stripping) the skin can be read allegorically as the cartographic mapping of intensifications that impinge on the body. The flayed, outstretched, and surfaced skin acts like the topology of a rubber mat; that is, as a relational set of networked points and pores. Skin cells become the paradoxical figures of life and death. Within the skin tissues, the cells take part in the paradox of both growth and decay. The skin points directly to the mystery of *time*—not chronological time as Chronos but incorporeal time as Aion—where *becoming* is the sense-event that cannot be attained for it has come too early or too late or is yet to happen. Deleuze (1990, p. 9) illustrated this paradox of time in the beginning of *The Logic of Sense* with the figure of *Alice Through the Looking Glass*: she gets bigger than she was, which means she also gets smaller than she is now. The time of becoming is a paradoxical interval of a sense-event.

A number of transgenic artists are thus working with skin as a *sk-interface* where the attempt is to move away from the usual representational dermatographics, the most *deceivably* obvious being tattooing, scaring, piercing, and burning of the skin, in order to raise issues of difference more in keeping with the Deleuzian take that moves away from the usual identity politics of the signifier. It is a way to come to terms with the 'crisis' of representation that the 'history' of the skin shows by introducing materiality. The membrane of the skin as a chink or fold tries to trouble accepted categories of skin color, texture, and the like, including what many critics claim to be progressive hybridity, which often remains only *complexly* categorical. Differentials are counted as measured increments. Questioning representational dermatographics has been overwhelmingly the dominant approach. One thinks of obvious films where skin and text are explored in the way the epidermis is inscribed and questioned, like Peter Greenway's *Pillow Book* (1996) and Christopher Nolan's *Memento* (2000) Willoquet-Maricondi (1999) reads Greenway's *The Pillow Book* (original title was *Flesh and Ink*) as raising the question of 'erasing' the body by calligraphic ideographic text and establishing patriarchy, as does Wieckowska (2005) from a Lacanian perspective. Pile (2009) reads *Memento* as raising questions concerning Andieu's conceptualization of the skin-ego in relation to Freud's Magical Writing Pad.

Transgenic art, on the other hand, is a non-representational approach where the radical attempt is made to reconfigure a new BwO, which raises all sorts of ethical and worrisome questions concerning the creation of life. It is not just fixated on the hegemony of the machinic technological models as raised, for instance, by the creation of a Borgian Data and the long line of sci-fi figures. This is not to suggest that this line of research is unimportant. Jill Scott (2008) for example, describes the benefits of *e-skin* development

that enhances touch and sound and enables cross-modal perception to take place through human-computer interfaces (HCI) so that the visually impaired are able to increase their quality of life. Such research may be thought of as the feminine-feminist counterpart to the more cyborgian military fantasies like Jon Favreau's 2008 film, *Ironman*. One approach, as I will present, is what Deleuze and Guattari called 'becoming animal,' and by further extension 'becoming vegetal,' a difficult concept that begins to disturb the radical distinction between human and non-humans by deterritorializing any hard and fast distinction between them. Vampires and Werewolves usually are treated with a 'cleansing' myth and made to be tolerable monsters that we can accept. When we think of 'becoming animal,' one might think of the comparison between Timothy Treadwell's approach towards grizzly bears in their native habitat, deceptively captured by Werner Herzog's documentary (2005), to Steve Irwin as the 'crocodile hunter.' The former's death is not mourned, rather he is vilified as a 'crazy man,' while Irwin received only adulation for his 'wildlife' work. Deterritorializing the 'human' proves to be a difficult task.

With 'becoming vegetal,' the notion of *hybridity* emerges once again, but with the proviso that a transversal interface across species is taking place where something 'alien' is being incorporated through transplantation. The vegetal capacities of tissues through sowing, transplantation, and deflowering are the technologies in play that have been coded as feminine. Hybridity is no longer a *static* concept. Rather the temporality of biological *growth* becomes all-pervasive. Growth as the ability *to become* remains in the province of nature. 'Bio Artists' and bioscientists share a core experience: waiting for growth. It takes a relatively long time for cells and tissues to grow sufficiently that they can be used as media and means. The phenomenon of growth, in its slowness, mediates between subject and object because it *makes present* the time both share with one another synchronously" (Karafyllis, 2008, p. 56). Transgenic art that deals with biological systems eradicates the borders between bodies and tissues. Nicole Karafyllis coins the word 'biofact' to identify the hybrid as an artefact melded with bios, an epistemic thing, a living being or system.

To approach the inhuman in us suggests an infinity between plants (vegetal) and animals and the human—the homology between the act of reading a text and the reading of animal tracks by indigenous ancestors or the many homologies between the human and animal aesthetics, not to mention the range of gestural and linguistic capacity of chimpanzees, dolphins, and whales. When it comes to skin, the inhuman is foremost extended to the vegetal. Jens Hauser's *Sk-interfaces* presents a number of bioartists who have turned to such explorations. These seem to be artists selected from an exhibition he curated called *Still, Living SymbioticA* (2007), which drew together a small coterie of artists experimenting in this area. Claudia Benthien also joined the Sk-interfaces Conference. Her talk can be found at www.fact.tv/videos/watch/181. SymbioticA is a genetics lab located at The University of Western Australia (Perth). It has become the hub

for promoting and aiding biological art (see www.symbiotica.uwa.edu.au/activities/exhibitions and <http://www.stilliving.symbiotica.uwa.edu>). Both Stelarc and Orlan (more below) have partnered with them and benefited from their technical and genetic expertise. Artists that design and engineer tissue cells from both plant and animal meld together a scientific laboratory with an artist's studio. However, not all of these artists dealt directly with 'life.' The well-known cell of artists called Critical Art Ensemble (CAE) presented a video installation called *Immolation* showing the effects of incendiary weapons on civilians after the Geneva Convention, thereby documenting a US war crime through the devastating effects to the body at the cellular level.

The Tissue Culture and Art Project (TCA), a collective of three (Oron Catts, Ionat Zurr, Guy Be-Ary), has been around since 1996; they call their creations "Semi-Living Entities." Artificial degradable biopolymer is scaffolded in a desired shape and then seeded with cells, which cells depend upon the project initiated. In the past, they have used stem (embryonic) cell technology, mouse endothelial cells, osteoblast cells, prenatal sheep cells, pig cells, and frog muscle cells. Their bioreactors are like artificial wombs where they grow living sculptures. Such sculptures are biofacts, a mixture of synthetic and living biological matter that blur the boundary between what is born/manufactured, animate/inanimate. TCA pushed hybridity even further with their *NoArk Project*. They grew virtually unclassifiable sub-organisms. TCA's artistic intention is to raise social issues and questions concerning these new biotechnologies, especially human conduct with other living systems as Other. Projects have included *Disembodied Cuisine* where attempts were made to grow frog skeletal muscle over biopolymer to raise questions surrounding the consumption of animals. Guatemalan *Worry Dolls* was another project involving six doll-like living entities grown in an artificial womb, each representing a possible 'worry' or set of 'worries': Absolute Truth; Biotechnology; Capitalism and Corporations; Demagoguery and Deconstruction; Eugenics; Fear, Genes and Hope.

Death and the ethics that surround killing these created living biofacts are always in play since more often than not these installations have to come down and it is forbidden to transport living tissue across borders. Five weeks into the art installation *Design and the Elastic Mind* at MoMA (2008), TCA had begun to grow a leather-like bio-object that took the form of a 'jacket.' Their concept was to develop a "victimless leather" jacket, subtitled it, *A Prototype of a Stitch-less Jacket grown in a Technoscientific Body*. The idea was to deconstruct the meaning of clothes as a second skin by materializing and displaying the jacket as an art object. They left for Australia, and it soon grew too large and had to be 'killed.'

Marion Laval-Jeantet and Benoît Mangin (2008), who form the duo of *Art Orienté object* (AOo) have been together since 1991. Raised in Corsica, Marion is especially engaged in shamanism. When they first met, Mangin suffered from allergies and continued to do so throughout their relationship. His allergic reactions formed the basis of

questions about what is foreign and alien to the body by paying attention to the skin. AOO experiments with creating ‘active objects’ (at once conceptual and carnal). Epidermal cells were taken from both artists, cultivated, and then grafted onto pig derma, which was then tattooed with motifs of endangered species. This project, known as *Culture de Peaux d’Artistes* (*Artists’ Skin Cultures*), is an attempt to promote a hybrid world where inter-species transplants would become ubiquitous, thus blurring species distinctions. Their *Roadkill Coat* recycled the furs of animals killed by French drivers and provoked questions about inter-species encounters. Only exhibited once, their *Pioneer Ark*, a hanging mobile, revealed the mutations of animals exposed to toxic chemicals and radioactive pollutants by molding transgenic porcelain figures of these species. They have also experimented with Kirlian or ‘aura’ photography. Their *Telepathic Video Station* was an attempt to convey to the public the emotional content of our species and the animal through the electromagnetic emanations from the skin. Perhaps the most controversial and ongoing experiment, initiated by Marion and called *Que le cheval vive en moi* (*Let the horse live in me*). The horse is hybridized with her body by means of an injection of horse’s blood. Her rationale: this is a therapeutic shamanist practice to master the anxiety of an exogenic living element that will enter and change her body and psyche.

Growing body parts becomes socially and politically disturbing with Julia Reodica’s (2008) *hymNext Project*. These stylized hymen sculptures are made from mammalian epithelial cells that have been scavenged from an abattoir and grown with her own vaginal cells creating the rodent-human tissue in vitro. Reodica envisions her hymen sculptures as occupying a philosophical and biological stance that is between scientific research and body politics. Symbolically, the hymen becomes a barrier that is broken down to begin a relationship or communication. Her creative intent is to work with skin tissue separately from the gendered body so that the final piece challenges or de-emphasizes the idea of assigned gender. The cell for her, manipulated in a novel environment, is able to avoid gender issues despite the hymen being so heavily coded.

Reconstituting the BwO

“Our sexual body is initially a Harlequin’s cloak.” —Gilles Deleuze

While the above artists extend the BwO by growing body parts that are outside of it, certainly Orlan and Stelarc present two artistic approaches through which the artist’s body is the material used to reconstitute the BwO in a dramatic way. Deleuze and Guattari identify three strata for doing so: the organization of the organism, signification as the stratum of the unconscious, and subjectification. Orlan’s plunge into biotechnology through her *Harlequin Coat Project* is not as invasive as her previous bodily perfor-

mances, but it does ‘perform’ on another register. It questions whether Deleuze’s epitaph “what a body can do,” which Olan herself quotes (2008, p. 89), can be extended to the cellular level. *Harlequin Coat* furthers her projects on self-hybridization. *Self-hybridizations Precolombienne* and *Self-hybridations Africaine* were a series of computer-manipulated self-portraits wherein Olan inscribes herself into signifiers of beauty that originate outside of Western culture (scarring, manipulating the cranium by flattening it or enlarging it, lengthening the neck through rings and so on). In so doing, she begins to appropriate physiognomic features from other cultures. However, *Harlequin Coat* begins to go past the explicit body of representation and reaches non-representational status by way of the material of her own cell, which in this project is seeded with a twelve week-old female fetus of African origin and the fibroblast muscle cells from a marsupial (a fat-tailed dunnart) with the help of SymbioticA’s laboratory. The project is meant to further problematize multiculturalism.

Stelarc’s *Extra Ear*, on the other hand, also with the help of TCA at SymbioticA, makes it potentially possible to create an Internet organ for the body through the implant of a miniature microphone that is connected to a Bluetooth transmitter. This last stage, while envisioned, is not completely assured. Stelarc (2008) anticipates all sorts of sensory redistribution of the organized organs so that if you telephoned him he could “speak to you through his ear” (p. 103) So while *Star Trek*’s Data has flesh added to his forearm, Stelarc’s extra ear is meant to push in the direction of the Borg collective imaginary. Referring to his *Fractal Flesh* performance, where half of his body was controlled and choreographed by viewers in the Centre Georges Pompidou (Paris), the Media Lab (Helsinki), and the Doors of Perception Conference (Amsterdam) by way of muscle stimulation equipment connected to his mechanical *Third Hand* located in Luxembourg, Stelarc opens the world of experiencing *remote* bodies. This then is “an excessive technological other. A remote phantom presence manifested in a locally situated body. With the increasing proliferation of haptic devices on the Internet it will be possible to generate more potent phantom presences” (Stelarc, 2008, p. 105). For Stelarc, it is the Borg future, the turning inside out of our implicit body so that “electronic circuitry becomes our new sensory skin and the outerling of our central nervous system” (ibid.). We have come full circle to *Star Trek: First Contact*. Stelarc is Captain Picard turned Locutius.

I close with a brief commentary on Eduardo Kac whose biotelematic installations (*Teleporting an Unknown State*), cyborgian experiments (*Telepresence Garment*) and most infamously, his biotechnological installations (*The Eight Day*, *GPF Bunny*—the acronym stands for “green florescent protein”—and *Genesis*) are, in my estimation, a counterfoil to the line of flight sought by Stelarc. His transgenic projects address the thin line and fragility between art and technology, of its potential plunge to Borgian megalomania like the Italian Futurists a century ago. Kac’s genetic rabbit, Alba, which is supposed to glow green from the protein, is a bit of a mystery since few have seen her and

Alba was not released from the laboratory where the gene transfer had occurred. Kac wanted to keep the bunny as a pet at home. The irony that a genetically altered animal was to live with its creator-artist should not go unnoticed. It is part of Kac's continuous attempt to avoid the implosion of art and technicity. He spectacularizes the gaze, like the glowing rabbit, only to show that there is nothing to see. Kac is the Duchamp of contemporary art for isn't his 'bunny' a genetic Readymade, generating the questions and the problematic once again between technology and production? The irony is hard to avoid. Kac's rabbit puts to the *question*, that is, it *reveals* for us the 'truth' of the eugenic future in the guise of a harmless sweet (as was destined to be) pet bunny.

The same goes for *Genesis* where Kac's constructs an 'art' gene by taking the famous Biblical statement from the book of Genesis about human domination over the world and eventually processing it by retranslating first into brail and then into a DNA sequence. This 'art' gene was then inserted into florescent *E. Coli* bacteria living in a petri dish. Its mutation could be influenced by Internet users who could turn off and on a light source illuminating the dish positioned within the art gallery. The installation exhibited the petri dish with its magnified projection on one wall, the Biblical passage quoted was written on another wall, while a third wall had the DNA sequence of the 'art' gene. Kac has thereby presented a parody of technoscientific genetic engineering, exposing the manipulative power placed at the center of existence. Finally, it should not be forgotten that Orlan called her *Harlequin Coat*—"a modified Readymade" (author's emphasis), which she says is an "unsaleable and almost unshowable" work (2008, p. 87, emphasis added).

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POLITICS

VIRTUAL SUICIDE AS DECISIVE POLITICAL ACT

by Geoff Cox

“Suicide is the decisive political act of our times”, says Franco Berardi; it typifies the communicative action of the arts and the pathology of the psychosocial system (2009, p. 55). Indeed, there appear to be ever more examples that would support Berardi’s view and reveal the act of suicide as symptomatic of the more general and paranoid aspects of contemporary culture.

What happened in New York on 9/11 serves as an obvious backdrop for such statements: think of Karlheinz Stockhausen’s infamous remarks describing it as “the greatest work of art ever” and Slavoj Žižek’s observation that “America got what it fantasized about” (as if following the script of a Hollywood disaster movie) (2001). That the event has been endlessly *remediated* leads Richard Grusin to describe a perceptible shift in cultural logic from mediating past forms to *premediating* future events and possibilities (2010). His argument is that after 9/11 (and Abu Ghraib too), premediation attempts to remediate the future before it settles into the present, and hence serves to produce a “consensual hallucination” such that we imagine future scenarios and death threats before they happen. Indeed, it represents a pre-emptive strike on the cultural imagination. For Berardi too, the key political problem is identified with mechanisms of control over the imaginary (2009).

So, what are the possibilities for the radical imagination when the homogenizing effects of neoliberalism have become the dominant force? If Francis Fukuyama’s pronouncement of the ‘end of history’ can be considered hallucinatory and pre-emptive, then it also indicates something about the post-political times in which we live where a pre-emptive strike on your own life can operate as effective critique of a repressive regime. In this sense, all suicide attempts can be considered to be pre-emptive attacks and symptoms of wider malaise about the possibilities of effective action. Correspondingly, the biopolitical regime of securitisation requires that technologies be based on affective states of anticipation and connectivity: what Grusin refers to as ‘commodified premediation technologies’ (2010, p. 181).

An example of this tendency is the Iraqi-American artist Wafaa Bilal's project *The Night of Bush Capturing: A Virtual Jihadi* (2008), a computer game in which he casts himself as a suicide bomber (becoming what Paolo Pedercini neatly refers to as a "first-Person Terrorist"). The game results from a hack of *Quest for Saddam* (released in 2003, as a sequel to *Quest for Al Qaeda*) in which players try to kill Saddam Hussein, into *The Night of Bush Capturing*, an online version allegedly by Al Qaeda, in which players try to kill George W. Bush. Bilal's further modification, *Virtual Jihadi*, rejects both versions—both the extreme fantasies of islamophobia and islamophilia alike—by placing his own body in the frame and by extension the player's body too. As Bilal explains:

What better way to reflect what Iraqis are going through than a personal tragedy, casting myself as a suicide bomber after the killing of my brother. I represent so many Iraqis who find themselves vulnerable to a terrorist organization like Al Qaeda taking over their homeland. Either they become violent because of the pressure or they are forced to join these organizations out of fear or they join because of their outrage at what the U.S. is doing to their homeland. (in Holmes, 2008)



figure 1: Wafaa Bilal, *The Night of Bush Capturing: A Virtual Jihadi* (2008), <http://wafaabilal.com>.

The contradictions are embodied in the game, and according to Brian Holmes, the inconsistencies of free speech are revealed in its reception—pointing to the cancellation of its exhibition at Rensselaer Polytechnic Institute in the US. He contrasts the threat to

freedom of speech of the censorship act with the symbolic speech act of the game. Indeed, which is the more terroristic?

With no longer a centre of power to be found, or established opposition as such (with the end of the cold war), it is clear that the enemy is distributed across complex networks not simply in the evil caricatures of Saddam or Bush (Al Qaeda is a good example of a disembodied network). But at the same time, the concept of the political is arguably still activated by the identification of the friend and enemy grouping. Drawing on Carl Schmitt's notion of enmity (in *The Concept of the Political*, 1927) and his critique of liberalism in general, the problem is formed when a consensus-based model fails to acknowledge that the political is necessarily antagonistic. Many commentators (such as Chantal Mouffe) continue to stress the unavoidability of antagonism rather than neoliberal consensus, which in the end turns out to be a new and subtle form of control.

In this connection, there has been much attention to Michel Foucault's lectures on governmentality delivered between 1982–3 (2010), to draw out the distinction between early liberalism and contemporary neoliberalism. He explains that neoliberalism has replaced the regulatory function of the state in relation to the market (liberalism) with the market itself (neoliberalism). Correspondingly, the human subject is defined in different terms, as reacting to the market rather than the limits of government. This characterises the *biopolitical* dimension of governance, what Foucault calls governmentality (2010), as it becomes enmeshed with the construction of certain types of subjectivity in line with free market logic. In the regimes of governmentality, control is exerted on life itself, and thereby one extreme method of refusing its logic is its symbolic ending.

This essay continues this line of thinking through the concept of virtual suicide, introducing numerous examples of the symbolic death of a life half-lived. Is this the only viable response that remains in a situation where Western forms of democracy have exhausted themselves on ethical grounds, ever more evidenced in human rights abuses and illegal killings in illegal wars (evidenced through Wikileaks not least)? As Jodi Dean puts it, in *Democracy and Other Neoliberal Fantasies*, democracy can no longer be considered an answer to political problems but a symptom (2009). The examples introduced in this essay establish positions of ethical refusal on various levels but it remains in doubt whether they achieve the reverse engineering of governmentality (and the political resurrection this pre-empts). But the concern is to try to understand the ways in which virtual suicide might affirm autonomy over actual life. Under present conditions of pre-emption, this is perhaps a prophetic way to understand the possibilities for effective political action. Is this what makes virtual suicide so compelling?

Virtual Suicide

There is undoubted currency for the subject of virtual suicide in cultural production. Alongside the experience of virtual death and dying in commercial game worlds like *World of Warcraft* (Klastrup, 2008), there are many that involve first person narratives about suicide. For instance, one popular example is *Five Minutes to Kill (Yourself)*, a free online flash game (also available for iPhone), in which the protagonist (Stan/you) has five minutes in which to kill him/yourself rather than go back to work (2009). As the marketing material puts it: “Stan has five minutes before another soul-snuffing office meeting and his only escape from professional obligation is sweet, chilly death....You’re Stan’s only hope.” The task is to explore the office space and find ingenious ways to hurt yourself—encountering a biohazard is one such opportunity to assist in the pursuit of death. Moreover, the mise-en-scène is violent but so too the symbolic violence of the capitalist workplace.



figure 2: *Five Minutes to Kill (Yourself)*, first developed by Ham in the Fridge (2009).
<http://www.haminthefridge.com/five-minutes-to-kill-yourself-family-reunion/>

Also, in the realm of office politics, Olga Goriunova’s *Suicide Letter Wizard for Microsoft Word* (2002) is a parody of Microsoft Word’s function that pre-empts the user’s intentions by offering help in the form of a Disney-like office assistant. The assistant (or wizard) is a programmed function that states, “It looks like you’re writing a letter”, in this case offering options for the stylistic preferences in writing a suicide note. The essay of the same name, “It Looks Like You’re Writing a Letter” by Matthew Fuller (2003, first written to accompany the installation *A Song for Occupations* at the Lux gallery, London,

in 2000), makes clear how the user of the software is also installed into the system. This takes place more generally in parallel to how the “disappearance of the worker is best achieved by the direct subsumption of all their potentiality within the apparatus of work” (2003, p. 139). In the social factory, the value that is stolen no longer relates simply to labour power but to subjectivity too. In this sense, enforced labour is already a death sentence, and therefore its refusal might prove to be the ultimate act of defiance.

Furthermore, under these conditions and in recognition of network power, the usual recommendation of those developing oppositional tactics is to take advantage of the vulnerabilities in networks by exploiting power differentials that exist in the system. Such tactics draw on methods informed by network, information, and media theory, and yet the effect of tactical media activists is paradoxical, as Geert Lovink contends:

Disruptive as their actions may often be, tactical media corroborate the temporal mode of post-Fordist capital: short-termism....This is why tactical media are treated with a kind of benign tolerance....The ideal is to be little more than a temporary glitch, a brief instance of noise or interference. Tactical media set themselves up for exploitation in the same manner that ‘modders’ do in the game industry: both dispense with their knowledge of loop-holes in the system for free. They point out the problem, and then run away. Capital is delighted, and thanks the tactical media outfit or nerd-modder for the home improvement. (in Raley, 2009, p. 28)

If effective tactics have migrated to the exercise of biopower (as this conference suggests), are the tactics of biopolitical activists similarly condemned? Is activism a spent force, in the sense that it repeats previous failed strategies to bring art and communicative action together? As Berardi puts it:

Shouldn't we set ourselves free from the repeated and failed attempt to act for the liberation of human energies from the rule of capital? Isn't the path towards the autonomy of the social from economic and military mobilization only possible through a withdrawal into inactivity, silence, and passive sabotage? (Berardi, 2009, p. 126)

To begin to consider these questions, it is crucially important to recognise that it is partly through its very critique that capital is able to regenerate itself. Paradoxically, capital does not wish to destroy critique but tame it through subsumption, and in so doing expand its reach to the whole of life. This restructuring aspect is what the autonomists refer to as the ‘cycles of struggle’ in recognition that resistance also needs to transform

itself in parallel. This is what Mario Tronti’s 1965 essay “The Strategy of Refusal” identified: that the logic of capital “seeks to use the worker’s antagonistic will-to-struggle as a motor for its own development” (1980, p. 29). The key issue is that capital does not develop through technological innovation per se, but from the inventive power of labour. This is why the withdrawal of labour remains an effective tactic. Unlike capital that needs labour, labour doesn’t require capital. Moreover, labour is potentially ‘autonomous’ and has the potential to use its creative energy differently.

If the current neoliberal regime is significantly underpinned by open social exchange, it continues to be the case that those who created it are logically the ones that can uncreate it— according to dialectical logic at least. Reversing the way power unfolds is arguably the only way change can happen, initially through ethical refusal and by establishing forms of resistance based on the structure of governmentality. The political task becomes one of reverse engineering, or negating, significant elements to achieve different ends.

It is with an understanding of cycles of struggle that much media activism tries to adapt to the prevailing conditions, not least to respond to how communication technologies have changed the political process and the ways in which dissent can be expressed. In the case of social media activism, this is plainly evident in new strategies of refusal (sometimes referred to as ‘exodus’: an act of resistance towards constituted power, not as protest but defection). For instance, the Moddr *Suicide Machine 2.0* is a good example that reflects the fashion for ‘unfriending’ from dominant social networking platforms (in its case, from Facebook, MySpace, twitter, and LinkedIn). The website explains: “Liberate your newbie friends with a Web 2.0 suicide! This machine lets you delete all your energy sucking social-networking profiles, kill your fake virtual friends, and completely do away with your Web 2.0 alterego.” The program logs in to the user’s account, changes the profile picture into a pink noose, and the password (in case you are tempted to resurrect your profile), then proceeds to delete all friends, one by one.



figure 3: Moddr, *Web 2.0 Suicide Machine* (2010). <http://suicidemachine.org/>

Echoing the argument for assisted suicide, Moddr claims to protect the right to commit web 2.0 suicide. Whereas Facebook.com disagrees, citing the way the machine collects login credentials and scraps Facebook pages as violations of their terms of service (Needleman, 2010). But their objection demonstrates duplicity, as it is well established now that Facebook holds personal information for their own shadowy purposes even after deletion of accounts (and 500 million friends provide a lot of data). The broader issue is that Facebook is following the logic of governmentality, in encouraging the free exchange of data so it can be mined to control the flow of people, commodities, and production.

In practice, there appears to be a pragmatic trade-off between ethical principles and use value, with users signing away rights to private platform owners in exchange for public sharing services often in full knowledge of the compromises this involves. On the other hand, the practice of ‘unfriending’ emerges as a growing tendency within network culture in recognition of privacy issues and in some cases the rejection of the underlying free market logic. In the case of ‘Facebook suicide’ specifically, there are growing numbers of people that have deactivated their accounts and an emergence of the disturbing phenomena of Facebook suicide groups on the site, such as the Facebook Mass Suicide Club. On the one hand, there are harmless and relatively trivial artists’ projects like Cory Arcangel’s *Friendster Suicide* (2005) where he simply announced his intention to delete his account performatively and in public, and on the other hand, examples like Hong Kong Facebook ‘suicide group’ sharing suicide methods and urging members to kill themselves on the same day (2009). What might have started as a joke or misanthropy, ends with actual suicide attempts.

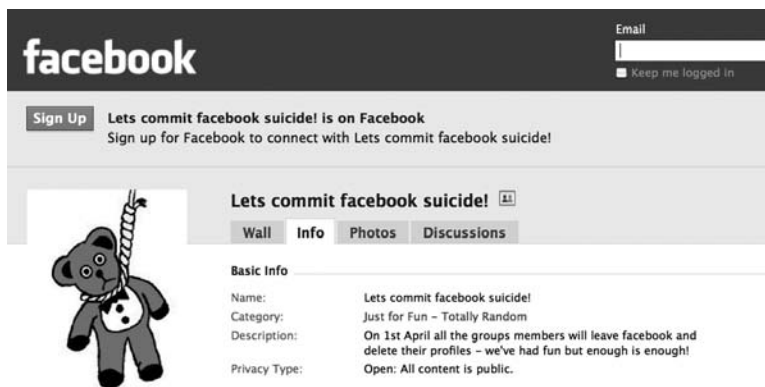


figure 4: Let’s commit Facebook suicide—just for fun, screenshot.

Facebook has become a favoured target for the reasons stated, and the emphasis on networks of ever more ‘friends’ demonstrates how social relations are developed in restrictive form that occludes the political dimension, inferring Schmitt’s concept of

enmity mentioned earlier. The mythologised story of Facebook’s development, *The Social Network* (2010), seems to concur with this when stating in its publicity: “You don’t get to 500 million friends without making a few enemies.” A further example is a hack of Facebook by Les Liens Invisibles, entitled *Seppukoo* (2009), a platform for users to commit virtual suicide in a ritualistic removal of their virtual identity. Making their conceptual references clear, the project title is an explicit reference to the Japanese ritual suicide of *Seppuku* (literally stomach-cutting) and evokes the stubborn refusal to fall into the hands of the enemy—and the preference for autonomy even at the cost of one’s life. In such cases, suicide follows the Samurai code of honour (out of respect to the emperor, or perhaps disrespect to the empire in this case). Furthermore, the project is inspired by *Seppuku!*, the ritual suicide that some members of the Luther Blissett Project committed in 1999, to declare the end of their multiple identities project (and the death of net.art as a temporary autonomous zone).

Significantly, these actions represent a shift from individual to collective action. Les Liens Invisibles (Guy McMusker) explains the motivation for the project:

Thinking about suicide as ‘viral’, we conceived it as a sort of involuntary form of strike. A massive accounts deactivation might potentially represent a denial of this super-valorisation of one’s virtual body, hence put into action what the Tiqqun group calls a human strike. Each person missing implied the lack of all the person’s contacts as well. [The] *Seppukoo* project was created to shift an individual action onto a collective stage through the mechanism of viral invitations. (in Borelli, 2010)

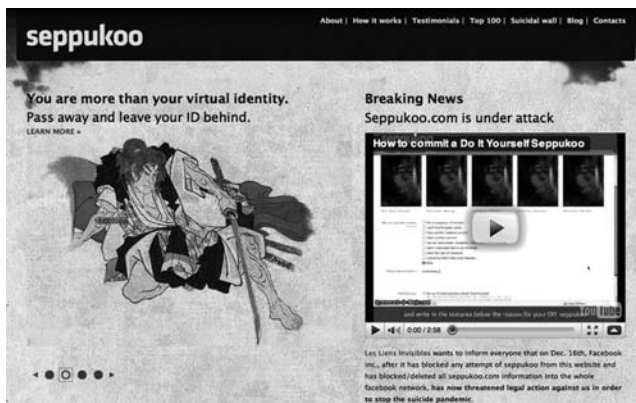


figure 5: Les Liens Invisibles, *Seppukoo* (2010). <http://www.seppukoo.com/>

As with *Suicide Machine*, Facebook was fast to challenge the actions of Les Liens Invisibles, and issued a cease and desist letter claiming the work infringed their rights in accessing information for services furnished by third parties. The Seppukoo ‘about page’ explains Facebook’s double standards succinctly: “Suicide is a free choice and a kind of self-assertiveness. Unfortunately, Facebook doesn’t give to its users this faculty at all, and your account will be only deactivated.”

As Loretta Borrelli states in her interview with the producers of both *Web 2.0 Suicide Machine* and *Seppukoo*, suicide has become “an act of undoubted political valiance” (2010). The detail of such projects demonstrates how the control of networked relations is increasingly managed through the dynamic interactions of technologies and biologies (the mixed reality management of life and death). The significance is explained in terms of the construction of certain kinds of subjectivity through the use of networked technologies. It is the ability of these technologies to allow social interconnections and participation that underpins their ideological power: “Communicative capitalism captures our political interventions, formatting them as contributions to its circuits of affect and entertainment—we feel political, involved, like contributors who really matter” (Dean, 2009, p. 49). Documentation of a recent online performance by Eva and Franco Mattes would appear to exemplify the quote. In *No Fun* (2010), one of the artists simulates his suicide in a public webcam-based chatroom called Chatroulette, where you can meet people randomly all over the world for live webcam chats. People watch in real-time as the artist appears to hang from a rope for hours. The reactions are shocking for their lack of genuine concern; some laugh nervously, some take pictures with their mobiles, and most significantly, people simply do not act. The performance illustrates what has already been referred to as a consensual hallucination, or empty spectacle, and it is hard not to be reminded of the affective power of the images from Abu Ghraib. The video documentation was banned from YouTube, which appears to grant it even more kudos in the charade it activates (there is even a “Banned from YouTube” logo displayed like a trophy on their site). In many ways, the premediation technologies employed are far more shocking than the fake content conveyed.



figure 6: Eva & Franco Mattes, *No Fun*, (2010). <http://0100101110101101.org/home/nofun/>

Following this line of thinking, participation in communicative technologies remains largely a fantasy, alongside the more general collective fantasies of the free market and fake global unity (a.k.a., globalisation). The pervasiveness of social media expose how the social is reproduced as an interpassive relation. Individuals imagine their active role in what ultimately is part of their subjugation. Moreover, the participatory work ethic of social networking is interpreted as an expression of new forms of control over subjectivity. Rather than old forms of governance that would limit human action, the logic of governmentality functions to open spaces for social exchange, to generate data that can be mined to more effectively govern the actions of people, and to pre-empt any threats to the efficiency of its markets. People are encouraged to act, but only in compromised forms. Virtual suicide stands as the stubborn *refusal* to operate under intolerable conditions of service such as those described and as such stands as an affirmation of the ability to be act autonomously.

Decisive Action

When Berardi suggests that suicide is the decisive political act, he is pointing to transgressions of action. He cites the example of the Finnish youngster Pekka-Eric Auvinen, who turned up at Jokela High School (in 2007) and shot eight people before shooting himself. As can be seen in the (since banned) YouTube videos that pre-empt the massacre, Auvinen refers to himself as an “antihuman humanist” while wearing a T-shirt with the sentence, “HUMANITY IS OVERRATED”.



figure 7: Screenshot from Auvinen’s now-censored YouTube video.
http://en.wikipedia.org/wiki/Jokela_school_shooting

So what constitutes good action? This is something that Paolo Virno has addressed in relation to the ability to act politically through his observation that the human animal is inherently capable of modifying its forms of life (2008). He uses the phrase “innovative action” that produces contradictory factors that reflect the human condition, its creative energies, and their repression. Underpinning political action, and reflected in the title of Virno’s book *Multitude: Between Innovation and Negation*, the claim is founded on the ability of the multitude to create strategies that oscillate between innovation and negation, “of placing ‘not’ in front of ‘not human’ ” (2008, p. 190). Echoing negative dialectics, Virno’s concern is to develop an understanding of negation, to outline a critique of capitalistic production as a negative condition that requires further negation.

The importance of ‘negation of negation’, as Žižek explains elsewhere, is to establish the system’s ‘real’ death in separation from its symbolic death: “the system has to die twice” (1999, p. 72; or, in the case of the ‘death of the author’, the metaphor must die too). Perhaps this further negation is what some of the examples introduced in the essay lack as they are locked into a frame of reference that refers to irony, rather than negation of negation: of protest, rather than refusal. Following Hegelian logic, negation of negation is crucial in moving from in-itself to for-itself (self-class-consciousness of conditions of exploitation). Yet, to Berardi, in *Precarious Rhapsody*, it is important to recognise that negation offers progressive innovation not new forms of totality (2009, p. 72). In making the qualification, he is addressing commonly held problems associated with the Hegelian historical subject, and instead stressing processes of “subjectivation” (instead of the subject, taking the phrase from Félix Guattari).

The problem of totality is similarly evident in friendship groups in social networking platforms. Indeed any action even of friendship is no longer confined to individual agents but to the distributed interactions of human and nonhuman agents operating dynamically. Berardi’s use of the term innovation also resonates with Virno’s in standing for something quite different from that which is associated with the instrumentalism of the creative industries. He refers to “dynamic recombination” as a way to rethink possibilities and radical strategies, such as the refusal of work, the invention of temporary autonomous zones, free software initiatives, and so on; virtual suicide might be added to the list.

To Berardi, the fundamental struggle is between machines for liberating desire and mechanisms of control over the imaginary. The psychopathology he speaks of relates to the ways in which technical systems and creative activity have been thoroughly captured by ‘semio-capital’ (to explain, ‘semio-capitalism’ is the term that he gives to the current system where informational capitalism has incorporated linguistic labour). He laments that we have been learning words from the machine and not from the mother (quoting Rose Golden from 1975) in situations where the learning of language and affectivity have been separated (2009, p. 9). He is echoing Christian Marazzi’s writing on the relations among economics, language, and affect: a situation in which people have become effectively

dyslexic, and “incapable of maintaining concentrated attention on the same object for a long time” (in Berardi, 2009, p. 40–41). There are tragic consequences in terms of the psyche, as language acts on the construction of subjectivity. Consequently, according to Berardi, “If we want to understand the contemporary economy we must concern ourselves with the psychopathology of relations” (2009, p. 37). He regards the current situation as a catastrophe of modern humanism, where we no longer have sufficient attention spans for love, tenderness, and compassion.

In Berardi’s view, only the autonomy of intellectual labour from economic rule can save us. Indeed the refusal of work is closely associated with intellectual labour as representing a kind of freedom rather than labour that is bound to the unfreedom associated with profit and power. (He explains this through the characterisations of the “merchant who robbed collective intelligence”, Bill Gates, and “the idiot warrior”, George Bush, who together suffocated intelligence, 2009, p. 60). He is invoking the force of general intellect and the social function of intellectual labour no longer separated from language, charted historically through Hegel’s move from in-itself to for-itself to ‘mass intellectuality’.

But what of virtual suicide? What does it tell us about the economy, the human condition, and our capacity for tenderness and compassion? It is worth remembering that unhappiness is generally encouraged to bolster consumption (so-called shopping therapy), and carefully engineered depression is in the interest of the pharmaceutical industry not least (and it is interesting to note that Auvinen was on a type of antidepressant, said to cause suicidal tendencies as a side-effect). Indeed the issue of pharmacology is pertinent as various remedies can be imagined outside of standard drugs—not least the beneficial properties of intellectual work in general. Berardi reminds us that:

The masters of the world do not want humanity to be happy, because a happy humanity would not let itself be caught up in productivity.... However, they try out useful techniques to make unhappiness moderate and tolerable, for postponing or preventing a suicidal explosion, for inducing consumption. (2009, p. 43)

In these terms, virtual suicide can be considered an effective refusal and the affirmation of the possibility of creative autonomy over intellectual labour and life itself. It decisively acts on a life half-lived in fear.

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RIGHT WING ACTIVISM: THE NEXT CHALLENGE FOR ALTERNATIVE MEDIA SCHOLARSHIP

by Joshua Atkinson and Suzanne V.L. Berg

Research concerning the topic of alternative and activist media has been fruitful over the past decade. Chris Atton (2002) has demonstrated the blurred line between audience and producer, while Graham Meikle (2002) has explored the role of open publishing in the establishment of political identity. In addition, I (Atkinson) have attempted to build on such research by bringing alternative media research associated with journalism and media studies together with the social movement research conducted by communication scholars like Victor Pickard (2006a; 2006b) and Kirsty Best (2005). Overall, these scholars and research projects have helped to bring clarity and understanding to a concept that, ten years ago, was largely unknown or poorly conceptualized. However, the existing research contains one enormous flaw: with the exception of a few studies (for example, Atton, 2004; and Downing, 2001) it is largely based on the examination of politically left-leaning alternative media and activist organizations. This provides a narrow view of alternative media and contemporary activism, which leaves scholars half-blind to the political realities of the twenty-first century.

In recent years, right-wing groups have worked to create and exploit cultural divisions through their alternative media networks. Such cultural divisions often isolate minority and ethnic groups, making those groups more susceptible to repression and exploitation. The cultural divisions fostered by these right-wing organizations, then, constitute a significant threat to human rights and democracy in the era of globalization. Such right-wing movements and their media represent the newest challenge that faces scholars who research alternative and activist media. In the following essay, we provide a template for future research by applying the concept of Resistance Performance to the United States-based Tea Party protest community. In addition, we outline the difficulties scholars may face if they seek to fully utilize the concept of Resistance Performance in any future research concerning right-wing alternative media and organizations; these difficulties are based on our attempts to interview grass roots alternative media producers

affiliated with various right-wing organizations. To illustrate the themes embedded within the narratives found in right-wing websites and publications, and used by self-proclaimed Tea Party activists, we applied the Resistance Performance perspective established in my past research (Atkinson, 2005; 2010; Atkinson and Dougherty, 2006). Within this particular essay, we looked to right-wing alternative media content that focuses on issues of religion and ethnicity, as those concepts most directly relate to the concept of biopower. Michael Hardt and Antonio Negri (2000) define biopower as the following:

Biopower is a form of power that regulates social life from its interior, following it, interpreting it, absorbing it, and rearticulating it....The highest function of this power is to invest life through and through, and its primary task is to administer life. Biopower thus refers to a situation in which what is directly at stake in power is the production and reproduction of life itself. (pp. 23–24)

Essentially, biopower is a process in which life—biological and social—becomes defined, which then affects the way people live and interact. In this way, human lives are defined and shaped. In the case of right-wing alternative media, we examined those articles and postings that depict the “Ground Zero Mosque” as a triumph of radical Islam, and children born to illegal immigrants as “anchor babies”; such stories affect the lives of those who are different from the white Anglo majority in the United States.

Past Challenges for Alternative Media Research

In order to understand the new challenge of right-wing activism that alternative media scholars now face, we must provide an overview of challenges met in the past. Over the past thirty years, research concerning the topic of alternative media has addressed three primary challenges: the challenge of definition, the challenge of exploration, and the challenge of integration. Scholars first grappled with the problem of providing a definition for the concept of alternative media. This was no easy task. The first to answer the challenge was David Armstrong; his book *A Trumpet to Arms* (1981) provided rich descriptions of the underground press of the turbulent 1960s and 1970s. Later, John Downing (1984) took up the study of alternative media in his book *Radical Media*, which profiled a variety of alternative newspapers, ‘zines, radio programs, and television networks operating during the early 1980s. Overall, the work of Armstrong and Downing brought attention to underground press and the media employed by social movements in the United States and Europe. Armstrong and Downing focused their definition of alternative media on those media used by social movement actors who sought to challenge power structures and transform social roles. Research concerning alternative media, then,

focused primarily on the media produced by left-leaning social movement organizations like Green Peace and the Nuclear Weapons Freeze Campaign (a.k.a., Freeze).

In the years that followed this initial research, other scholars began to take up the challenge of exploration, such scholars were interested in the politics of production. Chris Atton examined alternative media production in his books *Alternative Media* (2002), *An Alternative Internet* (2004), and *Alternative Journalism* (2008). In his research, Atton illustrated the various strategies used by under-funded organizations that produced and circulated alternative media content. The most important of these strategies was the use of reader/writers, or audiences who submit their own material to alternative publications and websites. Alternative publications rarely, if ever, have enough resources to pay reporters or writers, and so in order to function they rely on the audience to become the authors of news stories and commentaries. Meikle (2002) explained how the role of reader/writer was important to political identity. Many political activities that typified mainstream party politics have fallen away as conventions and other activities are now televised or viewed on the Internet; many people utilize open publishing functions found on alternative websites to become politically active. The act of writing for an alternative publication helps to shape political identity in the way that attending political meetings and conventions once had in traditional party politics.

The exploration that developed from the research of Atton and Meikle, as well as a host of other scholars, provided a more detailed understanding of alternative media. The challenge of integration developed because of the emergence of two separate lines of research concerning contemporary political activism. One line of research was the alternative media research conducted by journalism and media scholars such as Atton, Downing, and Meikle. At the same time, however, scholars in the field of communication also began to explore activism in the age of hyper-media. In recent years, many communication scholars have adopted the network metaphor that was developed by organizational communication researchers like Evan (1972) in order to study contemporary activism. Through this metaphor, new social movements are conceptualized as a series of nodes that are linked together by the Internet and other interactive media technology. Victor Pickard (2006a; 2006b) studied how Indymedia.org, an activist news site, stood as a network that was used to circulate a series of narratives to activists around the globe. In the case of Pickard's research, the dominant themes of the narratives circulated by activists through the network were 'be the media' and 'principles of unity.' These themes are particularly nebulous and vague, which allows for different activist groups to identify with the Indymedia network; this identification leads those groups to contact one another and attempt collaboration. Such a process creates diversity that, in turn, permits the expansion of a new social movement, but also gives rise to serious problems between organizations and activists. Kirsty Best (2005) describes those problems as agonisms that arise from the "mesomobilization" of disparate groups that

come together from “networked activism.” Based on the research of Alan Scott and John Street (2001), mesomobilization is a reference to multiple organizations coming together for a single purpose. Essentially, numerous activist groups might utilize Internet sites like Indymedia.org to plug into a particular network; through that site, activists learn of demonstrations and protests promoted by the larger network. Those promoted actions would be framed by the site within the nebulous themes of ‘be the media’ and ‘principles of unity’ described by Pickard. Mesomobilization takes place, then, as the various organizations work together to promote or defend those vague themes. Best notes, however, that setbacks arise as the activists in multiple organizations hold differing opinions about strategies for Communicative Resistance. The agonisms that arise from these setbacks create divisions between organizations and make the mesomobilized protest communities temporary at best.

In recent years, I have worked to integrate the line of research concerning alternative media together with the research concerning new social movements and networks; the concept of Resistance Performance (RP). RP has emerged from those efforts (Atkinson, 2005; 2010; Atkinson and Dougherty, 2006). The concept of RP focuses on the role of alternative media in the construction and co-performance of resistance against dominant power structures in local level communities. Two research methods have proven integral to the RP research: qualitative content analysis (see Krippendorff, 2004; Mayring, 2000) and active interviews (see Holstein and Gurbrium, 1995). The qualitative content analysis has been used to highlight the dominant themes within alternative media content read and used by activists in local level communities, and thus illustrate the backdrop against which activists converge to perform resistance. The active interviews are used to illustrate the categories associated with such resistance performed within local level networks against the backdrop constructed from alternative media content. The resistance described by local level networked activist entails five categories: Critical Worldviews, Alternative Media Interaction, Communicative Resistance, Intercreative Capacity, and Narrative Capacity (Atkinson, 2010). The first three categories are particularly important in our present study. The category of Critical Worldviews entails the different ways in which activists perceive society and dominant power structures: radical to reformist. Alternative Media Interaction entails the ways in which activists make use of alternative media: participatory to passive. Communicative Resistance is a reference to the tactics and strategies of resistance that activists use to address problems that stem from dominant power structures: militant to adjustive. Ultimately, the first three categories demonstrate how activists build perceptions about the power structures in society through their use of alternative media content within the context of local level networks; those perceptions stand as the backdrop against which militant or adjustive protest strategies are planned and protest communities are formed (see Atkinson, 2010).

Overall, the concept of RP does a fine job of integrating both lines of research described previously, as concepts such as reader/writer, network, and protest community are used within the overall framework. However, as stated in the introduction, there is a significant flaw with this research, as well as the past research concerning alternative media and new social movements. Pickard, Atton, Meikle, others, and I have constructed theories based on observations of left-leaning and liberal activist organizations. Ultimately, then, the next challenge for scholars who would study alternative and activist media lies in the exploration of right-wing alternative media. In the following pages, we demonstrate how to potentially apply the first three categories of Resistance Performance to the examination of right-wing alternative media content. We utilize the preliminary framework of RP to examine alternative media used by activists affiliated with the United States-based Tea Party protest community. The Tea Party emerged as a political force in the United States following the 2008 election of President Barack Obama, and the implementation of both the Troubled Asset Relief Program (TARP) and the American Recovery and Reinvestment Act of 2009. Tea Party activists often claim that their protests and actions are grassroots efforts, and that they are concerned citizens banding together to curb government spending and federal taxes. These groups often describe such taxation and spending as serious encroachment on constitutional freedoms. Much of the work conducted by the Tea Party has been directed at the Republican Party, as activists work to move the Party platform farther right. Overall, the Tea Party activists can be categorized as ‘reformist’ rather than ‘radical’ within the RP framework; they want to reform the US political and legislative system through adjustive strategies (radical activists seek to eliminate the system altogether through militant strategies). However, critics of the Tea Party claim that taxes are only a disguise for racist agendas that are mobilized against the first African-American President. According to these critics, the Tea Party actually engages in reversive arguments, calling for a return to a time of white Christian dominance when minorities ‘knew their place.’

Resistance Performance: An Examination of Content

In past RP research, qualitative content analysis of media was used to examine alternative media used by activists in an effort to uncover latent meanings within those texts. Essentially, qualitative content analysis of texts illustrates the backdrop against which local level networked activism plays out. For instance, through qualitative content analysis of alternative media texts used by activists in a town called Mystical City, I searched for examples in which the producers of the texts described so-called enemies along with the alleged problems that they posed to society. The results of the analysis demonstrated that the alternative media used by those activists entailed overarching themes of ‘human rights’ and ‘democracy’; for example, corporations (such as Enron) stood as enemies who

threatened both human rights and democracy through their actions and their contributions to political candidates (Atkinson, 2005; Atkinson, 2010; Atkinson and Dougherty, 2006). My past RP research demonstrated the backdrop against which the Communicative Resistance was carried out in local communities. In this context, powerful corporate elites controlled most of the resources in society, and kept most of the people in the US and world in a state of impoverished servitude that neglected human rights and violated the tenets of democracy. Interviews with local level activists demonstrated that reformist activists focused on the need to foster human rights and democracy in their resistance against corporate enemies; such activists engaged in adjustive forms of resistance such as education and peaceful marches. Alternately, radical activists focused on the injustice done by those corporate forces and engaged in militant resistance; they sought to physically impair the dominant power structures. However, it is important to note that the concepts of human rights and democracy that were embedded in much of the alternative media content used by radical activists constrained their performance of Communicative Resistance; the activists did not intend to harm people.

In the following pages, we identify dominant themes that emerge from the analysis of three alternative media texts used by right-wing activists affiliated with the United States-based Tea Party protest community: RedState.com, Glenn Beck radio program and website, and the Rush Limbaugh Show and website. As in the case of past RP research, we searched those alternative media texts for descriptions of so-called enemies, as well as problems posed by those 'enemies.' In the case of these right-wing alternative media, we limited our examination to the topics of the Cordoba Initiative's mosque, proposed for construction two blocks from the site of the 9/11 terrorist attacks in New York City, and the debate about so-called 'anchor babies,' born to illegal immigrants in the United States. We chose these two particular topics because they relate directly to the concept of biopolitics and biopower, as these themes and narratives construct an image of Muslims and immigrants. Such constructions, in turn, hold the potential to affect relations with these groups, influence their lives, and the position of their communities within social life.

RedState.com

RedState.com is an interactive website that is in many ways similar to the left-leaning Indymedia.org. It is similar to Indymedia in that audiences typically provide the content through posting their own stories and comments. It is different from Indymedia, however, in that there is a core group of RedState writers who initially founded the website in 2004 and who act as editors for the site today: Ben Domenech, Erik Erickson, Mike Krempasky, Josh Trevino, and Clayton Wagar. Most of the content found on the website is developed by the founders and their staff, which is then supplemented by additional

content posted by the audience. RedState mirrors Atton's (2002) concept of the reader/writer strategy used in many alternative media formats.

The qualitative content analysis of recent news stories posted on RedState concerning the proposed Cordoba mosque in New York City illustrated the producers' focus on Imam Feisal Abdul Rauf and the mosque organizers, positioning them as "secret radical Muslims." Feisal Rauf, a self-proclaimed moderate Muslim Imam, stated that the Cordoba Initiative sought to build a mosque close to the site of the 9/11 terrorist attacks in order to build bridges between the Muslim and Christian communities. Many writers at RedState post content aimed at disproving Rauf and the other organizers' intentions about the planned mosque. The Directors of RedState.com wrote an August 2, 2010 editorial, which described the Imam as someone with radical ideas:

...his writings directed at Muslims are full of praise for Wahhabi fundamentalism. He has refused to "repudiate the threat from authoritative sharia to the religious freedom and safety of former Muslims," a pledge issued nine months ago by ex-Muslims under threat for their "apostasy." He refused to describe Hamas as a terrorist organization, and will not talk about the Muslim Brotherhood. He is an open proponent of integrating sharia into the law of Western countries. When speaking to Arabic audiences, he discounts the idea of religious dialogue.

The RedState directors' argue that Rauf promotes himself as a religious moderate, but harbors radical ideals. A September 9, 2010 story responds to the debate over the Ground Zero Mosque: "The political elite have no problem being dictated to by a radical group within Islam which it would never tolerate from mainstream Christians. What's worse is the use of fear of radical Islamists by so called moderate muslims [sic] to advance *their* agenda." Throughout the text, one finds embedded links to articles and news stories at other sources on which the directors' story is based; the provision of such links is typically employed by RedState in order to build their argument. A later story posted August 10, 2010 by Dan McLaughlin titled "The Ground Zero Mosque and the Obama Administration" builds on the story posted by the directors:

We should welcome efforts to cooperate with moderate Muslims who wish to advance the cause of an Islam that rejects the various elements of the Islamist political ideology....But of course, hard experience has shown us endless examples of imams who talk the talk of moderation to Western audiences, while preaching fire and sword in Arabic behind closed doors. There are, as we detailed previously, several reasons to

doubt that Feisal Abdul Rauf, the imam of the proposed mosque, is any sort of moderate, regardless of what he may have said to sympathetic journalists and diplomats....This being so, the builders cannot be motivated by what they claim to be. On the contrary, their Cordoba Initiative must be a \$100-million exercise in exacerbating tensions.

As in the case of the directors' argument, it is once again suggested that Rauf and the organizers pretend to be moderate while actually holding radical views. The ire is not reserved for President Obama alone: Erickson argues that General David Petraeus uses news media to heighten tensions with the Islamic world: "What is politically incorrect for the media or Petraeus to say: Islam is largely incompatible with Western values when significant portions of the religion, not just the fringe, are driven to riot over koran [sic] burnings, cartoons of Mohammed, and the like." RedState alleges there is an incommensurable split between Western/Christian values and Islam. Numerous articles posted on RedState share this view and promote such an argument about both the Imam and the organizers of the mosque.

In reference to the issue of so-called anchor babies, only a few stories were posted on RedState.com at the time of analysis. In those stories, there was a focus on the increasing numbers of 'others' within the United States. According to an August 15, 2010 post titled "Amnesty (is) for Dummies" by a user called uvbogden:

Based on this Citizenship Clause, even children born in the U.S. to illegal alien parents are currently considered citizens. This definition of birthright citizenship has led to the practice of foreign women crossing the border into the country illegally, for the sole purpose of giving birth to a child in an American hospital, so that baby would be a citizen of the U.S. and serve as an 'anchor baby,' facilitating the legal immigration of the entire extended family. Recent reports have found that, while illegal aliens comprise only 4% of the U.S. population, they account for more than 8% of babies born in the United States. Considering this rate of birth of anchor babies, the subsequent family members that will immigrate based on these births, and the current and projected rates of illegal immigration, the sheer numbers of illegal aliens constantly breaching our borders are overwhelming.

Essentially, articles on RedState.com depicted 'anchor babies' as a tactic for moving entire families illegally into the United States. In this way, then, the following construct is suggested: foreign born Others only value their children and babies as tools that are a

means to an end. These Others are slowly moving into the United States and taking up space and resources that could otherwise be used by the citizenry.

The Glenn Beck Program and Rush Limbaugh Show

The Glenn Beck Program exists in two primary forms: Beck's radio program, and his website. The website features transcripts from the radio program, as well as additional material written by Beck and his staff. The radio program, which is produced and distributed by Beck's company Mercury Radio Arts, began in 2002 and currently reaches over 400 radio stations via Sirius XM satellite radio. The website was established shortly after Beck took to the air in 2002 to supplement the radio program. Like Beck's program and website, the Rush Limbaugh Show exists in multiple media formats. The program began in radio format in 1988 and has since developed a website to supplement the material presented on air. Overall, the Rush Limbaugh radio program is broadcast by over 600 stations. Unlike RedState.com, both Beck and Limbaugh's programs and websites are not intercreative; there is no audience contribution of content. In addition, the transcripts and articles found on the sites do not provide links to outside sources that bolster or support their claims.

Qualitative content analysis of these programs reveals similar content issues concerning the proposed Cordoba mosque in New York City. Both programs and websites build on the 'secret radical' idea found within RedState.com, but do not limit such radical ideals to Imams and organizers. Instead, these programs suggest that 'many' Muslims 'secretly hate' the United States and seek to integrate Sharia Law with local laws. In addition, both Beck and Limbaugh link the federal government and 'liberals' to these 'secret radicals' in their discussions about the Cordoba Initiative and the proposed mosque. Beck claimed in his August 18, 2010 broadcast that the Cordoba Initiative was named after the Spanish city of Cordoba, where he implies that Muslims turned a cathedral into a mosque to break Catholicism in the region:

Is it reasonable to ask to see if the terrorist, the Muslims that are extreme and extreme American haters, is it unreasonable to ask the question, do they believe that we are a wildly decadent society, that we are a society that is corrupting the world? They call us the Great Satan for a reason....And that it is possible that the World Trade Center was looked at in the Muslim world by some as our temple to our God, money, and power. Is it possible that it is viewed by some in the Muslim world as that temple?...Just like in Cordoba they take the cathedral of Christianity, conquer Christianity, and then take that cathedral and make it into a mosque, the third largest mosque in the world. And that was a

statement to the rest of the world that we have conquered their God and we are now leading.

Similarly, Limbaugh claimed in his broadcast of September 9, 2010 that “they” become violent when “they” do not get what “they” want:

Every time, it seems to me, anyone does not do exactly what they want, they start threatening to take it out on us, the troops, the imam [sic] here. This is a threat. The imam [sic] said, ‘Yeah, if I’d a known all this, I wouldn’t have done it. But, gosh, if I move it now, why, I don’t know what they’ll do.’ So this is the hammer that’s held on us, the religion of peace, which is not what everybody thinks it is, is going to have an uprising, much like the Dutch cartoon uprising if we move the mosque. Troops are already under great threat from militant Islamists. That’s why our troops have guns and armor. I mean it’s not peaceful out there on the battlefield....So basically the imam is saying we have to do what he wants. We gotta build this mosque or there’s going to be violence. How’s that any different from a threat? I mean that’s exactly how terrorists negotiate. Can we just be up front and honest about this? Yasser Arafat, you name it, this is how they negotiated. You do what I want to do or we’re gonna blow somebody or something up.

Limbaugh uses the word “they” to construct an image of a nebulous group of Muslim people who he represents as dangerous. Both commentators imply that the danger is made greater by ‘liberals’ who ‘control’ the federal government do little to stop the ‘secret radicals,’ or hinder those who would confront the ‘danger.’ In reference to the ‘anchor baby’ issue, both Beck and Limbaugh take a position similar to that depicted in RedState.com. Essentially, they suggest that birthing a child is a tactic used by foreigners to gain illegal access to the United States; in this way, babies are tools and not valued by the foreigners.

Much of the content found throughout these three alternative media sources focus on taxation and government spending, which corresponds with many of the claims that Tea Party advocates have made about the goals and aims of their particular protest community. However, as the qualitative content analysis has revealed, much of the content of alternative media used by Tea Party activists also delves into issues of religion and ethnicity. Our analysis identifies recurring themes about foreigners and ‘Others’ with ‘secret, illicit agendas’ within the United States. These themes construct an overarching backdrop for Communicative Resistance for the Tea Party. Within this backdrop, the following image is constructed: the United States is under siege from outside forces

including militant zealots who seek to destroy, and devious foreigners who seek to sap the nation's valuable resources. Such narratives create the potential to justify the isolation and exploitation of ethnic minorities. In the 2010 election cycle Republican politicians such as Sharon Angle, who campaigned for United States Senate in the state of Nevada, used elements of this backdrop to draw the support of Tea Party activists and right-wing groups. Angle reportedly claimed that Sharia Law currently governs the cities of Dearborn (Michigan) and Frankford (Texas); Angle offered no further explanation (Allan, 2010; Simon, 2010). In addition, Republican Senator Lindsay Graham of South Carolina has called on the Senate to re-evaluate the 14th Amendment of the United States because of the growing threat posed by the 'anchor baby tactic,' even though there is overwhelming evidence that such a tactic does not actually exist:

However, people who study patterns of illegal immigration say that [statements by Graham are] probably not true in the vast number of birthright citizenship cases. The co-author of the Pew study told *Time's* Kate Pickert that "well over 80 percent" of the 340,000 births to an illegal immigrant in 2008 were to a mother who had been in the country for at least a year, suggesting they did not come to the country specifically to have a child." (Goodwin, 2010)

Through employing the tactic of promoting themes that originate in right-wing alternative media, political figures create widespread distrust of ethnic minority communities living peacefully within the country. Such suspicion can have drastic ramifications, influencing the ways dominant groups perceive minorities, which, in turn, can profoundly affect the position of immigrant communities within society.

However, this is where the analysis of right-wing alternative media through the framework of RP incurs significant problems. Right-wing alternative media portray for activists a particular worldview, and the problems that exist within society. Under the framework of RP, activists learn about the world by using alternative media, and then come together to express opinions and engage in resistance against perceived threats. The qualitative content analysis identifies the backdrop, but does not reveal how activists use that backdrop or engage in resistance. In past RP research, qualitative content analysis of alternative media used by left-wing networked activists identified a backdrop defined by themes of human rights and democracy. Such a backdrop was only one part of the puzzle for RP. A full understanding of Resistance Performance within local communities by left-wing activists required an examination of the critical worldviews that they brought into their networks, the ways in which they used and interacted with alternative media, and the interactive capabilities of the network. Such categories, in reference to RP, influenced

whether Communicative Resistance was militant or adjustive, performed in conjunction with multiple organizations or in isolation.

Without knowing more about the categories of RP, scholars remain blind to the full picture of right-wing activism. Nevertheless, it is crucial that scholars work to better understand this situation, for there are significant dangers posed by this backdrop. For instance, in July of 2008 David Adkisson, an avid reader of Beck and other right-wing producers, walked into a liberal Unitarian Church in Tennessee and opened fire on the congregation killing two people and wounding others. After his arrest, Adkisson claimed that he attacked the church because “liberals had tied the country’s hands” in the so-called war on terror (Maxwell, 2008). In another incident in August of 2008, Timothy Dale Johnson allegedly entered the Arkansas Democratic Party headquarters and opened fire, killing the state party chair (Bustillos, 2008). Later, in 2010, Andrew Joseph Stack III crashed his single engine airplane into a federal building in Austin, Texas. In his suicide note, Stack called for violent revolt against the federal government (Brick, 2010). This is not to say that all Tea Party activists are violent or suicidal. Many of the Tea Party activists whom we have known are kind people who have genuine concerns about the federal government, radical Islam, and immigration. These people hold reformist views, which implies that the government can be changed through adjustive strategies of education and legal political rallies. However, a backdrop exists in which violent acts can be deemed necessary forms of resistance by radical activists; especially violent acts against members of minority communities. Gathering information that could build a solid understanding about the five categories of RP, however, will prove extremely difficult. In the following pages, we outline potential problems that loom for scholars and activists who wish to examine the processes of right-wing alternative media and activism.

Resistance Performance: Problems and Challenges

In the fall of 2010, we began to conduct active interviews, focus groups, and discussions with many activists who are affiliated with the Tea Party protest community. As with past research, we consider these interviews and focus groups necessary in order to fully understand the five categories of RP. Such interviews and focus groups have proven to be problematic, however. One important problem that scholars will most likely face as they turn their attention to right-wing alternative media producers, activists, and organizations: conspiratorial worldviews. Such a worldview on the part of right-wing activists leads to a variety of different tactics to obscure inquiries regarding their use of media: avoidance, lack of disclosure, and misdirection. These tactics hide or skew the five categories of RP, making the work ahead difficult.

In my past RP research I found that the worldviews of the left-wing activists were based on critical theories of Marx, Gramsci, Adorno, and others; hence the Critical

Worldviews category. In interviews and discussions with Tea Party advocates and activists we have noted the presence of worldviews based on conspiracies that cannot be proven or disproven, or cannot be disproven even in the face of overwhelming evidence. For instance, some of the Tea Party activists with whom we have spoken are convinced that President Barack Obama is not a United States citizen who was born in Hawaii, but a Muslim who was born in Kenya and is bent on subjugating the United States under Sharia Law. Such activists have demanded to see proof of his citizenship in the form of a birth certificate. However, when faced with evidence of the President's United States citizenship they claim that such evidence has been forged or fabricated.

Such conspiracy theories concerning the President and others correspond with Charles Stewart's (2002) past research concerning ultra-conservative groups like the John Birch Society. According to Stewart, groups like the John Birch Society are founded on conspiratorial worldviews in which the enemy is behind every door and hiding in every shadow; absence of evidence stands as evidence of the conspiracies. In fact, this view corresponds with the qualitative content analysis described above (the theme of 'secret radical Muslims'). A worldview in which anyone (liberal, foreigner, Muslim) may be a potential enemy, or working to aid enemies, creates a strict sense of inclusion and exclusion. People who are part of the group can be trusted, while outsiders cannot. As outsiders, we and other scholars cannot be trusted; particularly by those activists who engage in the production of alternative media. This lack of trust leads to three different obscuring tactics that we have observed in interviews and discussions with activists who engage in the production of local-level alternative media. So-called rank-and-file activists who attend rallies and go to protests are not likely to engage in these tactics.

first, many of the local-level alternative media producers whom we have contacted to interview or recruit for focus groups refuse to speak to us. Our emails go without reply, and people who we approach to engage in discussion walk away. Because of this, we have only had opportunity to interview a small number of producers and local-level activists. In the second tactic, Tea Party producers who do engage in interviews refuse to disclose crucial information about their organizations or networks. These producers typically reveal partial information about a situation or their organizations, and then refuse to reveal more. For instance, one Tea Party activist with whom we spoke claimed to have played an important role in the election of a prominent Republican by utilizing the Internet to draw Tea Party activists to aid that Republican. However, when pressed for details, the activist refused to elaborate any further. We concluded that these activists feared they would reveal important Tea Party 'secrets' by telling us more about their network, as well as their production and use of alternative media. Scholars can confront tactics such as avoidance and lack of disclosure with persistence and determination. It is essential to continue recruiting participants for interviews, and keep asking for interviews after people have initially declined.

The third tactic that we have encountered is much more problematic. It involves misdirection on the part of the local-level media producers affiliated with the Tea Party. In interviews and discussions with alternative media producers who affiliate with Tea Party organizations, we have encountered situations in which those activists have deliberately provided false or misleading information, or information that proved contradictory. In one instance, I met online with a group of activists who were very involved in Tea Party efforts, three were producers of local-level alternative media. Before I met with them, one of producers emailed me to stress that none of the four activists knew one another. At the onset of the discussion, the activists again reiterated that they did not know one another. As the discussion progressed, however, it became increasingly obvious that the four had intimate knowledge about one another's families, jobs, etc. Finally, one of the producers admitted that they knew one another quite well, and had been friends for a long time. When asked why they had insisted that they did not know one another, they simply replied, "that is what we do"; there was little else in the way of an explanation. This tactic, like the previous two tactics employed by Tea Party activists, seems to be born from the conspiratorial worldview. However, this particular tactic led me to question some of the information they relayed during the course of the discussion. Essentially, the misinformation that I detected as well as the potential for other misleading statements, obscures my understanding of the Tea Party activists, alternative media, and protest community as a whole. In addition, such misinformation could potentially skew the different RP categories if we were to progress to the next research stage of grounded analysis.

Ultimately, the conspiratorial worldviews of activists give rise to tactics used by right-wing alternative media producers in interviews and discussions that can hinder the research of scholars interested in the subjects of alternative media and social movements. Herein lies the challenge for alternative media scholarship. As right-wing activists gain popularity and move into positions of authority, it becomes increasingly important to understand the alternative media that have served to position those activists and their causes. The Tea Party protest community has forced the Republican Party to the far right through public rallies, and by promoting Tea Party candidates who run as Republicans. In this way, the Tea Party gained substantial legislative power in November of 2010. In Europe, the Freedom Party in Austria and has gained unprecedented access to power by stoking nationalist fears about Muslims. Previous research concerning alternative media has taken a utopian view of activists, media, and radical democracy. The examples of the Tea Party, Freedom Party, and other rising groups demonstrates how activists can cultivate cultural divisions, and use those divisions as a pathway to power. By utilizing the framework of RP, scholars can begin to understand the thematic backdrops against which many right-wing activists and organizations engage in the performance of resistance. Such information can help scholars and political opponents of such groups to neutralize some of the more dangerous aspects of those thematic backdrops with their own information

campaigns. However, scholars must also find ways to engage with the right-wing activists and audiences of right-wing alternative media to gain a full picture of what is going on within these movements and protest communities.

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MEDIA ACTIVISM IN SEARCH OF 'TRUTH'? QUESTIONING THE MISSION TO RESTORE SANITY

by Claudia Schwarz and Theo Hug

For a young, media savvy, radically globalized generation, television as a platform for news has lost momentum. Ironically however, in a media landscape with a variety of news providers competing for audiences and trust, television news parodies like *The Daily Show with Jon Stewart* and *The Colbert Report* attract new audiences as they seem to fill a gap. They succeed not only in entertaining and informing (even educating) a previously 'deactivated,' relatively young target audience, but also in initiating activism by using old and new (social) media. How is it possible that a comedy show succeeds in promoting reason and gets young people to stand up for more sanity in politics and culture?

In this case, critical (subversive) practice comes from within the mainstream, that is: television—a platform criticized for “dumbing down” audiences (Postman, 1985). Could television, thus, actually become part of the solution for commitment? In this constellation, what is the role of self-determined (intrinsic) and acquired (extrinsic) practices in relation to mobilized practices and practices determined by other factors? And, how do they work differently in comparison to the subversive practices of tactical media and media activism, which question the methods of biopower?

This paper examines several responses to the (more and less serious) calls for action of the two shows and discusses their delicate role as entertainers, watchdogs, and activists for reason, sanity, and what is left of 'truth' in the media. Furthermore, implications for critical media studies are considered by questioning the claims of “education towards truth” (Mitterer, 1991, p. 67). Finally, the paper questions whether we can talk about news parodies as a form of media activism and why the Rally to Restore Sanity and/or Fear has and has not had an impact.

Standing up for Sanity

On October 30, 2010, approximately 215,000 people gathered at the National Mall in Washington, D.C., for the Rally to Restore Sanity and/or Fear, a joint venture by Jon Stewart, the host of Comedy Central's news parody *The Daily Show*, and Stephen Colbert, the host of its spin-off *The Colbert Report*. The official rally website opens with the famous call for action from the 1976 satire *Network*: "I'm mad as hell, and I'm not going to take it anymore!" In the announcement of the rally on the show, Stewart asks, "How did we get here?" pointing to the voices of the fifteen percent of Americans that dominate the agenda and are covered by the 24/7 newsreel. In the rally, he wants to "send a message to our national leaders and our media that says 'We [the rational eighty percent of Americans] are here!'" (*The Daily Show*, September 16, 2010).

The rally was a great success. It was much bigger than the organizers had anticipated; yet, its impact remains unclear. It was covered on all major news channels, however many in the audience did not quite know what to make of it (Easley, 2010). This might be due to two things: first, the event combined two very different rallies—the quite serious Rally to Restore Sanity (team Stewart) and the ironic March to Keep Fear Alive (team Colbert). Second, the media themselves were one of the main targets of criticism in the rally, which put them in an awkward position and hit their blind spot.

Nevertheless, as a piece of media activism, the rally proves that a television show can, in fact, mobilize people "who've been too busy to go to rallies, who actually have lives and families and jobs (or are looking for jobs)" (Rally to Restore Sanity, 2010), that is, people who were generally believed to be passive consumers. The rally also proved that people are disappointed with politics and the media to the extent that they are willing to publicly express their frustration. Moreover, it shows that people are able to differentiate between actual (truthful) information and what Harry Frankfurt infamously terms "bullshit" (Frankfurt, 2005).

In the following, a rough outline of the search for 'truth' in the media (understood as truthful reporting) helps to establish news satire as a genre that criticizes politics and the media on a meta-level and speaks 'truth beyond facts.'

Who to Trust in the News Media

The acceptance of the news media as an authority in terms of truth telling has been challenged for some time now, especially with the advent of new technologies and new channels of information processing in Web 2.0. Interestingly, a general mistrust is apparent in almost all parts of civil society, ranging from the political to the economic.

Seymour Lipset and William Schneider (1983) argue that there is a correlation between the decline of confidence in the media and the decline of confidence in politics (see also Hetherington, 2005). According to this line of reasoning, the criticism of the

news media in news parodies has a negative effect on people's trust in politics. As the collected data shows, watching *The Daily Show* leads to distrust in the media and significantly decreases ratings of news media coverage of politics (Morris and Baumgartner, 2008, p. 324). Cynicism, Morris and Baumgartner claim, results in an "unhealthy distrust for all aspects of politics" (p. 328). Even though an explanation for these findings is not provided, it is not difficult to come by: first, information about any aspect of civil society is communicated through the media. If people do not trust the media, they cannot trust the content reported. Secondly—and in this context more significantly—the mechanism and style of communication (and deception) are shared by all, media as well as politics: form rules over content, which means that information is scripted rather than authentic and 'hyped' rather than rationalized.

The style of communication we find in all matters today is based on what comedian Stephen Colbert famously termed "truthiness," a term reminiscent of what Harry Frankfurt calls "bullshit": "The essence of bullshit is not that it is *false* but that it is *phony*" (Frankfurt, 2005, p. 47). Similarly, "truthiness" is defined as "truth that comes from the gut, not books" (*The Colbert Report*, October 17, 2005); and, "the quality of preferring concepts or facts one wishes to be true, rather than concepts or facts known to be true" (American Dialect Society, 2006).

As Frankfurt describes the dangerous development, people are not concerned with the difference between the truth and a lie anymore. They are busy chattering, regardless of what might or might not be true. Possible reasons for this development especially in the media can be found in the 24/7 news cycle that requires continuous news-chatter; the emergence of new jobs and fields of work like PR, consulting, and lobbying; Web 2.0 technology, wherein people are invited to share their thoughts, and many more. This idea of 'bullshit' in communication resonates with Neil Postman's famous line: "Americans are the best entertained and quite likely the least well informed people in the Western world" (Postman, 1985, p. 106).

In the long run, a perceived lack of respect for the truth leads to general mistrust, which is only legitimate—even sane. It requires careful deconstruction to re-establish a common ground from which to rebuild trust. The question remains who, other than media critics, sociologists, media pedagogues, and philosophers, is up for the task and influential enough to spread this message. As argued here, ironically this deconstruction might be provided by successful news parodies within traditional television.

In a news media system like the one in the United States, where there is a firm belief in a 'truth' to be found—hence the slogan in the "Code of Ethics" by the Society of Professional Journalists (1996): "Seek Truth and Report it"—the question of who is able to tell the truth, almost seems legitimate. After CBS anchor Walter Cronkite, the unrivaled 'most trusted man in America' died in 2009, speculations about the new most reliable newscaster arose. Surprisingly, the anchor of a satirical news show, Jon Stewart, was not

only suggested for the position in an article published in the *New York Times* (Kakutani, 2008), he also won the *Time* online poll for most admired journalists against ‘real’ news people like Dan Rather, Brian Williams, and Anderson Cooper (*Time* Poll Results, 2009).

During the run-up for the 2008 elections, *Newsweek* featured Stewart as one of the most powerful media figures in the elections. In 2010, they called him a “Media Watchdog,” placing him second on a list of the “New Thought Leaders” of the decade: “For the past several years, however, there’s been another step added to the end of the process: being held to account for our faults by a comedy show with a sharp eye and a sharp tongue” (Williams, 2010). The *New York Times* described Stewart as “Mr. Common Sense, pointing to the disconnect between reality and what politicians and the news media describe as reality” (Kakutani, 2008).

Fake News Shows on a Mission to Restore Sanity (and/or Fear)

In *Amusing Ourselves to Death*, Neil Postman describes a subversive TV program that is highly reminiscent of *The Daily Show*. However, he thought it would not attract an audience large enough to have an impact (Postman, 1985, p. 161; Erion 2007, p. 13). Quite obviously, times have changed.

The Daily Show and its spin-off *The Colbert Report* are news show parodies aired on weekdays on Comedy Central. Apart from their most obvious mission, to entertain people and make fun of things, and the slogans mentioned on their websites, like “unburdened by objectivity, integrity, or even accuracy,” “zero credibility,” “truth that comes from the gut, not books,” and “time for a truth injection,” they obviously fill a gap created by their ‘real’ counterparts. With a nightly audience of approximately one and a half million for *The Daily Show* and approximately one million for *The Colbert Report*, the shows have gained momentum, especially among audiences between eighteen and thirty-five years of age.

By making fun of both current events and the way mainstream news media report them, they reveal ‘truths’ beyond a mere fact checking or fact and opinion-reporting. They have proven their role as watchdogs of media watchdogs by upgrading their ‘fake’ reporting to the level of critical, satirical news reporting (Schwarz, 2008, pp. 245–277).

The importance of both shows can probably best be measured by the media attention they receive, the studio guests they attract (including the sitting president, which was a first in the US), and the fact that especially young audiences name them as one of their prime *news sources* and who—in research studies—turn out to be among the best-informed group of people (Erion 2007, p. 10, referring to an Annenberg Public Policy Center poll; Pew Research Center, 2007).

From two different angles, the two shows take on their mission: while Jon Stewart is the authentic, critical, stand-up comedian-anchorman; Stephen Colbert impersonates a conservative, republican pundit. While Stewart aims to make people think and/or laugh

about matters, Colbert seeks to mobilize his audience, for example, getting people to change Wikipedia articles and asking them to support his ‘idea(l)s.’ Given both shows’ incredible success and impact, together, they are the perfect team to provoke change.

In a reaction to the Tea Party movement in the US, and the immediate danger of politicians and their media bullhorns that they believe were systematically stupefying and hence disempowering citizens, the mismatched team set out on a mission to restore sanity (and/or fear). In a rally speech by Jon Stewart called, “A Moment of Sincerity,” he pointed to the challenges of our time and criticized the media for hyping unreal fears and polarizing citizens, what he calls the “24-hour politico-pundit perpetual panic conflict-inator.” However, his primary message was a call for social cohesion.

Moving Masses with Old and New Media:

Between Couch Potato, Political Lethargy, and the Search for Meaning and Identity

The rally has shown that traditional media such as television—generally believed to deactivate people—have the power to activate them, to get them to go to places, do things, even make them think and reflect on issues. Ironically, however, it is not only the ‘real’ or sincere programs on television that seem to have this impact.

Of course, new media supplemented the movement: there were iPhone apps, tweets, and other social media that also called for people to attend the rally. However, the initial starting point of the movement was a critical and thoughtful parody of an anchor-man—who, by breaking his routine of sticking to his anchor desk—motivated people not only to think critically, but to show others that they care and want to do something—in this case participating in a rally—demonstrating concern for a society and politics that they believe should be more sincere and solution-oriented. “On this one day, regular people wanted to show that media may be broken, but America isn’t” (Easley, 2010).

All across so-called ‘Western’ countries, one of the main concerns in politics has been that younger generations seem to be particularly disinterested, disenchanting, and disillusioned with politics and the ‘establishment.’ The main question is how to motivate young people to care about politics and the world at large, beyond the virtual realms into which they have retreated. The success of *The Daily Show* proves that—if issues and topics are presented adequately—young people do care. One of the reasons why celebrities and politicians are happy to be interviewed on those shows, even at the danger of being ridiculed, is the fact that they reach out to a young audience, which is almost impossible to access through other, let alone, traditional media. The two news parodies are the format that gets young people involved; that presents what is significant in a way that also helps people differentiate between what is important, honest, sincere, and trustworthy, and what is not.

With Great Power Comes Great Responsibility

The impact the two shows have on young populations—and this is especially true for *The Daily Show*—is systematically denied or played down by the anchors. Jon Stewart has the power to inform, entertain, and educate people, yet he emphasizes that he is ‘only’ a comedian. Even as arguably the ‘most trusted man in America’ he sticks to this image, which suggests that he does not misuse his power. Maybe this is part of his success, but it is also a point he is criticized for.

At issue is his responsibility, which he sometimes takes and often denies. In this sense, the Rally to Restore Sanity and/or Fear was a one-time event, the impact of which quickly declined. However, it was a rather radical step outside of their (or at least Stewart’s) comfort zone. So, are Stewart and Colbert moving from comedy into political activism?

News Parodies as Forms of Media Activism?

In his chapter on media activism, Matthew Lasar (2007) begins with an historic example predating the establishment of the United States (Lasar, 2007, p. 925). He refers to the case of the newspaper printer John Peter Zenger (NY, 1732) who accused the British colony’s governor of corruption and was sent to jail for libel. However, the jury ruled that no libel was committed since Zenger printed the truth.

As Lasar writes, the “Zenger case both advocated and paved the way for independent media” (Lasar 2007, p. 925)—an idea still at work, for example, in the context of Indymedia.

Media activism can be defined as two related kinds of activity. One creates media that challenge the dominant culture, structure, or ruling class of a society. The other advocates changes within that society intended to preserve or open up space for such media. Often media activism encompasses both these activities in the same historical moment; or it quickly moves between the two modes of action. (Lasar, 2007, p. 925)

Clearly, the two shows challenge the dominant media and they encourage action and discursive activities (for example, in the context of [re-]mediation in social media). They encompass these activities and they attract a wide and increasing audience, but there is no intention to create open spaces in terms of platforms.

A similar ambivalence is noticeable if we look at other characterizations of media activism. For example, Graham Meikle (2002), who addresses the basic distinction between open and closed systems in his book *Future Active: Media Activism and the*

Internet (Meikle, 2002, p. 13). He relates openness to incompleteness (open source or open content developments). Here, media activism is used as an umbrella term for various intervening forms of media appropriation (with characteristics such as open, incomplete, spontaneous, and temporary forms). More recently (2010), he distinguishes four dimensions of Net activism: intercreative texts (for the concept of interactivity, see Tim Berners-Lee, 1999), tactics, strategies, and networks. As for the two shows, they can be regarded as intervening forms, but they are part of a closed system. Robert Huesca refers to activist media as a key phrase and defines it as follows:

Activist media are radio, television, and other media practices that aim to effect social change and that generally engage in some sort of structural analysis concerned with power and the reconstitution of society into more egalitarian arrangements. Many activist media practices are also committed to principles of communication democracy, which place at their core notions of popular access, participation, and self-management in the communication process. (Huesca, 2008, p. 31)

The shows also aim to effect social change to some extent, and they focus on high quality products (not on processes and grassroots developments). But there is no core notion of participation in a political sense.

Wolfgang Sützl's (2011) characterization focuses on carnivalesque cultures as media of resistance or disobedience. In view of the explicit self-portrayal in the case of Jon Stewart as an authentic, critical, stand-up comedian, the show can be located clearly in this tradition, but at the same time, it is part of the mainstream media.

With reference to the concept of variations (Goodman and Elgin, 1988) the theme of media activism can be described in terms of perspectives that appear in different ways such as: the unconventional use of media in the context of creative re-framings or social orientations; the strengthening (fortification) of minorities, questioning and criticizing mainstream developments, structural constraints, regimes and dominant cultures (cultures of dictatorial rights); and, cognitive autonomy in (partial) cultures of resistance. However, the two shows appear as ambivalent forms when applying these perspectives.

In the case of the Rally to Restore Sanity and/or Fear, there is a questioning of the mainstream media and its attempt to 'hype' unreal fears and polarize citizens, thus promoting biopolitical regimes. This questioning suggests a form of media of resistance in the sense of biopolitical activism. Although the case is not aiming at cutting edge developments like the activities of artists such as the Critical Art Ensemble or Stelarc and scientists such as Beatriz da Costa who began developing projects that intervened in a new, engineered (technological) form of exercising power on the body itself, the case is a

good example for effectively challenging the workings of biopower by introducing discontinuities in a new hegemony of knowledge.

Show Masters as Truth Tellers?

In the case of our examples, the activists emphasize that they have no agenda of influence. They rather question issues and—for all intents and purposes—this kind of questioning is not explicitly, but implicitly challenging processes of governmentalization, the ‘art of government’ in a Foucauldian sense.

With the concept of ‘governmentality,’ Foucault aims at a new understanding of power beyond the problematique of consensus, will, or conquest: “The relationship proper to power would not therefore be sought on the side of violence or of struggle, nor on that of voluntary linking (all of which can, at best, only be the instruments of power), but rather in the area of the singular mode of action, neither warlike nor juridical, which is government” (Foucault, 1982, p. 221). Foucault advocates a concept of power that focuses on various forms of social control in disciplinary institutions (for example, schools or hospitals) as well as on different forms of knowledge in contrast to widespread conceptualizations of power in the sense of the hierarchical, top-down power of the state. Accordingly, the concept of ‘government’ is not limited to state politics alone.

It includes a wide range of control techniques that apply to a variety of phenomena, from one’s control of the self to the ‘biopolitical control’ of populations. Foucault defines governmentality as the ‘art of government’ in a wide sense, which includes organized practices (attitudes, rationalities, and techniques) through which subjects are governed, and which is linked to related concepts such as biopolitics and power-knowledge (Foucault, 2006a, b).

On the other hand, if we understand these creative acts in terms of an ‘ethics of de-governmentalization,’ we should be aware that the analytical potential under the auspices of Foucault are somehow pruned and finally turned into moral stances. In other words: the concept of de-governementalization emerges as concept of re-governementalization on other levels (Hug, 2008).

However, ‘truth-oriented’ activism may be related to claims of clarification and enlightenment. But whatever the “truthometer” (Politifact.com) or other authorities will tell us, we are depending on a sense of trust in the respective agencies. Although we might successfully refer to differentiated philosophical concepts of truth such as *veritas est adaequatio intellectus ad rem* [truth is the correspondence of the intellect to the thing], consensus, evidence, coherence, or pragmatism, we should be aware that “education towards truth is always education towards the truth of the educator” (Mitterer, 2001, p. 67).

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RECLAIMING A STORY: RECASTING THE CHEROKEE IMAGE THROUGH MELODRAMATIC NARRATIVE

by Eddie Glenn

In the summer of 2007, the Cherokee Nation of Oklahoma faced perhaps its biggest public relations dilemma since the forced relocation of the tribe nearly 170 years earlier. In March of that year, Cherokees voted to restrict tribal membership to those who could trace ancestry to signers of the Dawes Rolls, a 1906 census of Cherokees conducted by the United States (US) government. The vote was a result of a tribal high court ruling that the Cherokee constitution was unclear about requirements for tribal membership. The ruling permitted Freedmen, descendants of slaves owned by Cherokees before Emancipation, to obtain membership in the tribe. However, the 2007 approval of a constitutional amendment restricting membership revoked the Freedmen's Cherokee affiliation.

The revocation of Freedman tribal membership resulted in a firestorm of criticism from national media. In a *USA Today* editorial, Lois Hatton, comparing the revocation of Freedman membership to the Cherokee's own oppression by the US government, stated that "[t]he Cherokees are disenfranchising the Freedmen in the same way they were forcibly removed from their land. When we do not learn the lessons of history, we are inclined to repeat the errors" (Hatton, 2007). William Katz, on George Mason University's *History News Network*, noted a tinge of irony in what he described as a patently racist vote. The constitutional amendment excluding Freedmen was approved on the anniversary of the Bloody Sunday march that motivated Congress to approve the 1965 Voting Rights Act. While former president Bill Clinton and other dignitaries were commemorating the historic march, "the Cherokee Nation chose a lower road." Cherokees voted to exclude Freedmen from the tribe, Katz wrote, "because [the Freedmen's] ancestors included people of African descent" (Katz, 2007). The title of a June 8, 2007 *New York Times* editorial clearly indicated that publication's position on the Cherokee vote: "The Shame of the Cherokee Nation." A subsequent letter to the *New York Times*, written by Jon Velie, lead council in a lawsuit filed by a group of Freedmen against the tribe, evoked the image of civil rights icon Martin Luther King. Velie framed the

Freedmen's exclusion from the tribe as another episode in the long struggle for equality by African Americans: "Dr. King might have said that the Freedmen are not free. They are shackled in the manacles of discrimination and exiled...while the Cherokee Nation floats in its vast ocean of prosperity" (Velie, 2007). As portrayed through the national media, the Cherokee's vote was—to say the least—unpopular.

However, the most damaging blow to the tribe came, not from the media, but from the United States Congress. On June 21, 2007, members of the Congressional Black Caucus introduced a bill threatening to "sever United States' government relations with the Cherokee Nation of Oklahoma until such time as the Cherokee Nation of Oklahoma restores full tribal citizenship to the Cherokee Freedmen disenfranchised in the March 3, 2007 vote..." (US Congress, 2007–08, p. 1). A severance between the two governments meant far more than lack of recognition of the tribe. The bill would terminate treaty-obligated payments from the US government to the Cherokee Nation, costing the tribe over \$300 million (Smith, 2008). Thus, the Cherokee Nation was faced with a tarnished image, and the threat of economic damage.

To address this exigency, the Cherokee Nation undertook a campaign of image recasting, aimed directly at members of Congress. The tribal government produced a short film titled *The Truth about the Freedmen Issue*, challenging both the accusations of racism leveled by national media and the punitive actions by the Congressional Black Caucus. According to Cherokee Nation Communications Director Mike Miller, the film was distributed on DVD format in August 2008—as H.R. 2824 was moving through the congressional legislative process toward a vote—to "Congress, congressional staffers, and other people in the federal government who are involved in the Freedmen issue" (personal communication, 8 Oct. 2008).

The failure of H.R. 2824 (Cherokee Nation, *Both Houses...*) implies that the tribe's image recasting efforts were successful, but leaves unanswered the question: How did those efforts operate rhetorically to defend the Cherokee Nation against accusations of contributing a Native American footnote to the centuries-long story of American racism—a story that Martin Luther King called "one of the most shameful chapters of the American scene" (Church leaders, p. 2). In this essay, I argue that the Cherokee Nation engaged in a process of image restoration and narrative repatriation by appropriating an existing melodramatic narrative. That melodramatic narrative, created and propagated by dominant white American culture, but appropriated by the Cherokee Nation in *The Truth*, cast H.R. 2824 as yet another instance of the US government's attempt to subjugate the tribe. I will first provide an overview of narrative—specifically, melodramatic narrative—as a method of argumentation. Then I will discuss the Trail of Tears melo-drama, as commonly understood by white America. Finally, I will conclude with implications of this analysis.

Narrative

Existing narratives are stories that are already known and shared by audiences. According to Herman Stelzner, such stories serve as resources for public argument and rhetorical expression (1971, p.163). Thomas Rosteck notes a surprising paucity of analysis of existing narrative as argument, since “elsewhere in the humanities, students of literature have long understood that when the essential elements of a well-known ‘story’ interact with aspects of a social scene and with the subjective experiences of an audience, then universal human reactions are elicited” (1992, p. 22). He cites Spenser, Swift, and Shakespeare as just three of the writers who have “utilized pre-existing narratives, well-known to their audiences, as comment on social or political issues, as strategies for description, and as invitations for response to public exigency” (ibid.).

According to Walter Fisher, narratives in general function rhetorically through shared meaning for those who “live, create, or interpret them” (1984, p. 2). Hayden White suggests that “far from being one code among many that a culture may utilize for endowing experience with meaning, narrative is a metacode, a human universal on the basis of which transcultural messages about the nature of shared reality can be transmitted” (1980, p. 6). In sum, narrative provides a template by which experiences in our social world may be measured. The Cherokee Nation’s response to the threat of funding by the federal government utilizes an existing narrative of US government oppression of the Cherokees—what I will call the Trail of Tears narrative—in a melodramatic form.

Melodrama is described by Michael Osborn and John Bakke as a form of narrative expression that provides “a way of seeing or sizing up a situation....[Melodrama] explains to an audience how and why certain events occur and rules out coincidence and chance as their causes” (1998, p. 221). Melodramatic characters possess six distinct traits (Osborn and Bakke, 1998, p. 222), the first of which is a representation of absolute morality. Melodrama presents heroes and villains as representations of pure good and evil respectively (Grimsted, 1968, p. 221). These absolute representations focus audience response on uncomplicated approval or disapproval—what Robert B. Heilman calls a “monopathy” of emotional experience (1969, p. 85).

A second trait of the melodramatic characters is preeminence, specifically in relation to history (Osborn and Bakke, 1998, p. 222). Melodrama focuses the audience’s attention “upon those who experience events, and upon their feelings of outrage, sorrow, frustration, anger and the like” (ibid). As Heilman notes:

What melodrama typically offers is the exaltation of victory, indignation at wrongdoing, the pitiableness of victims, the frustration of the indeterminate outcome, the warming participation in courage, the despair of defeat, the shock of disaster, the sadness of death. (1968, p. 95)

Such presentations allow the audience to make easy emotional choices about the events and characters portrayed through melodrama. As the choice is typically between good and evil, the audience can reasonably be expected to choose the former over the latter.

A third trait of melodramatic characters is a simplistic representation of humanity. The portrayal of a character as pure good or evil presents those characteristics synecdochally, so that any evil in a hero, or good in a villain, is denied expression. It is this trait of simplicity, according to Osborn and Bakke, that distinguishes melodrama from great literature, in which characters are far more in-depth expressions of humanity.

A fourth trait of melodramatic characters is rigidity, and along with it an inability to change. As observed by Jeffrey D. Mason “no one learns, no one changes” (1993, p. 197) in melodrama. Such rigidity is necessary to retain the dialectic of relationships within the melodrama. Growth, change, transformation, and complication would destroy the tension between hero and villain that gives melodrama its rhetorical power. “Melodramatic heroes and villains require each other” (Osborn and Bakke, 1998, p. 223).

Fifth, characters in melodrama are stereotypes, without individualistic traits. They represent class or group portraits, offering a unified group identity to the “good” and “evil” representations (Mason, 1993, pp.10–11). Any individuality expressed would “endanger the noble stereotype constructed by the rhetoric. Any form of idiosyncrasy is incompatible with the melodramatic style” (Osborn and Bakke, 1998, p. 223).

Sixth, and most importantly, melodramatic characters justify arguments. They are not interesting in and of themselves. “[T]hey do not deflect from the discursive business, but rather point directly and instantly to the rhetor’s message” (Osborn and Bakke, 1998, p. 223). Their purpose is to simplify for the audience a choice—between good and evil—and strengthen commitment to that choice. In the following section, I will demonstrate that a simplified rendering of the Cherokee’s centuries-long relationship with the US government provided the tribe with a narrative context against which the congressional attempts to cut funding was foregrounded in *The Truth about the Freedmen Issue*.

The Trail of Tears Narrative

In 1839, the Cherokee Nation was forcibly removed from its homeland in what is now the southeastern United States, and marched by military escort to Indian Territory, today the state of Oklahoma. An estimated 4,000 Cherokees died of hunger, exposure, and disease along what became known as “The trail where they cried,” or The Trail of Tears (A Brief History, no date).

Even before the removal, however, a melodramatic narrative of the relationship between the Cherokee Nation and the United States was emerging. The Cherokee removal was vehemently protested by non-Indian American citizens. In a letter to President Martin

Van Buren in 1836, shortly after a small group of Cherokees had signed a removal treaty on behalf of the entire tribe, Ralph Waldo Emerson expressed concern that:

[T]he American President and the Cabinet, the Senate and the House of Representatives, neither hear these [Cherokees] nor see them, and are contracting to put this active nation into carts and boats, and to drag them over mountains and rivers to a wilderness at a vast distance beyond the Mississippi. (Emerson, no date)

In true melodramatic form, Emerson expresses the moral dialectic of the Trail of Tears, couching the removal in terms of good and evil:

In the name of God, sir, we ask you if this be so. Do the newspapers rightly inform us? Man and women with pale and perplexed faces meet one another in the streets and churches here, and ask if this be so....The piety, the principle that is left in the United States, if only in its coarsest form, a regard to the speech of men, forbid us to entertain it as a fact. Such a dereliction of all faith and virtue, such a denial of justice, and such deafness to screams for mercy were never heard of in times of peace and in the dealing of a nation with its own allies and wards, since the earth was made. (Emerson, no date)

A full decade before the removal, in a memorial dated January 11, 1830, a group of Philadelphia citizens likewise expressed moral indignation of the treatment of the Cherokees by the US government:

[I]t is the sincere desire of your memorialists that the Government of the United States and all others who presume to act towards the Indians may be endowed not only with a spirit of ordinary benevolence, but a remembrance of solemn accountability of nations, no less than individuals, to a supreme tribunal, may purify their feelings, and direct their purposes. (Philadelphia memorial, no date).

A similar memorial drafted the same year by a group of Boston citizens, resolved that:

[W]e should regard it as a great calamity, if, in a plain case, the Government of the United States should forfeit the solemn pledges, which have been so often given to a weak and dependent ally; inasmuch as such a course would probably bring upon us the reproaches of

mankind, and would certainly expose us to the judgments of Heaven.
(Boston memorial, no date).

Emerson and the memorialists of Philadelphia and Boston portray the United States government as—if not explicitly evil—at least derelict “of all faith and virtue.” The Cherokee Nation, however, is portrayed as the hero—albeit a pitifully weak one—who is suffering at the hands of the dominant, villainous United States.

As characters in a melodramatic narrative do not vary from their stereotypical portraits (Mason, 1993, p. 197) lest the dialectic between their representative qualities be negated, we should perhaps not be surprised that the same melodramatic narrative presented by Emerson was manifested 139 years later in a popular rock song by Paul Revere and the Raiders. Indian Reservation, sung from a first-person Cherokee perspective, with the implied villain—the US government—referred to only as “they,” was a number one hit on the Billboard charts in 1971. The song vilifies the “they,” who “put us on this reservation,” “took away our Native tongue, taught their English to our young,” and “took away our way of life” (Loudermilk, 1971). The popularity of the song—it spent twenty-two weeks on the charts and was Columbia Records best-selling record in 1971 (Romanowski and George-Warren, p. 831)—implies that the Trail of Tears melodramatic narrative still resonated in late twentieth century popular culture.

As recently as 2005, Mariana Achugar and Mary Schleppegrell noted the Cherokee removal as one of two well-known historical events, along with the Great Depression, in which well-developed causal relationships between events were not well presented in American history texts. Simply put, the two historic episodes are presented too melodramatically to provide lessons in causal relationships to American school children.

It is noteworthy that the modern Cherokee Nation, on its official website, does not appear to subscribe whole-heartedly to the existing Trail of Tears melodramatic narrative. In a page on the site dedicated to a history of the Trail of Tears, at least partial responsibility for the removal of the tribe from its ancestral homelands is attributed to a group of Cherokees who signed the Treaty of New Echota, which ceded the traditional lands of the Cherokee Nation to the United States. In signing away the Cherokees’ claims to their homeland, those individuals:

...also signed their own death warrants. The Cherokee Nation Council earlier had passed a law that called for the death penalty for anyone who agreed to give up tribal land. The signing and the removal led to bitter factionalism and the deaths of most of the Treaty Party leaders once in Indian Territory. (Brief History, no date)

This recognition of the complexities—and complicities—of individual Cherokees during the time of the removal, however, minimizes the dialectic tension between the characters of the melodramatic Trail of Tears narrative. In the rhetorical deployment of that narrative, the tribe adhered to the melodrama, as it exists and is commonly understood by the dominant non-Indian American culture.

Drawing on that existing Trail of Tears narrative, *The Truth about the Freedmen Issue* presents the exigency at hand—the threat of funding cuts by Congress—in the melodramatic terms of the long and often contentious relationship between the US government and Cherokee people. In the opening disembodied narration of the video, Cherokees are described as a people “struggling to preserve a cultural heritage.” The Trail of Tears narrative is evoked as that “cultural heritage” is described as “rich in history.” Enthymematically, the rich history of the Cherokee Nation, to many—if not most—Americans, *is* the Trail of Tears narrative. According to Kathleen McCay, former director of special projects at the Cherokee Heritage Center, a museum in the Cherokee capital of Tahlequah, Oklahoma, the oppression of the Cherokees by the US government is the most salient aspect of Cherokee history for many visitors to the museum: “The white people who show up are very apologetic because they’re very familiar with that storyline of the Trail of Tears” (personal communication, September 10, 2010).

That narrative is evoked quickly again in *The Truth*, when H.R. 2824 is described as an effort by some congressional members to “terminate the Cherokee Nation, casting it aside, and cutting off necessary funding for its neediest residents.” Five minutes into the film, that description of H.R. 2824 is restated, almost word for word, as the Trail of Tears narrative is presented visually in a transition from stock footage of the U.S. Capitol building—the lair of the melodramatic villain—to a video clip of a small Cherokee girl: a most innocent representation of the victimized hero. The eighteen-second transition exudes melodrama, in both a narrative and a visual sense.

The melodrama is evoked again in a vignette featuring Bud Squirrel, a spokesperson for the Cherokee Nation’s food distribution center. Squirrel explains the purpose of the center—providing food to the neediest members of the tribe—and then describes the potential results of the passage of H.R. 2824: “It would be a devastating blow to a lot of people—140,000 individuals that receive help [every] year.” While the vignette begins visually with Squirrel sitting in an aisle of the food distribution center, it transitions to elderly tribal members and children walking through the center, filling shopping carts with food. Again, the melodrama of the enthymematic narrative is eclipsed only by that of the visual imagery.

The melodramatic narrative becomes increasingly explicit, however, as the video draws to a close. The disembodied narrator states that “H.R. 2824...unnecessarily punishes those who do not deserve punishment” as the visual images transition between a Cherokee mother and child playing in a park and a group of traditionally dressed elderly

Cherokee women singing in a choir. This scene is immediately followed by a vignette of Cherokee tribal member Karen Comingdeer, who expresses the interpretation of H.R. 2824 in terms of the Trail of Tears narrative in the most explicit manner yet implemented in *The Truth*: “These members of Congress are trying to play judge, jury, and executioner of the Cherokee Nation....”

The melodramatic Trail of Tears narrative is presented most explicitly, however, in the final vignette of the video. Angela Pettit was presented early in the video as a victim of uterine cancer who relies on federally funded Cherokee Nation healthcare services for her very existence. As slow piano music plays in the soundtrack background, Pettit makes a second appearance, evoking the melodramatic relationship between the US and Cherokee governments to deliver the final personal narration of the video: “If I could speak to Congress, I would tell them to please reconsider going forward with this bill.” As Pettit’s voice cracks with emotion, she continues: “Because, the way I feel in my heart about it is, the Native Americans have a lot of perseverance, and we have been put through so much, if this goes through, it’ll be—it’ll be another round of trying to terminate us. There are thousands and thousands of lives in their hands.”

By drawing on the existing Trail of Tears melodrama, *The Truth* presents the argument that the proposed punitive congressional action against the Cherokee Nation is yet one more episode in the narrative of good versus evil that has characterized the relationship of the two governments. Audience members—congressional representatives—are presented with two choices: Choose the side of good, and vote against H.R. 2824 on behalf of the victimized heroes of the narrative; or, align themselves with their predecessors in the halls of power on Capitol Hill, and continue the villainous subjugation of the long-suffering Cherokee people by passing the bill.

Conclusion

In this essay, I have argued that the Cherokee Nation, in *The Truth about the Cherokee Freedmen*, appropriated a common melodramatic narrative—about the tribe, but not created by Cherokees themselves—to counter proposed congressional punitive measures.

I will conclude by suggesting three implications of this analysis. The first involves resistance to biopolitical strategies implemented by a dominant governing power; the second illuminates our understanding of melodramatic narrative as a form of argumentation; and the third addresses the political import of Native American narrative sovereignty.

The Dawes Rolls, the 1906 U.S. government census of Cherokees and other Native tribes, created a standard for “Indian-ness” still implemented today to determine who is, and who is not, an “official” federally recognized Indian. Each Cherokee Nation member is issued a Certificate of Degree of Indian Blood by the US government (Conley, 2008, p.

35). That “Indian Card,” as it is called, indicates what fraction of Indian blood each person possesses. That “blood quantum” is determined by the number of generations between a Cherokee and his or her Dawes Roll-signing ancestor, and whether any non-Indian relatives are present in those generations (Kathleen McCay, personal communication, September 10, 2010). Certainly, no attempt is made in *The Truth about the Cherokee Freedmen* to protest the actual existence of that biopolitical standard. However, the film does represent a successful attempt by the tribe to maintain that standard within bounds acceptable to the majority of Cherokee voters, as evinced by the passage of the 2007 tribal constitution amendment.

In terms of the actual argumentative strategy of the film, *The Truth about the Cherokee Freedmen* presents a functionalist approach to melodramatic narratives, specifically those existent and salient to a particular audience—in this case, the dominant American culture. In their study of the competing melodramas constructed during the 1968 Memphis sanitation workers’ strike, Osborn and Bakke note that “[w]e determine melodrama’s rhetorical significance by measuring its impact upon the people and events that are engaged in controversy” (1998, p. 229). By Osborn and Bakke’s standard, the Trail of Tears melodrama, as it was deployed in *The Truth*, appears to pass the test of “rhetorical significance.” Moreover, it appears to have been implemented strategically, rather than emerging from the milieu of an ongoing conflict, as was the case of the melodramatic narratives of the Memphis sanitation workers’ strike. An examination of the political leadership of the tribe provides support for this supposition.

Chad Smith, the principal chief of the Cherokee Nation during the Freedmen controversy, is also an attorney and historian who has designed a Cherokee history course (Chad “Cornstassle” Smith). From the three-inch-thick text for the course, we know that nineteenth century Cherokees voluntarily agreed to the treaty that led to the horrors experienced on the Trail of Tears, though the majority of the tribal members were forced to leave. We know that the tribe received a payment of five million dollars for their ancestral homelands in what is now Georgia, North Carolina, and Tennessee. We know that, before the removal, many Cherokees were far wealthier than their white neighbors in the state of Georgia, and lived in extravagant Southern-style mansions. We know Cherokees, like many other wealthy Southerners, engaged in the odious practice of human slavery—a fact that eventually re-emerged in the Freedmen controversy (Smith, 1999). These documented historical observations, all of which negate the dialectic of the melodrama, were presented in a textbook edited by the executive leader of the Cherokee Nation government. He is obviously aware of the oversimplification of the Trail of Tears melodrama as it is commonly understood by many Americans. Yet, employed as a rhetorical strategy by the tribe, the melodrama was effective in thwarting a serious financial crisis. That efficacy implies a strategy of existing melodramatic narrative that may serve well in countering accusations of racism in an endemically race-conscious

society. It should be noted, however, that the marginalized nature of both the Cherokees and the Freedmen make this specific example a unique situation indeed.

The inconsistencies between the Trail of Tears melodrama and the recorded history of the tribe point to another implication as well, particularly in light of the obvious fact that the leadership of the Cherokee Nation is well aware of those inconsistencies. The rhetorical implementation of a melodrama about Cherokees—but not created by Cherokees—represents a unique instance of “narrative sovereignty,” a concept that Arnold Krupat describes as Native Americans’ agency in the expression of their own stories, in their own ways (2007, p. 629). The Cherokee Nation’s exercise of narrative sovereignty in this case serves a pragmatic purpose. In exercising narrative sovereignty, the tribe defended its political sovereignty, countering Congressional efforts to force the tribe into service as a “federal instrumentality” as described by Alex Tallchief Skibine (2000). Tribal legal systems have, over time, become increasingly similar in structure to the federal government system. As the structures of those tribal systems have become more colonized, so have the processes, so that tribal governments have become little more than conduits of federal governmental control over the lives of Native peoples. Through such processes, Skibine argues, tribes “stand to lose the uniquely ‘tribal’ or ‘native’ component of their sovereignty” (2000, Section III, Interference with Tribal Culture). The exercise of narrative sovereignty by the Cherokee Nation in *The Truth* couches H.R. 2824 as not only a colonizing process, as described by Skibine, but also as the most recent subplot in the Trail of Tears melodramatic narrative.

Michelle H. Raheja defines the appropriation of modern film, video, and new media technologies in Native American creative works as “visual sovereignty.” Such acts have “the potential to both undermine stereotypes of indigenous peoples and to strengthen ... communities in the wake of genocide and colonialism” (2007, p. 1161). I would suggest that Native American expressive sovereignty—be it narrative or visual—is not limited to artistic works. Such expressions can serve to strengthen, not only communities, but political sovereignty itself. The Cherokee Nation’s appropriation of the Trail of Tears melodrama constitutes such an act of sovereignty, strategically implemented for political purposes. In *The Truth about the Freedmen Issue*, Cherokees reclaimed their own story—modified though it was from years of melodramatic service to the dominant culture—and expressed it in their own way and for their own purposes, not “in the wake” of oppression, but as a weapon against it.

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BIOTECH

TWEAKING GENES IN YOUR GARAGE: BIOHACKING BETWEEN ACTIVISM AND ENTREPRENEURSHIP

by Alessandro Delfanti

Garage biology, biohacking, and citizen biology are all expressions that describe a new and emerging movement of amateurs conducting life sciences outside of traditional professional settings such as university and corporate labs. Among several groups of amateur biologists, DIYbio (Do-it-yourself Biology, www.diybio.org) is probably the most well known organisation. It is a network that was established in Boston in 2008 and is composed of several groups in major US and European cities. Their aim is to provide non-expert citizen biologists with a collective environment and inexpensive open source tools and protocols for biological research, which can be conducted in weird places such as garages or kitchens. Although, so far no important scientific innovation has come from citizen biology, the novelties that characterize it have been described in terms of open and peer knowledge production, danger to public health, co-optation, democratic (or apocalyptic) change in the relationship between experts and non-experts, ethical dilemma and public engagement with science (see for example Bloom, 2009; Kelty, 2010; Ledford, 2010; Schmidt, 2008). Yet, a different perspective is possible. Garage biology can be interpreted as an example of a direct transposition of free software and hacking practices into the realm of cells, genes, and labs.

Thus, in one sense, garage biology is part of a well-known story: the emergence of online platforms for the open and collaborative production and sharing of information and knowledge (Benkler, 2006). Within this general framework, in the last few years, we have witnessed the emergence of science movements that rely on distributed and collaborative web tools that allow a proactive approach to information production and to the shaping of the techno-scientific environment in which they exist. For example, in order to share data and information and to organize offline groups that are geographically dispersed (Delfanti, 2010). These movements represent today's expression of an old phenomenon that Clifford Conner (2005) called the *People's History of Science*, a long history of the participation of carpenters, mechanics, miners, and outsiders in knowledge production. It is not difficult to

imagine including citizen biology in this narrative, as it is not limited to the expert community but rather crosses and opens the frontiers of expertise and scientific institutions. On the other hand, though, one might ask if citizen biology represents a challenge to Big Bio, the ensemble of big corporations, global universities, and international and government agencies that compose the economic system of current life sciences. Garage biologists play a role in hacking biology since they embody an active approach in the shaping of the institutional environment in which biological research takes place and in the questioning of the proprietary structure of scientific information: who owns and disposes of biological data and knowledge? In this sense, this movement can be seen as an actor in the shaping of the relationship between research, academia, and the market.

In fact, hackers provide a multifaceted example of a culture attuned to the economic dynamics of the software world made of start-ups, people escaping from academia, corporate networks, garages, and computer science departments. Hacker ethic is composed of a formalised set of moral norms. For example, Steven Levy (2010), defines the ethic through the following positions: access to computers should be unlimited and complete; all information should be free; authority should be mistrusted; hackers should be judged by their hacking, not bogus criteria such as degrees, age, race, or position; you can create art and beauty on a computer; and computers can change your life for the better (other works on hacker ethic, and other versions of it: Himanen, 2001; Jesiek, 2003; Moody, 2001; Raymond, 2001). Hackers also highlight the ambivalent role of garage biology in digital capitalism and neoliberalism. The history of hacking, computers, and software, as well as the battles around information technologies and intellectual property are fully integrated in the history of neoliberalism and the development of informational capitalism (on this ambivalence see Castells, 2005; Coleman, 2004; Coleman and Golub, 2008; Johns, 2009; Mattelart, 2003).

The members of DIYbio have straightforward relationships with the hacker movement. For example, their models are hackerspaces—collectively run spaces that are now widespread in Western countries—where people gather to hack, talk about, and work on computers; spaces where subscribers for a low individual monthly rate can find computers, tools, and other people interested in hacking. Sometimes, when they cannot open their own labs, DIYbio groups collaborate directly with existing hackerspaces in order to set up small labs, or ‘wet corners’ within the computer hardware that fills urban hackerspaces. DIYbio members and groups are also immersed in a dense entrepreneurial environment where start-ups and new open science companies try to navigate their way through the dominance of the Big Bio market.

DIYbio.org

An early explicit reference to the possibility of a biohacker way of conducting life sciences research can be found in 2005. Rob Carlson, a physicist who works in the field of genetics, wrote in a *Wired* article: “the era of garage biology is upon us.” Carlson was working at a Berkeley lab and was inspired by the history of the computer revolution that had happened thirty years before in San Francisco Bay Area garages (Golob, 2007; Ledford, 2010). Three years later, exactly in the other epicentre of hacking history, DIYbio was born. In fact, the movement started in Boston in 2008 stemming from an idea by Mackenzie Cowell, a young web developer, soon joined by Jason Bobe, the director of community outreach for the Personal Genome Project at Harvard Medical School. At the first public meeting, held in a pub in Cambridge, Massachusetts, twenty-five people turned-up. By 2010, about 2,000 people had subscribed to the mailing lists and DIYbio counted dozens of local groups, with new chapters popping up in places as far from Massachusetts as Madrid, London, and Bangalore. DIYbio is not a formal organisation but rather an open brand anyone can use for citizen science projects, coupled with a global mailing list where most discussions are conducted and decisions taken. In collaboration with or partially overlapping DIYbio, several other citizen biology projects have emerged, forming a complex network of different experiences.

Today, garage biology consists of elementary scientific practices, such as DNA extraction or bacteria isolation with household tools and products. In most cases, media attention overstates and mythologizes the poor scientific practices: right now garage biology is not a site of research and innovation. However, by the end of 2010 DIYbio groups had begun several scientific projects. The Pearl Gel System is an inexpensive open source gel box that can be used to run electrophoresis (www.pearlbiotech.com). One garage biologist has created a centrifuge that works with an inexpensive and diffused power tool gadget. The design for the centrifuge is free and can be downloaded and fabricated with a 3D printer (Ward, 2010). In the BioWeatherMap project, people are asked to collect bacterial samples from crosswalk buttons in their cities in order to analyse the geographic and temporal distribution patterns of microbial life in a highly distributed way (<http://bioweathermap.org>). SoCal DIYbio is planning to use Amazon cloud computational power and JCVI Cloud Biolinux software (<http://cloudbiolinux.com>) in order to conduct grassroots bioinformatics and data analysis. In New York, DIY biologists are extracting and genotyping people’s DNA at public events.

DIYbio has also established dialogues and relationships with universities, private companies, media, and the United States Government. DIYbio has raised concerns about security and safety among biologists, ethicists, and government agencies (Schmidt, 2008). This is why the movement has an intense relationship with the Federal Bureau of Investigation (FBI) and with the Presidential Commission on Bioethics. After the problems faced by people who performed garage biology in the United States during the

years after 9/11 along with anthrax hysteria, both the government and DIYbio want to prevent possible problems, misunderstandings, or surprises. In fact, the media employs images regarding biohacking of biosecurity and even bioterrorism: are crazy kids playing with dangerous bugs that some terrorist might use to spread unknown diseases and panic? Indeed, “Hacking is good. But you have to admit the word has a bad reputation” as argued in a *Nature Biotechnology* article (Alper, 2009, p. 1077). Furthermore, DIYbio has appeared in dozens of media reports in newspapers and magazines such as *The Guardian*, *BBC*, *The New York Times*, *The Boston Globe*, *The Economist*, *Wired*, and the like. Also, several mainstream scientific journals have covered the DIYbio rise, for example, *Nature* and *EMBO Reports* (Alper, 2009; Ledford, 2010; Nair, 2009; Wolinsky, 2009).

Through their website and several local online spaces, the members of DIYbio organize collaborative research projects and share scientific data and information. The people who compose DIYbio are diverse, and they generally belong to three different groups: young biologists, such as graduate or even undergraduate students; computer scientists and ‘geeks’ who want to tinker with biology; and bioartists interested in applying the critical approach of DIY to biology. Some members are concerned with the fact that no real garage labs exist and that access to biological tools and lab equipment is hard to get, expensive, and strictly regulated; therefore, a real garage biology movement is far from appearing. Yet, in 2010, DIYbio and other citizen biology projects opened several community spaces such as Sprout in Massachusetts and GenSpace in New York.

Biorebels

DIYbio is often referred to as a biohacker community, and its members freely use that type of definition. In addressing the question “Who is a biohacker?” found in the DIYbio website FAQs (<http://openwetware.org/wiki/DIYbio/FAQ>), the following is cited: hacking subculture, the hacker ethic of “biologists, programmers, DIY enthusiasts”, the Homebrew Computer Club and the Free Software movement, the importance of enjoying “hacks” and finally the “biopunk” attitude. One of the major public events that presented DIYbio to the world was the hacker conference CodeCon, which, in 2009, replaced one third of its normal program with a special focus on biohacking (<http://www.codecon.org/2009/program.html>). Media narratives about DIYbio use the word *biohackers* ubiquitously, together with similar phrases such as, for example, *life hackers* (Ledford, 2010). They often draw comparisons between garage biology and the Homebrew Computer Club, the headquarters of Bay Area hackers of the 70s such as Steve Wozniak, Bill Gates, Steve Jobs, and so on (Bloom, 2009; *Economist*, 2009; Golob, 2007; Johnson, 2008). Yet, some individuals linked to DIYbio prefer to define themselves as makers, craftsmen, enthusiasts, hobbyist, or amateurs. They often agree, though, that the garage is an important symbol with respect to the love the media express for DIYbio. Garage labs are

places where one can develop his or her curiosity, creativity, and desire to tinker with genes and cells. After all, the hackers that accomplished the computer revolution were nothing but “a bunch of unshaved guys in a garage” (Golob, 2007). Press accounts of DIYbio and the members I interviewed emphasize how garage biology is to be considered part of the tradition of American innovation—think about Apple or Google and the mythology related to the Silicon Valley garages where they began (Levy, 2010; Vise and Malseed, 2006). After all—who knows?—“the future Bill Gates of biotech could be developing a cure for cancer in the garage” (Wohlsen, 2008).

Other similarities between DIY biology and hacking reside in the obstacles biohackers identify in Big Bio. In DIYbio narratives, universities and corporations are flawed because they rely on specialization and hierarchical systems, but also because they build monopolies and steal individual creativity by means of intellectual property rights. Big Bio is neither open nor inclusive. Big Bio labs are indeed perceived as similar to the Hulking Giants, the huge mainframe computers of the 60s that hackers regarded as difficult to access and that were controlled by a “priesthood” of technicians (Levy, 2010). Perhaps, as Jason Bobe said, “there will always be the giant players—the biotech and pharmaceutical companies—in life sciences” (Nair, 2009, p. 230) but the widespread diffusion of information and sequencing technologies will allow amateur biologists to contribute to the scientific enterprise.

Of course, fun and hedonism are also important ingredients of DIYbio culture. As DIYbio founder Mac Cowell explains, DIYbio gives people the justification for doing silly or weird things because, as in many narratives about rebel science and hacking, innovation arises from having fun and playing with biology. Cowell quit his job because “he wasn’t having fun anymore” and he sold his car to start DIYbio (Boustead, 2008). Exactly as Wozniak sold his Volkswagen van to start Apple in his garage (Levy, 2010). Of course, hackers do not always like the sunlight. On the ninth floor of building twenty-six at MIT, hackers would work all night in order to avoid the ‘priesthood’ that wasted precious time using university computers for dumb tasks, but also because of their weird circadian rhythms and lifestyle. And, so it is with biohackers: “you’ll be tweaking genome sequences on your computer late at night” (Carlson, 2005). You will not be able to stop the passion of hacking.

References to hacking are dominant, but the use of the term ‘do-it-yourself’ positions DIYbio within an old American movement of makers and inventors who work in their garages, giving it a rebel flavour. The expression DIY was broadly adopted in the 80s by the punk-hardcore movement both in the USA and Europe. Now, this movement is witnessing a renewal and is part of a broader social phenomenon centred around the convergence between online peer production; the diffusion of inexpensive open source tools and machinery (such as 3D printers); and a widespread ‘maker’ culture (Niessen, 2011). DIYbio is part of this movement, the main communication tools of which are

magazines such as *Make* (<http://makezine.com>) or websites such as Instructables (www.instructables.com). There is also a link between biohacking and craftsmanship. Christopher Kelty, one of the few scholars who has started addressing garage biology from the point of view of its sociological and anthropological dimensions, argues that three figures can be used to understand citizen biology: namely, outlaws, hackers, and Victorian scientists (Kelty, 2010). DIYbio, in some media accounts, is “a throwback to the times when key discoveries were made by solitary scientists toiling away in their basement labs” (Nair, 2009, p. 230). In addition, one of the founders of DIYbio, Jason Bobe, draws this comparison: “in some sense, we’re returning to some of the roots of biology, where scientists had laboratories in their parlors. You know, it was parlor science. It was something that didn’t actually happen often in institutional settings; it was something that happened at home” (National Public Radio, 2009). For Drew Endy, a Stanford bioengineering professor who is one of the strongest backers of the garage biology movement, “Darwin may have been the original do-it-yourself biologist, as he didn’t originally work for any institution” (cited in Guthrie, 2009).

Activism and Citizenship

For its members, DIYbio is not only about biohacking but many other things as well. It is public engagement with science, open source software, decentralisation, participation, and innovation. When asked to interact with the FBI or with the United States Presidential Commission for the Study of Bioethical Issues, DIYbio proved capable of finding ways to position itself in order to avoid backlash and problems. For example, they decided to highlight that citizen biology has an educational side, and that it could provide inexpensive hardware or kits to be used in schools or community labs, besides giving people a vibrant online community wherein to discuss science. DIYbio might become a cultural interface for biology, a place for people to explore biotech. In their letter to the Presidential Commission, members argued that “DIYbio.org was created to help build a positive public culture around new biotechnologies and practices as the number of contributors to the life sciences extends beyond traditional academic and corporate institutions” (DIYbio 2010).

There is the classic problem of the relationship between science and society at stake: participation. It is easy to state that P2P practices are changing and increasing the ways of participating in the production of scientific knowledge. But does this increase consist of a real shift towards democratizing science? Does it actually affect the asymmetrical relationships between citizens and experts? Scholars who have tackled this relationship have generally been very prudent in picturing participation in science. Often, ambivalence is highlighted. Callon and Rabeharisoa (2003) point out that “research in the wild”, or the intervention of patients in biomedical research, involves their active participation in

establishing new collectives that include new subjects. Also, the renegotiation of the relationship between research in the wild and research conducted in professional settings involves issues of power, epistemology, and the presence of incentives of a new and different nature. The changing panorama of expertise urges lay people to get actively involved in techno-scientific decisions in order to change the world and not just observe it (Collins and Evans, 2007). While referring to ‘geeks’ and the diffusion of free software practices outside the computer world, Kelty (2008, 2010) argues that the public can avoid passivity and instead be “aggressively active.” Do-it-yourself science certainly challenges mainstream science, asking for more access and involvement. But amateurs are also redefining what ‘the public’ means in the current configuration of science-society interaction: an active role substitutes the simple encounter between science and its public and creates new spaces of interaction and participation (see Nowotny, 1993). DIYbio is a site where different approaches coexist. For example, DIYbio amateurs who work outside of traditional professional settings can have “access to a community of experts” (<http://openwetware.org/wiki/DIYbio/FAQ>).

This is not too different from the perspective of the Critical Art Ensemble (CAE), an artist-activist group whose works and writings are considered by many garage biologists as a foundational myth (www.critical-art.net). In 2004, one of the CAE members, Steve Kurtz, was arrested under the suspicion of bioterrorism when, after his wife died of a heart attack, the FBI found cell cultures and lab equipment in his apartment (Simmons, 2007). CAE used amateur biology as a tactical practice in an artistic context in order to create what they called “a counter symbolic order” against the power of Big Bio. The public space their practices aimed to create was intended to be “one where the authority of the scientific personality is not so powerful. The hierarchy of expert over amateur has to be suspended in this context. If experts have no respect for the position of amateurs, why would they come to a place where dialogue is possible?” (CAE, 2002, p. 66).

Yet, the vision of citizen biology as a site for participation has a completely different side. While for CAE, the goal was to enable people to challenge the capitalist face of Big Bio by providing conceptual and political tools, in some biohackers’ view, participation could help overcome some of the problems faced by Big Bio itself. There is an ambivalence, though, with respect to the political and economic role of this sharing: is it going to be part of an expropriated gift economy (Barbrook, 1998; Levina, 2010) or rather a resistance against the intellectual property rights enclosures that sustain Big Bio monopoly power? The biocitizenship imagined by DIYbio includes very different features, and the answer to the question is not clear among garage biologists.

Free as in Free Genes

When it comes to openness and sharing, DIYbio members would certainly agree with the free software foundational definition: “free as in free speech, not as in free beer.” Access to knowledge is another important framework under which DIYbio operates, as it enables citizen participation in science. Indeed, openness is one of the core legal implications and needs of user-led science. In “Open Science: Policy Implications for the Evolving Phenomenon of User-led Scientific Innovation,” Victoria Stodden (2010) analyses citizen science in relation to the access and sharing of knowledge. Public involvement as well as collaborative models between scientists and non-scientists require policy solutions that support not only data and knowledge sharing, but also the sharing of benefits deriving from it. Drawing from computational science examples, Stodden points out that the incentive model of citizen science is closer to that of open source software than to that of Big Bio. But for DIYbio, openness refers both to the open access to data and knowledge according to an explicit open source model, and to open participation directed to *all*, regardless of professional recognition from Big Bio. The DIYbio online FAQ page states that the organisation offers the “groundwork for making this field open to anyone with the drive to become great at it” (<http://openwetware.org/wiki/DIYbio/FAQ>). In which case, then, the free software model would apply to genes and cells?

In typical hacker fashion, garage biologists have different modes for finding the tools and machinery needed for their labs. These tools are usually expensive or difficult to buy since companies do not often sell equipment, reagents, and so forth to individuals for safety and regulatory reasons (Alper, 2009), but also because they do not perceive the possibility of a non-institutional market. This constitutes a threshold that is hard to overcome. The story of two PCR machines can explain how DIYbio answers this problem. In San Francisco, two young electrical engineers, Tito Jankowski and Josh Perfetto, are developing OpenPCR, a project to build an inexpensive Polymerase Chain Reaction machine under open source principles: anybody would be able to download the instructions to build it and the software to run it, and thus have an easy-to-use \$400 machine at their disposal. As with other DIYbio projects, the money needed to develop OpenPCR was raised with a crowd-funding scheme through the website Kickstarter (<http://openpcr.org>). In Los Angeles, SoCal DIYbio found two used—and broken—PCR machines that the group fixed using members’ electro-technical skills and adapting free software to control them. Other DIYbio techniques for putting together inexpensive equipment include stealing, buying used stuff such as benches or glassware from university labs, or using the university address of their graduate student members in order to get material shipped from companies. They also use skills acquired working in ‘ghetto labs’ in universities that were not well funded. Again, garage biologists have an ambivalent relationship with big institutions. On the one hand, they rely heavily on universities for material, education, used machinery, and other needs. Yet, they also lack

recognition with respect to their scientific projects. In 2009, for example, DIYbio was excluded from the annual iGem competition, where dozens of teams of undergraduate students from all over the world compete to design and build the best biological systems and operate them in living cells (http://ung.igem.org/Main_Page; see also Alper, 2009).

Intellectual property rights are not perceived as evil necessarily. Garage biology surely adopts an open attitude, using open access tools, Creative Commons licenses, and so forth when it comes to sharing data and protocols of knowledge. For some members there is a political commitment to open science: to prevent people from practising science is against freedom of thought. But for others, openness is a means towards a different end: entrepreneurship. Openness is a way of defying incumbents and restoring the freedom of the market against the obstacles represented by the broad patents owned by Big Bio: a typical anticommons effect (Heller and Eisenberg, 1998). Thus, often when DIY biologists talk about innovation happening outside traditional settings such as the academy and corporations, they also want to highlight that openness is not only good per se but also part of the strategy against Big Bio monopoly power. Indeed, biohacking is laden with anti-institution and anti-bureaucracy claims. Giving people inexpensive and widespread tools for biology, DIYbioers want to avoid academic paternalism and demystify ‘official’ science. For example, even though many members are getting their doctorates, the importance of the normative, institutional course of scientific education is not taken for granted. One important barrier of entry for people who want to practice biology is formal education, but garage biologists are often convinced that participation in DIY projects is more important than a formal, ‘normal’ university career—something they want to demystify (Wolinsky, 2009). According to Jason Bobe (2008), a DIYbio founder, we are going to see a scientific renaissance that will be funded and enacted outside the incumbents of Big Bio and their slow and bureaucratic processes. The peculiar feature of this renaissance is that “it’s going to take place outside of ‘science proper’, away from universities which dominate now, and funded out-of-pocket by enthusiasts without PhDs.” Moreover, formal education is an aspect of Big Bio that garage biologists cannot stand because it is the expression of the power of an old boy network: “Nowadays, biology is like a medieval guild. Firstly, you have to get a PhD, but if you want to practice then you need venture capital, otherwise you don’t have the tools” (Bloom 2009).

In fact, garages are spaces where people can work outside of institutions in order to avoid patenting their findings and inventions through the university. For some DIY biologists, this is a problem related to individual rights rather than a more general problem of knowledge privatisation and academic capitalism. They want to keep their intellectual property rights and not remise them to the big institutions they work for in their daily jobs.

You do not Need a PhD to do Biology

Thus, DIYbio embodies different faces of hacking such as openness regarding data and knowledge sharing as well as openness regarding the doors to scientific institutions, but also rebellion, hedonism, passion, communitarian spirit, individualism, entrepreneurial drive, and distrust of bureaucracies. DIYbio is an interesting case because it includes all the cultural and political ambivalence of hacker ethic and FLOSS practices (Barbrook and Cameron, 1996; Coleman, 2004; Coleman and Golub, 2008). Up to now, the results of garage biology have been modest. So, from the scientific viewpoint it is hard to state that they are actually hacking DNA and cells, and we do not know if they will be able to hack them in the near future. Yet, DIYbio is making biology hackable in several ways. First, the kind of acknowledgment and incentives they recognize are not always related to the ones of institutional science: a good hack does not need to be peer-reviewed, though it surely has to be shared with other biohackers. You do not need a PhD to do biology. Second, garage biologists use informational metaphors and aim at standardizing genetics in order to make it inexpensive and more easily accessible. Third, they are opening community spaces for people to conduct biology outside the boundaries and limits of Big Bio. Finally, they are trying to open up the boundaries of life sciences entrepreneurship by experimenting with new business models based on open source approaches.

Through making biology hackable in these different ways, garage biology is producing a picture of a different way of conducting research in the life sciences: more open and horizontal, within a mixed constellation of different actors such as start-ups, universities, individuals, community spaces, and with a prominence of small and open companies instead of Big Bio slow giants. With its radical requests for openness and inclusion and with its rejection for institutional prerogatives and constraints, garage biology surely challenges many assumptions about public participation in scientific knowledge production. Citizen scientists and users contributing to science claim to be part of the scientific process on almost any level. They point to a problem in the current distribution of power over knowledge (Kelty, 2008). Distributed social production has already proven to be enormously productive in many fields of knowledge and DIYbio claims a positive change accompanied by a redistribution of power. Big Bio will have to take into account amateurs' needs and interests, as companies and scientific institutions are asking citizens to contribute by crowd-sourcing knowledge, sharing and analysing data, or performing scientific research (Delfanti, 2010; Hope, 2008; Levina, 2010).

The Ambivalence of Biohacking

Garage scientists depend on big science but try to live beyond its frontiers, in a no man's land: they are somehow *outlaws* (Kelty, 2010). This has important implications for the relationship between different types of expertise, as I argued above. But here I also want

to draw a comparison between garage biology and other forms of production situated outside the boundaries of institutions. In *Convergence Culture*, Henry Jenkins (2008) depicts the clashes that involve fans and mainstream media industries. Fan creation ‘in the wild’, as I would say to connect Jenkins with studies on the participation of lay people in biomedical research, can be a rich resource that companies can harness to capitalize new content and get in touch with their public (Arvidsson, 2008; Terranova, 2000). On the other hand, companies are always challenged by content creation that happens outside their boundaries because they need to control it in order to avoid injury, and this can be an expensive and puzzling task. The pessimistic side of this balance is represented by the exploitation of creativity and appropriation of free labour by greedy corporations (Barbrook, 1998). This description somehow echoes Marxist ideas of the relationship between capital and labour. Italian autonomist Marxists have, since the late 50s, argued that workers’ struggles are one of the main engines of technological innovation and of capitalistic transformation and evolution. Yet capital is never able to fully control workers’ social practices, nor to reconcile its inside with its outside. This very edge is where capital struggles to survive, and feeds on new ideas and solutions, and therefore evolves. Struggles against exploitation are both the driving force and the opposition of capital (Panzieri, 1976; Tronti, 2006).

Of course, garage biologists are neither workers struggling against capital, nor fans shooting a short movie of the Star Wars saga without the authorisation of George Lucas, but they have an ambivalent role with respect to Big Bio. One interesting question is whether in the future their hacks will favour, change, or disrupt today’s life sciences incumbents. They challenge, in new and deeper ways, the separation between the roles of experts and non-experts. They refuse the absolute authority of universities on scientific recognition and of both academia and industry on intellectual property rights. But they also represent an attempt to participate in new ways in an innovation regime that includes universities, corporations, start-ups, patients’ associations, and so forth. DIYbio often refers to the possibility of developing a new market for biology tinkering tools or to the possibility for small companies to rely on open science practices not patents.

Less than ten years ago, CAE was highly sceptical about the possibility of a corporate side of amateur biology when it argued that “even entrepreneurs do not seem to have any interest in finding a way to capitalize on this divide” between experts and amateurs (Critical Art Ensemble, 2002, p. 123). Yet, an important act of DIYbio is this precise investment in the role of entrepreneurship and corporations as a way of sustaining a possible biohackers movement. In this sense, again, DIYbio’s relationship with Big Bio is ambivalent. The anti-bureaucracy side of garage biology is trying to challenge Big Bio incumbents. Garage biologists would like to dismantle monopolies based on intellectual property rights, capital-intensive laboratories, and scientific expertise. However, most of them are not interested in a critique of academic capitalism or biocapitalism, but rather in

the possibility of opening up new markets where smart, small-scale, open source models could compete with Big Bio and its Hurling Giants. Others hope Big Bio will finance their activities, recognizing biohackerspaces and biohacker communities as innovation incubators where new ideas, start-ups, and entrepreneurs might be born in the near future. Both models are similar to free open source software economic models. Garage biology represents a shift towards a more open approach to life sciences. It challenges the incumbents of the current life sciences system, what I have called Big Bio, to highlight the role of big corporations, global universities, and international regulatory agencies. Yet, it also shows how this open science is strictly related to entrepreneurship, academic capitalism, and neoliberalism.

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ON CREATING LIFE AND DISCOURSES ABOUT LIFE: PESTS, MONSTERS, AND BIOTECHNOLOGY CHIMERAS

by Pau Alsina and Raquel Rennó

“While genetic studies appear to be the mythical guise of pure science and objective knowledge about nature, they turn out underneath, to be political, economic and social ideology.” —*Richard Lewontin*

“One would have to speak of bio-power to designate what brought life and its mechanisms into the realm of explicit calculations and made power-knowledge an agent of transformation of human life. This doesn’t mean that life has been fully integrated into techniques that control or manage it: it constantly escapes from them.” —*Michel Foucault*

Pests, Monsters, and Biotechnology Chimeras: Art, Biology and Technology

The term Mother Nature is quite appropriate if we think that man has a tortuous relationship with her, between fear and admiration, the desire to control and to nearly destroy. Such binary visions of and often paradoxical relationships between man and nature apply to the technologies in the sciences. It is still difficult to overcome the widespread dualistic perception about technology.

Technophilia, borne of an ideology of progress and an evolutionary view of the history of technology (especially after the Industrial Revolution) is hegemonic and largely used as an upbeat speech by the media and technology market. According to this vision, man assumes the role of *demiurge* and rebels against the establishment: above all, against everything that constitutes its finitude and mortality. On the other hand, there are also technophobia discourses, supported by a mythological fear of the destructive forces of human creation and nature that punish those who dare to control or modify it. Technophobic arguments are frequently used by those who accuse technologies of increasing the gap between rich and poor, or between economically central and peripheral countries. But what may appear as an opposition is composed as two sides of one

hierarchical view, where there is a dominant element on one side and a subjugated element on the other.

The bodily and cognitive abilities acquired through the use of powerful digital and biological technologies cast doubt on what seem to be unchanging dualities: the opposition between nature and culture, between the natural and the artificial, between the living and the dead. As these boundaries become blurred, new issues emerge. For example, there is an economic interest in the chain of life (due to the development of biotechnologies), and in virtual environments (with development of the World Wide Web).

Today, biotechnology has led to the completion of the Human Genome project; the implementation of gene therapies; embryo manipulation and cloning; the creation of transgenic foods; and the implementation of xenotransplants. Some of the most widely used biotechnologies are genetically modified organisms producing so-called transgenic plants. In 1987, *Nature* magazine announced the first successful transgenic plant, and by 1996, the agricultural industry had begun to use those plants commercially. Today, four percent of arable land is used for transgenic plants, and thirteen percent of the world's seed market is the product of genetic engineering. Mostly concerned are soy, corn, cotton, and rape; and the countries where transgenic plants are most widespread include the US, Argentina, Canada, Brazil, and China. In recent years, the most rapid growth has occurred in developing countries, which currently account for thirty-four percent of the world's total production (World Trade Organization, 2005).

In addition to transgenic plants, there are other kinds of genetically modified organisms. Functional foods are designed to provide a health benefit beyond basic nutrition, such as vitamin A-enriched Golden Rice aimed at combating dietary deficiencies in Asia. Or biofactories, genetically modified used to produce raw materials for industrial use, such as rubber-producing sunflowers. There are also genetically modified microbes such as bacteria that decompose oil spills, or microbes for military use that can damage roads, weapons, vehicles, fuel, anti-radar coatings, and bullet-proof vests.

We could also include mammals cloned in the course of scientific research, like Dolly the celebrity sheep, or transgenic animals such as the spider-goat, a transgenic goat that produces spider webs, or the 'oncomouse', a mouse with cancer for medical research. Biotechnological stockbreeding produces chickens with more meat while the transgenic salmon grows faster. And, of course, genetic engineering is applied to domestic pets: brightly coloured goldfish and cats that do not cause allergies. All of these technologies are patented and registered by the private companies that exploit them commercially.

Other transgenic animals have also caused a great stir, such as artist Eduardo Kac's fluorescent rabbit Alba, created with the GFP (green fluorescent protein) gene. This is an example of transgenic art, a living being that was born to live as part of Kac's own household, living out its life as a household pet. Kac thus turned genetic engineering into something domestic and commonplace, which exists in the life of a 'pet'. The artwork was

not in creating Alba, but in the act of bringing the whole process to light in order to attract public attention to the debate on genetically modified organisms (Kac, 2005). In fact,

Alba was not created for cancer research or any other kind of medical research, which was why it was seen as ‘decadent’, meaning decorative. The discussion about this ‘decadent art’ is often dominated by the arguments of multinational companies, science laboratories, and experts. They usually claim that there are no ethical issues involved as no one gets hurt. Experts shy away from looking beyond the immediate concerns of research laboratories and their research funding. The exclusion of mass audiences from these discussions leaves a void that is filled by the worries of business, that have to focus in short term profits. (Tomasula, 2002, p. 137)

Art, Nature, and Culture

The very separation between nature and culture is an abstraction that has had real consequences in the way we treat and change nature. This system also generates the possibility of creating a hierarchy that devalues some elements while valuing others. By separating man from nature, we enable the creation of an anthropocentric view that considers all that is outside the human system as secondary.

Artists are increasingly operating as mediators, translators and creators of ideas that do not necessarily respect the boundaries between art, science, and technology. In this way, they contribute to the expansion of the concept of art itself and strengthen relations between the three areas. The loss of epistemological confidence in science coincides with an increase in popular knowledge, primarily through what is reported in the media. On one hand, we have the plurality of epistemologies or the emergence of “epistemologies of plurality” (Santos 2007, 243–244) which occur concomitantly with the increase of the discourse in defence of individual and social identities, caused both by the fears of terrorist attacks and the need to market a culture and territories. Thus, the discourse of plurality in culture (and art) is of great relevance. It is where contradictory views can be challenged and unique beliefs and the mechanisms of dogmatic rhetoric may be exposed.

Artists often reveal these ideologies, these visions of the world, almost hidden in scientific discourse under a layer of objectivity. Flusser also has confronted these two views in his works on reality and fiction:

Consider Newton’s famous phrase: *hypotheses non fingo* (my hypotheses are not inventions). In contrast, consider the words of Wittgenstein: Science discovers nothing, it invents it. The contradiction between the

two statements reveals a profound change in our concept of reality and fiction, discovery, and invention. In effect, it reveals the loss of faith in the established and discovered reality, placing in a fiction invented by ourselves. (Flusser, 2010)

The problem of the polarity of views can limit the development of work in art and biology. Some reject this type of knowledge, considering it beyond the interests of culture, others simply replicate what is already done in science, often without a critical discourse.

Eugene Thacker (2006) called attention to the risk in the responsive use of technology by artists, that seeks the latest fashions and scientific discoveries that may cause the artwork to be used as mere tool, promoting the biotechnology industry itself. He also points to the risk of the prefix 'bio' becoming another 'cyber', a prefix that can be applied universally, thus losing any specific meaning. Curiously (also observed by Thacker), the prefix 'bio', used in words such as bioterrorism, biofuels, bioweapons, biopharmaceuticals, incorporates the concept of basic elements in technopolitical life. It also creates the possibility of a concept of external life adaptable to whatever it is, a life without substance, and a concept of potential life suitable for different uses and practices.

However, in addition to providing a meta-critical discourse, art also works directly with scientific discoveries. For Louis Bec, experimental art practices are a rare transformational agent, a transducer technology between modes of expression and communication considered antagonistic. They become new dimensions between artificial probes and digital media worlds. The ability to test the limits of mental feasibility and physiological research has evolved into real artistic practice.

To understand the worlds of different species is to broaden our concept of the world and think more clearly about all possible realities. In addition, it enables the expansion of a usually anthropocentric vision of art. Bec proposes that we should question our range of perception of reality by extending the codes and modes of communication and understanding how other species are reported beyond dichotomies between 'identity' and 'alterity', that directly touch on issues related to biotechnology and the fear of bioterrorism (Bec, 2009, p. 462). Behind it is the fear of the unknown, faceless enemies represented by viruses and bacteria. Susan Sontag mentioned that when a micro-organism is found, the war metaphors gain strength, generating aggressive strategies of 'defence'. There is a direct relationship between the imagery of pollution and the invasion by what seems strange to us, by the 'other'.

It is no coincidence that the threats of bioterrorism have this double factor, contamination and death caused by invisible agents whose origin we do not know and that might come and attack us in our own home. According to Sontag, "The authoritarian political ideologies have an interest in promoting fear through the idea that aliens are ready to take over" (Sontag, 1989, p. 74).

Thus, individual freedom can be replaced with a (false) promise of peace on the part of political power. The idea of stability, of either an individual or a group, is utopian, but it is also reassuring. As Julia Kristeva suggests, “The discomfort caused by the other is because the alien is in ourselves, the instability is inherent in everyone” (1988, p.47).

Rather than being potentially polluting and corrosive, the figure of the stranger is a threat because it acts as a mirror that moves us away from what Freud had already identified as the ‘lost self’, which is imagined as independent and harmonious. Art applied to biology is in contact with new subjectivities, new forms of life, and it creates languages and modes of expression that highlight the problems behind the specifics of the biotechnological tools, generated by fear or ignorance, or by an admiration connected with mythological and ancient beliefs. Furthermore, artists who work with the concept of ecology have projects that offer opportunities for a change of attitude based on concepts of an alternative lifestyle, economics of biological resources, and sustainable consumption.

Today, plants, cells, genes, and other biological materials are the chosen media for a growing number of artists, while others base their work on eco-installations in the environment. By stripping the life sciences of their pragmatic role and contextualizing them in aesthetic form, artists are treading the boundaries between nature and art, just as they contribute to the generation of a critical discourse around new developments in science and technology.

Biotechnology industries are launching public awareness and public relations campaigns to promote the idea that the combination of the free market and biotechnology works solely in the public interest, and that they aim to rectify health, population, and environmental problems. Meanwhile, biotechnologies are popularly viewed as negative because they are seen as transgressing the sacred boundaries between the natural and artificial worlds, biology and technology, divine creation and industrial artefacts. Biotechnology industries are suspected of generating deep-rooted problems by detecting a gene, creating a pill, and selling a formula that governs everything. But it is a problem in epistemological and ontological terms, not just economic ones.

On the other hand, a supposedly apolitical aesthetics aimed at fuelling the cultural innovations market, where it is possible to soothe public scepticism by separating it from the biopolitical debate attached to these practices, and by promoting it in the aesthetic bunker, can help to educate the public, while indirectly functioning as an excellent public relations exercise that paves the way for future marketing campaigns for new biotechnology products considered necessary and unavoidable (Critical Art Ensemble, 2002).

Another crucial element here is the differentiation between various bioart and biotechnology practices, to allow us to detect when political activism in the area of biotechnology becomes a morally conservative, reactionary or reductionist response to problematic issues, linked to essentialist ideas of life that are part of moral discourses. These discourses are implicit, and they must be made explicit.

As if we were dealing with a new ecosystem to be produced through biotechnology chimeras, life now becomes geneticised information that can be manipulated, broken down, and wholly transformed. From now on, barriers will have less to do with science than with legal and political issues around experimentation with living beings. The new biotechnological bestiary breaks down classical natural history taxonomies, producing hitherto unknown combinations and hybrids that transcend traditional classification, going from impossible fantasies to commonplace technologies. In this sense, biomedica refers to the hybrid formed between information technology and biological components and processes. On one hand, we think that the biological incorporates processes that occur naturally. On the other hand, we refer to the way in which we can think of biology as a technology that allows us to manipulate living matter, through the lens of information technology, in order to combine the immaterial and the material (Thacker, 2006). But the fact that molecular biology, through biotechnologies working with IT, reduces life to genetic information obtained from the molecule of life, from DNA to the 21st century version of the Holy Grail, is not exempt from political, economic, and social implications that we must help to shed light on.

Every sociohistorical context has its own way of conceiving and confronting life. Technoscience is not just neutral knowledge of reality; it is a mechanism for producing social and natural reality. Biotechnologies are less about denaturing nature than about producing a particular nature, because what we see when we look at the secret of life is life already transformed by the technology of our gaze (Keller, 1996, p. 20), and above all because “each historical formation sees and reveals all it can within the conditions laid down for visibility, just as it says all it can within the conditions relating to statements” (Deleuze, 1987, p. 24).

The foundational myth of modern science asserts that it is possible and necessary to know reality independently of social, political, and economic conditioning factors. This means that the scientific subject tells us what the object, or reality, is by virtue of a position within a privileged observation point, which is science. This mythical objective point, cut off from its own context, leads us to believe that when science speaks, we are listening to an objective rationality that has undistorted access to the intrinsic peculiarities of observed reality (Mendiola, 2006, p. 75).

For several decades, the sociology of scientific knowledge has tried to show that this mythical objectivity becomes a specific and particular form of incarnation, not a false vision promising the transcendence of all the limits and responsibilities (Haraway, 1995, p. 326) that will allow us to show the situational, contingent, and heterogeneous nature of all scientific practice.

It would be an appeal to a located knowledge, such as the “amateur discursiveness” proposed by artists’ collective Critical Art Ensemble that refers to a different perspective around transgenic debates, allowing citizens to participate to the discussion at certain

levels. It should not be that individuals are left with the implied obligation to have faith in scientific, government, and corporate authorities that allegedly act with the public interest in mind (Critical Art Ensemble, 2002, p. 6).

As genomes, enzymes, and all kinds of biochemical processes are privatized, a pancapitalist policy expands, which only serves to strengthen and extend the economic profit machine. Molecular invasion and control are quickly transformed into new kinds of colonial and endo-colonial control: the focus is on consolidating the food chain, from the molecular structure to the packaging (Critical Art Ensemble, 2002, p. 4).

To a large extent, biotechnology is part of an industry and, as such, operates as a flesh machine, generating new products and services, which create new market niches, as it transforms the public's understanding of the concepts of nature, the body, and health (Critical Art Ensemble 1998, p. 6). In response to this, there is a strong ecologic movement that demands greater control of the use of transgenics in agriculture and other fields, given that they irreversibly change nature, generating a dependence on transgenics, and disrupting entire farming systems.

Life Between Reality and Discourse

This situation shows how power relations are intertwined with technoscience, articulating a dense fabric of interrelations in which a wide variety of actors play a role. Nature and society are no longer explanations, if anything they have to be explained (Latour, 2004). So we have to understand that biology is a discourse—not the natural world itself, but a discourse. This means that organisms also emerge in a discursive process that is the result of human and non-human elements, based on a set of semiotic-material actors that become active builders of natural scientific objects. To talk about life today is to talk about the different narratives that are used to define life, because narrative is what gives it meaning, and allows it to be thought about as organized.

Thus, we have to find a way of relating to nature that is not based on reification or ownership, abandoning this parasitical relationship Foucault described in his works on the change from natural history to the birth of modern biology (Foucault, 1997, p.12). In Donna Haraway's words, "Nature is not a physical place to which one can go, nor a treasure to fence in or bank, nor an essence to be saved or violated. Nature is not hidden and so does not need to be unveiled. Nature is not a text to be read in the codes of mathematics and biomedicine. It is not the 'other' who offers origin, replenishment, and service. Neither mother, nurse, nor slave, nature is not matrix, resource, or tool for the reproduction of man (1999, p. 122).

In biotechnologies, the part (the gene) designates the whole (life). And this implies that the information is detached from the context from which it arises or in which it is inserted, turning its back on the specificity of the local, like merchandise. Before life could be reduced to genetic information, it had to undertake a long journey in which we can identify three key moments that overlap today: eighteenth century natural history from

which life takes leave (timeless botanical gardens full of taxonomies); nineteenth century evolutionism that turns life into history (the ecological niche, in which the organism is separated from the context); and late twentieth and early twenty-first century genetic engineering, which decontextualizes life (genetic databanks of life-information that can be manipulated and transformed) (Mendiola, 2006, p. 58).

In an attempt to express this Promethean will, which is inscribed into biotechnologized life, Eduardo Kac created the installation *Genesis* in 1999. On entering the exhibition space, we see a Petri dish containing bacteria in the DNA of which the artist has included excerpts from the book of Genesis in the Bible. Kac created an artificial gene by translating a sentence in Morse code and then converting the Morse code into basic DNA pairs, according to a conversion principle developed by the artist for this piece. The significance is not as much in the creation of the artistic object, as in the fact that its meaning develops as visitors participate and influence the bacteria's natural rhythm of mutation, transforming the body and the message coded within it.

The act of choosing a paradigmatic sentence from Genesis symbolizes a reference to man's desire for supremacy over nature, a desire that is divinely sanctioned. The opportunity to change the sentence brings to mind a symbolic gesture, which means we do not accept its meaning in the form in which we inherited it, and that new meanings will emerge as we try to change them.

However, the production of nature will continue to be political because it continuously weaves power relationships among the agents who are part of the network. Life sciences are political sciences and geneticized life is bio-power, the result of matter and semiosis interwoven within power relationships that try to confer a life that is presented to us as natural, although, in reality, it is just the result of a complex sociohistoric process with a long history.

With the arrival of the modern episteme "make live and let die", Foucault's productive idea of power reveals the change from a disciplinary society to a society of control, in which governability is defended in terms of 'security'. If it is true that life has always been subject to power, the question today relates to the specific biopolitics that biotechnology contains. This is why it is interesting to turn to Foucault's concept of biopolitics and its implicit connection between two ways of articulating biological life itself (Thacker, 2006, p. 43).

In the eighteenth century, an information-based view of life control emerged. The sciences of demographics, political economy, and statistics documented births, illnesses, and deaths, quantifying life itself in a sophisticated way. The new concept of 'population' made it possible to manage and express individuals' health and made it possible for natural history, biology, and then, evolutionary biology to develop. In this way, population became a biological as well as a political issue, while currently it is turning into a genetic

issue to be controlled: biology and information technology merge perfectly for the purpose of producing bio-power.

At issue is a life shaped through the systematic implementation of a system of techniques and rationalities, such as the medical regulations inscribed in health or the emphasis on citizen security and the development of a political economy: a moulded life that becomes docile, subject to what is expected of it, a regulated life that avoids fear of the uncertain or strange. For example, the terror that is generated through the imaginary associated with biotechnological wars allows the discourse on new infectious diseases to merge with that of bioterrorism, and thus a strengthening of state control over public health. The US bioterrorism legislation created in 2002 exercises this function, allowing the public health administration to develop all kinds of strategies. (Public Health Security and Bioterrorism Preparedness and Response Act of 2002. Public Law, 107–188).

We are facing a biological war with a long tradition and various levels, such as biological sabotage. By exploring the history of epidemics, we can see how they have often been presented to us linked to wars or military conflicts. For example, the intentional poisoning of wells narrated in Thucydides tales of the Peloponnesian war is an early form of biological sabotage. Plagues, epidemics, fear of contagion and infection go beyond the biological and become social, cultural, and also political elements. Elements that Foucault synthesized historically in two basic reactions: one, anarchic, around the ‘dance of death’ and the other totalitarian, such as quarantine (Foucault, 2007).

We should also take into account biological weapons, the use of pathogenic agents and biological resources like anthrax, banned by the 1925 Geneva Protocol in terms of use, but not research and production, which allowed the development of research programs in many countries that later made experimentation possible in Japan during WWII. There are forms of genetic warfare based on the eugenic plans of Nazi Germany, inspired by the ideas of England’s Sir Francis Galton, such as ethnic cleansing in search of a ‘pure race’ free from any element that could be considered a defect in ideal of ‘human purity’. Even in our own imagination, cloning appears as the ideal of reproduction of the best specimen, another form of cleansing and selection. And this ideology is still implicitly present in databases of genetic profiles of creative people, although the term ‘eugenics’ is no longer used anywhere as a consequence of the atrocities that have been committed under its name.

We are dealing with a politicized biology that since 9/11 has generated an endless number of biodefence laws regulating ‘life itself’. Laws that led to the FBI’s persecution, arrest, and jailing of Steve Kurtz, a founding member of the artists’ collective Critical Art Ensemble, under the accusation of bioterrorism. His crime was to look at scientific processes through the view of a capitalist political economy, displacing the legitimised version of science as something neutral and value-free. Steve Kurtz was sued and accused of bioterrorism for the simple act of using inoffensive molecular biology technologies and engaging in a critical discourse around biotechnologies.

All of this demonstrates that what is at stake is related to the problem of life itself, beyond specific policies against bioterrorism. That is, in relation to life that is subject to control, regulation, and modulation, true biopower is that which is a form of power that regulates social life from its interior, following, interpreting, absorbing, and rearticulating it. What is directly at stake in relation to power is the production and reproduction of life itself (Hardt and Negri, 2002).

The other side of plagues and epidemics are the monsters that represent abnormality and are left out of classifications that have no place for them, even though its precisely the monster that shows us the flipside of the norm, the dark side of order as a mirror of humanity. Etymologically, ‘monster’ comes from the Latin *monstrare*, which means ‘to show’ and indicates that monsters are, above all, strange beings that show or demonstrate something hidden. Teratology, the science of monsters (derived from the Greek *teratos*), is an attempt to document this lack of a place for anomalies, and refers to horror as well as fascination, to prodigies and demons, aberration and adoration, the sacred and the profane (Lykke et al., 1996). The monster connects worlds that link the real and the imaginary, the normal and the abnormal, the permitted and the prohibited, the visible and the invisible.

Every era begets its own monsters. In our own time, the monster is bound to emerge in the course of the path aiming to transform nature and turn it into simple matter with the serviceability of merchandise. Today, the monstrous has become banal, transformed into a consumer object halfway between fascination and the fear that leads us to technoscientific chimeras, the product of a rationality that continues to provoke disorder.

Chimeras, unlike monsters, are hybrids par excellence, a product of the fusion of three different animals—goat, serpent, and lion—that emerges as a recurring infernal mythological figure and becomes a metaphor for designating new life forms produced by molecular biology. Transgenic chimeras produce a tremendous amount of disorder, making the impossible possible through the infinite hybridization of a new biotechnological nature. Projects such as The Tissue Culture and Art Project illustrate the imaginary associated with these biotechnological chimeras. They use living material and molecular biology techniques as though the genetic code were digital code, so the manipulation of life becomes the manipulation of code, but with the capacity to re-materialize. The creation of semi-living sculptures through experimentation with live tissue generation led them to create projects such as *The Semi-Living Worry Dolls*, *Womb 2000*, where they brought Guatemalan worry dolls to life. The project provoked a great deal of unease in relation to the perception of the boundary between the living and the inanimate. They followed up with *Pig Wings* in 2000–2001, which involved the creation of a semi-living sculpture representing fake pig wings, in reference to the saying ‘if pigs could fly’, and used to express the impossibility of achieving something. Their latest project, *Disembodied Cuisine*, explores other ways of interacting with semi-living systems such as, for example, consuming them as food; in this way parts of an animal can be self-

generated and then eaten, without the need for the death of the animal, which can stay alive, with a simple biopsy (Catts and Zurr, 2003, pp. 47–60).

Here, the interaction with semi-living entities is a conceptual challenge linked to the biotechnological chimera that will blur the idea of the body as an entity that is separate from our living environment. As defined by Lynn Margulis, “a body is a community of cells and, furthermore, the biosphere is one interdependent entity” (Margulis, 1995). Semi-living objects are a tangible example of this idea: we can see parts of our body growing as part of our environment, but we definitely need cultural understanding to deal with this new knowledge and control over nature as a whole.

Throughout history, plagues, epidemics, monsters, and chimeras have represented the flipside of the norm, the ‘other’ to be banished from the earth and buried in the inferno of the impossible. But today, in an increasingly biotechnological life, they coexist naturally with us, producing a new nature that is not exempt from a specific biopolitics regulating and standardizing life, although in reality life always escapes through the interstices of becoming, chance, and absolute uncertainty. Because we will always be able to say that “when power takes life as its aim or object, then resistance to power already puts itself on the side of life, and turns life against power...Life becomes resistance to power when power takes life as its object” (Deleuze, 1987, p. 122).

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The Cerebral Subject in Popular Culture and the 'End of Life'

by Valerie Hartouni and Etienne Pelaprat

Cultural Figures of Self and Brain

In autumn of 2010, MIT's Media Lab attracted public attention in the United States when the opera it produced in collaboration with the American Repertory Theater, *Death and the Powers*, opened to critical acclaim in Monaco. What incited the attention and excitement of commentators was in part the opera's elaborate technical set, which expressed, through light and sound, the digitized voices and bodily movements of off-stage actors to tell its story. Robots, screens, lights, and props were not only intended to simulate a sense of human subjectivity in the stage itself, but sustain a persistent tension: if consciousness can be uploaded into machines, will we still be recognized as human? By materially enacting this tension, the opera introduced a late-modern twist (the sentience of computational machines) in an old operatic genre (existential crisis). At the same time, the opera captured for audiences the look and feel of a future with which they might nevertheless already be familiar: post-human life, enacted by the cognitive-computational symbiosis of the subject, animated by a promise of immortality.

Death and the Powers invites us to imagine a future when an essential condition of human life, death, has been overcome because a condition of western science and philosophy, the division of mind and body, has been resolved by technological ingenuity. Simon Powers, a man of considerable wealth and intellect, has devised a way to upload his consciousness into an elaborate system of computers and robots and thus to exist as a digital environment. Driven by a will to power, he dreams of living forever by returning to a material form light from which he claims to have originated in the first place. 'Light' is a sign whose meaning juxtaposes several entities: the electrical circuits that define the physicality of his being; a universal material phenomenon; and, in more aesthetic terms, expanded omnipresence and omnipotence. Light is, thereby, an index of being, one that Simon Powers feels himself to more authentically inhabit.

By transferring his 'self' into a new form of embodiment, Powers escapes the foregone conclusion of death and revels in an unrivaled mastery over life in *The System*. Expressing himself in mundane robotic devices, he convinces his wife and his physically

disfigured graduate assistant to transcend their organic incarnations and join him. “No matter the matter,” he repeats, “I did that.” A dramatic tension in these negotiations concerns whether, in fact, the matter does matter with respect to being recognizable as a human being. “I am the same,” Powers declares. But the same as what, and in what sense? Miranda Powers, Simon Powers’ only child, is reticent to abandon her organic, mortal coil for a presumably immortal silicon chip, and part of the dramatic tension in the opera is organized around her reticence: “The body of this death is who I am, it is my mind...” she offers in response to her father’s invitation to join the family in a “world of light.” “Who will I be?” she asks, “and what will I see when my body is gone?” Powers’ research assistant, disfigured and with a prosthetic arm, reassures Miranda that the Powers embodied in the System is self-same to the one who exists in a body. The relation of self to embodiment is a matter of degree and not kind. Thus, he claims the body we are embodied in is a possession, not a condition, of being: “my left arm is...mine, not me.”

The questions posed by *Death and the Powers* have a formidable history stretching across modernity. But what the opera captures so well in re-staging these questions are the ways in which conventional understandings of the distinctly human are being fundamentally refigured. It seems self-evident that the brain can stand in for the human, especially if life is understood primarily in computational, digital terms. And, indeed, the standard question endlessly repeated with respect to this reductive formulation is whether a thinking machine can be a sentient being? What is seldom asked and what *Death and the Powers* so cleverly poses is whether sentient beings are in fact nothing but thinking machines. Behind a digitized form of life lies a desire to refuse the material ontology one has been given, and assume a material ontology one has made. The refusal of the given, in favor of what is made, is a theme we shall return to later. Suffice to say now that the significance of this refusal sets up for the opera’s audience an assumption about not only what immortality can look like, but also what death means as a contemporary experience—death is something we can and must transcend through technical ingenuity. However, the means of doing so require transforming the infinitude of being into a technoscientific project. That is, death is something we can transcend if we transfer ourselves to a different material ontology we can engineer, thereby affirming we are nothing but thinking machines. Thus, it is not simply the silicon of computational devices that harbors the desire for immortality. Rather, it is the desire to reduce being to the technoscientific ingenuity of human thought.

One finds these themes elsewhere in contemporary literary fiction and popular culture. Consider by way of further illustration James Cameron’s 2009 science fiction film, *Avatar*. The setting of this film, briefly, is the rich, bio-diverse planet, Pandora, inhabited by the Na’vi, an ostensibly pantheistic community of humanoid aliens and curiously prehistoric life forms. Drawing on the same visual repertoire as *Death and the Powers*, the bioluminescence of Pandora’s native ecosystem defines a unique ontology.

Here, however, light signifies a biological substrate akin to nervous tissue. Its mysteries, the audience is informed early on, are interpretable by science, and over the course of the story a group of likable researchers translate the spiritual pantheism of the Na'vi into a familiar scientific register. Pandora, we discover, is a global information network of biological connections that not only distributes the energies of life (connecting all living things), but also functions as a cognitive entity (thereby connecting all living minds). The planet, in other words, is akin to a physical brain, stocked with cognitive functions, capable of sentience and, in a decisive moment, able to direct its fate by directing its animal life forms.

Like *Death and the Powers*, *Avatar* never explicitly articulates the underlying neuroscientific concepts that animate its concepts of life and death. The film simply asserts that life is coextensive with a physical embodiment of mind. Its resplendent visual repertoire and depiction of scientific prowess in unlocking the planet's secrets are together sufficient to suggest the idea that Pandora's physical world is in fact a recognizable 'being.' What matters here is the condition on which such a being is made recognizable as such. 'Nervous energy' is what imbues all of Pandora with life itself. The juxtaposition of science, a visual repertoire of neural circuitry, and the spirituality of a globally unified nature conveys the notion that in neuroscience's biology of the brain lays an ontology of being. Moreover, it reasserts the claim that the brain is a biological entity we can understand because it is a technical achievement we can engineer.

As the film presents it, the source of life that animates Pandora is put at risk by an American corporation whose efforts to extract profit from the planet's rich resources require the protection of mercenaries who must, in turn, subdue an indigenous population for whom the concept of profit is unknown. Indeed, much of the narrative of the film is propelled by an age-old formula that pits the profit-driven, instrumental imperatives of corporate capitalism—ill-equipped to recognize real wealth—against a balanced system of life where community and reciprocity are built into nature. As we gradually learn, the rich deposits that the corporation seeks to extract are part of the fundamental fabric of life. The energy that sustains all life forms (and forms of life) on Pandora is only 'borrowed'; what grants bodily life must, at the point of death, be returned and exchanged for an immortality that is achieved by merging, cognitively, with the planet. Nothing of the essence of living and being, therefore, escapes the closed material ontology of Pandora.

The visual staging of life and death in *Avatar* makes it possible for the film and the audience to imagine relationality as considerably more than an abstract religious imperative. A sentimental narrative of being as 'physical being-with' is pitched to the audience constantly through the language of empirical science. And what drives home the material 'givenness' of the relationality of life on Pandora is the commingling of neural fibers: every indigenous inhabitant on the planet is endowed with nervous fibers that are exposed at the end of a queue, a braid which extends from the back of the head. The

interweaving of neural fibers between creatures binds beings—that is, two cognitive systems—in a single, harmonic social and political whole. The recognition that one is a being, and that one belongs within a whole community, is achieved through the mastery of a physical condition of being-with, and being-within, Pandora’s interconnected living system. Thereby life-long bonds are formed, knowledge and shared memory is communicated, and a sense of oneself and one’s place in relation to a global community is secured.

It is against this specific backdrop of an ontology of life and economic-military conflict that the narrative arcs that drive *Avatar* unfold. When the film begins we are introduced to Jake Sully, a cynical, hardened marine paralyzed during combat. He is embarking on a voyage to Pandora to take the place of his dead twin brother, a scientist specializing in the biological life of Pandora. What gives *Avatar* its title is the fact that the scientists on Pandora, led by Dr. Grace Augustine, have been able to genetically engineer and inhabit hybrid Na’vi-human bodies in order to converse with the indigenous Na’vi. More importantly, the avatar body allows them to conduct scientific research in Pandora’s dangerous and otherwise inhospitable environment. But the military-industrial complex, which seeks to abort efforts to reach a diplomatic solution with respect to the mining of the planet’s rich resources, enlists Jake to gather information that might help the corporation advance its interests and sabotage the scientists’ effort to broker peace. In the end, however, his fate is bound-up with neither colonial faction; it is rather with the Na’vi. While on his first outing in his avatar, Sully is separated from his group and saved by Neytiri, heiress to the Na’vi tribe. Although correctly suspected of being a spy by the Na’vi, he remains with them, undergoing a series of trials and rituals that define the integration of the young Na’vi into the community. Having undergone these trials and rituals in his avatar and thus being fully integrated into the Na’vi community, Sully opts to permanently abandon his human form and be, as he puts it, “reborn.”

As was widely remarked in the press following its release, *Avatar* employs a conventional ‘going native’ narrative: a Western white man arrives at an exotic, spiritually connected society, falls in love with a native, learns to see the bountiful wealth of a simple life, and succeeds in stemming off the forces he once formally represented. And while the film does indeed employ such a narrative, also at work albeit more subtly so in Jake Sully’s transformation is his movement between two ontologies, a movement facilitated by the intersection of technoscience and nature. There are two modes of being in the film—becoming and being-with—and each mode requires Sully to make different choices. Will he, for example, accept the free spinal surgery on Earth in exchange for his loyalty to the military-industrial complex; or will he give up on this overly technical mode of life in favor of the fluid organicity of Pandora?

What mediates Sully’s choices is the avatar body. But what is this body and what does it represent? As becomes clear to the audience early in the film’s narrative, the journey into an avatar body is a journey onto a particular post-human moral, political, and

economic landscape. The journey into an avatar navigates around, and provides the escape from, corporate interests in reproducing scarcity and political interests in reproducing the need for security. In the opening sequence of the film, the avatar is referred to merely as an expensive transportation vehicle, a prosthesis, something that is ‘driven.’ The avatar facilitates the acquisition of scientific knowledge and is used as an instrument of corporate interests. As the film progresses, however, the distinction between which body is one’s own and which is merely a vehicle one drives; between who one is and is becoming; and between which world is real and which only visited, is progressively blurred. Sully realizes that he is, in fact, faced with a choice: to choose a body is to choose a social, moral, and political purpose. And what underlies this moral terrain is, once again, the figure of the brain as both the essence of the self (the seat of what cannot be instrumentalized) and yet also the locus of an activity (consciousness) that can travel from one cognitive embodiment to another. It is by permanently transferring his “self,”—his “mind” in a brain—that Sully effects a material, and thereby spiritual and political, conversion. Only within a certain set of assumptions about life and science’s capacity to harness it can this moral choice appear as a real choice. As a majestic world of beauty and serenity, Pandora incites this choice by fostering a desire to retrieve an authentic self. Submitting to its ontology is the condition on which one can embody the sentimental narratives of a boundless ‘being with,’ something akin to Freud’s desire for ‘oceanic merging.’ For material life on Pandora imbues a cognitive being with a unique property: one is never dead, but is rather always being reborn.

The Technoscience of Consciousness

To tell their stories, both *Avatar* and *Death and the Powers* rely on a set of assumptions that the mind is physically embodied in the neural networks of our brain. To be sure, the notion that we “are our brain” is not new (Vidal, 2009). What is specific, however, to both of these artifacts and their ideology of “brainhood” is a scientific notion of mind: such a notion holds that mental processes and structures are, in fact, physical processes and structures, and that science, therefore, can empirically study the mind by studying brains and other thinking machines. This scientific view—that our minds are reducible to physical mechanisms—has grown far beyond neuroscience or cognitive science. The implications of a physicalist ontology of mind are now discussed in the humanities and social sciences as part of what is called the neural turn. To be sure, there are many different versions of this new science of the mind, each with their own philosophical commitments about how the mind emerges from matter. And, as has been widely noted by many critics, the promises that neuroscience and cognitive science have made about what it can know with respect to how the mind works (that is, everything) far exceed any research results. Nevertheless, it is clear from the cultural artifacts we have considered

(and everyday observations about brainhood in popular culture more broadly) that the influence and practical consequences of a physicalist theory of mind have dramatically outrun its, to date, more modest scientific conclusions.

The physicalist, scientific account of mind that informs *Avatar* and *Death and the Powers* is specific to a branch of cognitive neuroscience that has its philosophical roots in cybernetics. Cognitive neuroscience argues that the physical foundation of mind is computational. What we call a mental process, for example, is for cognitive neuroscience a logical algorithm or computational model. Because it can be physically implemented (for instance in the silicon chips that drive a computer), and because it represents models of thought and representation, computation is thought to mediate and resolve the presumed separation between materiality and mentality. These theoretical commitments about an empirical science of mind allow two modes of inquiry. First, by treating the brain as a computer, neuroscientists claim they can reverse engineer the brain as a machine through various experimental methods that isolate cognitive functions as computational processes. The most dominant and commonplace expression of this form of experimentation today is functional magnetic resonance imaging (fMRI). Second, cognitive scientists, for their part, attempt to build computer models of mind in computational devices, and often embed those models of mind in robots. The assumptions that both of these modes of science are possible inform *Avatar* and *Death and the Powers*: the mind is not only a physical entity, it is a computational entity that can be engineered and instrumentalized. Thus, the particular science of the mind at play here is, in fact, a technoscience, a term that is intended to indicate the inseparability of technical engineering and scientific empiricism.

In the last few decades, cognitive neuroscience has focused on a particular problem of mind: to wit, consciousness. The general idea is that there is now a sufficient degree of understanding of mind and brain to discover how neural activations allow one to experience something consciously. And here, the Holy Grail is a particular conscious experience: the experience of the self as a self. Again, 'progress' on the consciousness question advances on two fronts. The first front is the purely computational side, where the challenge has been to describe and build the mechanical models of thought necessary to grasp oneself as a thinking subject (Hofstadter and Dennett, 1981; Hofstadter, 2007). As John Searle has observed, however, a purely computational approach denies that consciousness, as the experience of a subject, exists (Searle, 1997). According to Searle, the project of a purely computational approach is instead to demonstrate that we've been mistaken all along: there is rarely a 'consciousness of' something, only a set of mechanical adaptations describable at the level of computation. Jean-Pierre Dupuy, in a similar vein, concludes that the computational commitments of cognitive science represent a de-humanizing move in the science of the mind. In the name of science, he argues, cognitive science reduces the depth of human experience to nothing other than the

epistemic techniques of a complex system. Neuroscience, which is actively mapping the brain for the “neural correlates of consciousness,” (Metzinger, 2000) perhaps best expresses this argument by Dupuy: it tries to translate conscious experience into quantifiable, verifiable processes of the brain—processes that, because they are physical, are deterministic and causal.

We are now perhaps in a better position to understand the significance of Simon Powers and Jakes Sully as contemporary cultural signifiers. They are not only individuals whose journeys are mediated by a science of the mind. Their journeys are possible on the condition that each ‘self’ becomes a technoscientific object, an object of engineering. This is expressed by the mobility of consciousness in both films: Powers’ mind is transferred into silicon while Sully’s is transferred into a Na’vi body. By taking the essence of the ‘self’ to be consciousness, both stories stage their characters within broader dramatic arcs of self-discovery, omnipotence, moral choice, ethical care, love, spiritual unity, meaning, purpose, and immortality. That is, they stage as a question of ‘seeing’ and ‘being seen by’ others, the moral, political, and social dilemmas of ‘being a physical brain.’ This staging, moreover, functions to imbue a deep, sentimental significance to a science of mind. To submit one’s mind to the technoscience of cognitive neuroscience represents a decision to undergo a liberating, possibly emancipatory transformation.

But how do we begin to evaluate the contemporary significance of the scientific ontology of mind and consciousness that grounds *Avatar* and *Death and the Powers*? Powers is a human-computer symbiosis of mind; Sully is reborn by digitally transferring his mind to a genetically modified human-alien body. Each cuts the figure of a ‘post-human’ self no longer contained in the impenetrable body (Hayles, 1999). Are Powers and Sully, then, cheerleading the arrival of our post-human future (Kurzweil, 2006)?

In our view, the answers lie elsewhere. The science of consciousness in *Avatar* and *Death and the Powers* stages dilemmas of ‘seeing’ and ‘being seen’ in ways not possible from within a human, mortal body. They are not parables about whether or not machines can experience consciousness. They are, rather, parables about the crisis of determining what is ‘human.’ They turn on the notion that the crisis that exists at the heart of social, economic, political, and ethical life is not one of resources, money, profit, power, or wealth. The crisis that exists is rather a crisis of recognition, of seeing and being seen by others, when it is taken for granted that human beings are nothing but machines. In this respect, these stories invoke a set of late-modern plot lines (capitalism vs. reciprocity in the evaluation of wealth; a military-industrial apparatus of control versus a community of equal partners) and incite a corresponding range of fear and desire. Amid a set of recognizable social, political, and economic struggles, Sully and Powers represent figures that undergo liberation by assuming a different material form of being. But notice: the both obvious and obscured condition of their liberation is that each submits his ‘self’ to the instrumental rationality of science.

This point is crucial when considering the practical consequences of the sciences of the mind in medicine and psychology. For the integration of neuroscience in these areas of thought and practice has required and engendered a re-framing of the human subject per se. Indeed, as Ehrenberg (2004) has argued, neuroscientific psychology has not only legitimated and expanded a new scientific understanding of mental pathology; it has also reframed the very categories of social behavior. Consider for a moment the broad attention today given to autism, Alzheimer's disease, or schizophrenia not only as theoretical and practical problems in psychology, but also as social and political configurations of particular kinds of human thought and behavior. Cognitive neuroscience is broadly reshaping, enabling, or responding to new social, economic, and political circumstances by outlining a new kind of human subject—a new way of seeing the human being—which we might in fact call the cerebral subject (Pelaprat, 2010). But in what sense does the cerebral subject frame the human being as a social, economic, ethical, or political actor? And what do we make of the fact that the foundations of its being—a physicalism of mind—requires that the subject be transformed into an object of technoscience? That, in short, the infinitude of being is accounted for in purely mechanical, computational terms that can instrumentalize the self?

Consciousness and the Threshold of Life and Death

To better understand the import of these complexities, we need to take up one final theme, which we suggest links these cultural texts to a biology of consciousness: this theme concerns the threshold between life and death. At first glance, we can note that dying today is a prolonged, medical affair, due in large measure to bioscientific advances that enable bodily life to be supported and sustained beyond its own independent, physiological capacities. At the same time, dying has also come to be understood as a particular stage of life that is (or can be) economically expensive, ethically troublesome, and morally divisive. Endemic to the life of the population and a problem of economic, ethical, and legal import, we can note finally that dying is a matter of interest and regulation. The principle mode by which the state asserts its interest in the 'end of life' is to guarantee individual autonomy and choice—that is, freedom—with respect to the conditions of (one's own) death: how, when, and why we die are supposed to be matters over which individuals assert control. As a political, economic, medical, and ethical problem, therefore, dying is today configured through a double-logic: it is endemic to the economic, legal, and moral life of a society's population and, at the same time, it is a problem of individual liberty.

This double logic is important in defining death as a particular kind of individual struggle. To die likely means to progressively lose control and autonomy over one's body and mind (and the closer one gets to death, the greater the loss of control). Against this

technoscientific state of affairs, the logic of freedom asserts itself in the form of a series of concrete, practical questions: How do you make sense of what is possible or necessary to do as a dying patient, or as a person in relation to a dying patient, when it is in large measure a question of will, cost, and technical ingenuity that keeps you alive and prevents you from dying? How do you act for others if they are dying—that is, not dead, but incapacitated? What guides you in determining the best way to proceed in these cases?

The social-legal expansion of dying as a particular kind of problem of both the state and the individual first emerged in the late 1960s with the release of Harvard's Ad Hoc Committee Report on Brain Death. This document defined legal and medical death as the total cessation of electrical activity in the brain, by which it meant the cessation of the brain's capacity to produce consciousness. The need for a redefinition of death was precipitated largely by the new ability of physicians to control and reproduce bodily life with the use of life-sustaining machines. What is crucial, however, is that the Harvard committee introduced a physicalist theory of mind to replace the heart and lungs as the threshold of life and death. This was a practical definition and it was adopted quickly across medical contexts and accepted by the courts to define the boundaries of a new, recognizable legal actor. In the United States, the Quinlan (1974) and Cruzan (1990) legal cases are considered foundational decisions that build on the assumption that a cerebral subject can be enveloped by the law to account for the end of human life. It was only a matter of a few decades before care for the dying drastically expanded into the form we recognize today: as an expensive social entitlement that affects the whole of a population and draws individuals and the state into a relation of ethical regulation.

What thus buttresses the economic, political, and medical reality of dying and death today is not simply science, law, and/or the ethical policies of medical institutions. It is the fact that a new kind of social, legal, economic, and ethical actor—the individual in relation to his or her own death—has been produced on a radically new foundation of what counts as the beginning and end of human life: to wit, consciousness. The cerebral subject has become crystallized in law and medicine as the contours of a threshold and actor. To be sure, not all of dying is mediated through the cerebral subject, but it is a major point through which a rationality of dying has been extended.

Notwithstanding the institutionalization of a particular agreement about what constitutes death, there is on-going debate among physicians about which brain activities produce consciousness. This point is absolutely crucial: what constitutes the threshold of life and death today is not simply consciousness, but a physicalist and biological criteria of consciousness, which is to say a functional system in the brain that produces consciousness. The debate over these criteria has been organized largely by and around the neurological understanding of the persistent vegetative state and related “disorders of consciousness” (Monti et al., 2009; Laureys, 2005). Vegetative patients have brains that continue to partially function and bodily lives for the most part sustained by machines

(because they cannot chew, swallow, communicate, or perform any deliberate gesture). Their residual brain functions produce behaviors and regulate autonomic functions that make them appear conscious. Thus, because vegetative patients are the limit point, as it were, of consciousness, and of medical and legal death, they are the best cases by which to determine the biological foundations of consciousness.

For a long time, diagnosis of brain death or the vegetative state relied on interpreting the behavior of a patient that had been solicited by a physician (Jennett, 1976). But since the 1990s, physicians have eagerly turned to cognitive-neuroscientific criteria to determine if a brain is producing consciousness. This eagerness largely corresponds to the desire to substitute scientific certainty (which neuroscience presumably provides) for interpretation (which is seen to be subjective). Today, the internal nervous activity of the brain, understood as a cognitive-computation machine, is a primary criterion for diagnosing whether or not a brain is conscious of its experience. Thus, the trend in determining the end of life in vegetative (and other dying) patients has been toward submitting the essence of the self—the capacity to produce a conscious mind—to the language, techniques, and interpretations of cognitive neuroscience. This trend far exceeds the problem of dying, as is evidenced in the sprawling visual ecology of fMRI images in popular culture, legal debates, social science, and criminology.

Today, no discourse is more critical to the end of life than the neurosciences. By transforming the mind into an object of technoscience, the neurosciences simultaneously assert what the mind is even as they also take it as an object of engineering. The vast legal, ethical, medical, and economic problems of the end of life turn with ever-greater intensity on neuroscience's account of the brain as the material locus of the self. If we can detect consciousness in the brain of a vegetative body, can we interact with it? Can we ask this person's brain whether or not it wants to remain on life-support? If consciousness is detected, can a brain exercise a right on behalf of its 'self,' or must others exercise one on its behalf? Is it moral to let a science interpret brain activity as the utterances of a subject? Can moral decisions be made in such a way? These are just a few of the questions asked in medical settings because the cerebral subject grounds an understanding of our relation to dying. If neuroscience is to be believed, the answer to these questions is yes.

And yet, despite all of these profound questions, end of life discourse is best known by a slogan that is often repeated: end of life care must deliver on the "promise of a good death" (Emanuel and Emanuel, 1994). Generally, it is accepted that a good death entails responding ethically to the technical imperatives at work to compel dying patients and loved ones to sustain bodily life beyond its own physical limits. The image of the feeding tube, in this regard, is a crucial cultural signifier (Anderson, 2005). What 'the good death' has also come to signify is a certain kind of freedom: dying well means dying according to what one believes to be the good in dying; it is the right to die as one sought to live (Dworkin, 1993). It is remarkable how firmly accepted it is that dying falls within this

rubric of an emancipatory ethics. What is more remarkable still is how moral codes, procedures, and principles follow from this ethics to link up with a neoliberal ontology: individuals are free because they have choice, they have interests, and they have the autonomy to pursue those interests in order to preserve dignity. In this normative picture of dying, the body in its slow, progressive, morbid decay remains relatively absent except insofar as it is a source of unfreedom. Medical care of the body is part and parcel of an effort to relieve the essence of the self—the mind in the brain and one’s interest in dying well—from an unfreedom while, of course, abetting it. Here we might notice how much the erasure of the dependence on the body depends on the assumption that the self is essentially the mind—an assumption that is validated by the clinical picture along side of narratives of heroic medicine and traditional understandings of autonomy and choice as conditions of freedom.

Conclusion

We are now in a better position to understand the significance of the cultural artifacts we considered at the beginning of this paper. Whether tied to a contemporary discourse of the self, or the discourse on end of life, a new scientific rubric of consciousness produced by physical processes has taken hold, one where the brain, as a cognitive machine, answers for us whether or not there is a there, there. *Avatar* and *Death and the Powers* invoke the logic of this cerebral ontology of being. They trade in a grammar and vocabulary of being that can be accessed by the ‘truths’ of science and harnessed by science’s capacity to engineer these ‘truths.’ These last points deserve elaboration. If dying today is a problem of the state, economy, law, and ethics, it is not simply because the body’s decay is sustained by technology and medicine. The idea that we need an ethics to respond to our technological power to sustain bodily life is misleading. Rather, what is happening is that a new discourse of life couched in biological consciousness frames the way individuals can be seen, recognized, and integrated as actors in a social, political, economic, and ethical ‘field of dying.’

Those who have experienced end of life care know that the promise of a good death is, for the most part, a cynical one. What then do we make of the ethics of end of life care? Is it mere political ideology? Is its function to paper over, or provide a good feeling for dying’s messy, morbid, painful, protracted, and ugly process? Does it function, perhaps, to exculpate and distance individuals from responsibility for the dying who are nevertheless kept alive at all costs?

Two points regarding these questions can be made to close this paper. First, let us return one final time to the concept of the cerebral subject. Biological consciousness, in its scientific development and medical application, makes it possible to respond to dying in a new way. It responds to the ambiguity of when one is dead by stating that, in fact, selves

are brains that are able to produce consciousness. But this new way is also practical; it makes it possible to initiate a legal, social, and economic response to dying. The cerebral subject is therefore deployed in these domains (Supreme Court cases, federal Medicaid registers, etc.) in order to modulate the care of individuals. Various processes can be set up (legal, financial, institutional, medical) because now the state knows how to organize and navigate a set of interests; hospitals know how to organize and deliver care; and economists know how to organize, track, and (attempt to) reduce costs. End of life ethics, as a particular kind of ‘brainhood’ ethics, lubricate the institutional mechanisms by which an individual, placed on a trajectory of dying, is made sense of: the dying individual, in other words, becomes a subject of health care resources, expenditures, legal procedures, and insurance liability and reimbursement. Why is this? Largely, in our view, because of the cultural circulation of a set of meanings about ‘being a brain’ that make it possible to identify dying patients with rights, interests, and desires in relation to death, despite the fact that their status as conscious beings is in doubt. Hence it is possible to set up a legal process by which the end of life interests of patients can be determined even though patients remain unconscious for the duration of their medical care. Or, legal instruments such as advanced directives allow individuals to stipulate their preferences for dying in enforceable legal documents. Or, finally, health care costs can be attributed to preferences about the purchase of medical goods and services. Indeed, it is crucial to recognize that political, legal, and economic rationalities are inserted into dying and death because they can be modulated through the cerebral subject. These rationalities allow for dying and death to appear as the total, aggregate phenomena of an entire population—which is where the state, the market, and the law find their legitimacy. In short, the cerebral subject establishes a frame within which law, state, economy, and institutions can graft and modulate their practices because this frame provides them with a sufficiently plausible stand-in for a subject (the brain) and, thereby, a useful structure of social action.

The second point is more normative in its evaluation of end of life discourse and its cerebral subject. As Avatar and Death and the Powers demonstrate, the desire to be a brain is a desire to remake oneself as an effect of our technical engineering prowess. Is it only coincidental that immortality appears here as a technical possibility, a dream that we find activated, again and again, as a narrative theme? One is reminded of Günther Anders’ observation that modern human beings are “ashamed to have been born instead of made.” What Anders’ observation captures is the frequently noted rebellion of modernity against what is given in human life. The exemplary expression of this ‘given’ is that we can neither explain our own birth nor account for our disappearance from the world. For this reason, technical expertise—that which springs entirely from scientific knowledge—is the object of a desire for refounding the distinctly human. “No matter the matter,” Simon Powers says to his daughter. But of course, the latter “matter” is of his own making, whereas the former, that of the body, is the given of his existence. We must acknowledge,

as Jean-Pierre Dupuy has argued, the anti-humanist move at the heart of the cerebral subject of end of life discourse. The cognitive-computational ontology that grounds this subject is, in fact, an attempt to reduce being to the technical existence of a machine that can think. It needs to be understood as a dream with immediate, practical consequences: it incites the desire to assume a technical control over death by re-making the conditions of life through engineering.

Is the issue of dying and death today, then, really about finding the proper ethics of medicine and developing the technical capacity to provide a ‘good death?’ If the ethical and juridical experts are to be believed, one supposes that it is. But a critical engagement with a broader cultural environment of brainhood reveals that the danger likely lurks elsewhere. The danger does not exist simply in the technoscientific modes by which we seek to remake ourselves through our biology. They exist, more immediately, through the reordering of social, institutional, economic, and legal practices which presume that biological consciousness is a proper ontology of being by which to interpret dying in a legal, social, and cultural way. There is an element of power—a biopolitics—at stake in this formulation of dying and death, but by this we note only the obvious.

The fluidity of this cerebral ontology is culturally powerful. Its framing of cerebral subjectivity offers narratives of hope, belonging, and eternal life. Nevertheless, the political reality of end of life care as a utilitarian, technical staging of the human subject within social, economic, and political processes is hard to escape. In this regard, the cultural staging of the brain performs a strategic political function: it obscures the way in which our social, legal, and cultural reform of dying, invested as it is in the rationality of the state, individualistic ethics, and economic rationale, is abetting the rational instrumentalization of human life in the name of ‘freedom.’

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