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PanopDecon: deconstructing, decontaminating, and decontextualizing panopticism in the postcyborg era.

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Abstract

This presentation describes a series of exhibits, events, inventions, and interventions that examine, problematize, deconstruct, and critique, panopticism.

Introduction and (de)context: Authority loves the plague

Foucault described how authorities once used the specter of plague to justify draconian quieting of any civil unrest. Just the mere mention of the word ``plague'' could be used for quarantine and control of the great unwashed masses.

Throughout the past century, forced evacuation to mass delousing centers, cleansing stations, or the like, has sometimes been used to remove undesirables from a given area. Modern algorithmic surveillance technologies work hand-in-hand with the control of territory to prevent transgression by undesirables (Wood 2002).

More recently, the military/medicine complex has been training armies to work together with police in mass casualty decontamination, and there is a proliferation of ``decon'' facilities ranging from mass detention camps for smallpox suspects to showers at every subway

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stop in Singapore that can process (strip and scrub) 7,000 people at each subway stop. (See: http://wearcam.org/decon/index.htm.) Even ``ethnic cleansing" could, in some ways, fall under the domain of decontamination (``decon").

Harvard University's Kennedy School of Government describes powers that responding agencies might desire:

> -The authority to compel people to remain in one location or move to another, including temporary detention;
> -The authority to use the military for domestic law enforcement, population control, and mass logistics;
> -The authority to seize community or private property, such as hospitals, utilities, medicines, vehicles, or transit centers, or to compel the production of certain goods;
> -The authority to compel individuals to undertake decontamination procedures, take medicines, or be quarantined;
> -The authority to censor and control the media;
> -The authority to liberalize standards for conducting searches and seizures;...
> -The authority to waive regulatory requirements on the use of certain pharmaceuticals....
> No reasonable person wishes to sacrifice any of these principles, but it may be necessary to do so in a real incident if lives are to be saved.
>
> (See: http://wearcam.org/decon/decon_summary.htm for more similar quotes, excerpts, and background information.)

PanopDecon

DECONference sponsored jointly by the DECONism Gallery in Toronto and the McLuhan Program in Culture and Technology at the University of Toronto, was conceived as a probe into society, and to understand the culture and technology of mass decontamination. In the exhibit, decontamination was deconstructed by literally building a futuristic mass decontamination facility, as might form the entrance to a space station or airport of the future, or as an entranceway into a high security government building or industrial facility such as a factory. In such a future world, an alleged need for cleanliness (decon) might also be used as justification for a mass decontrabanding (including a search of personal belongings).

Initially all passengers or persons entering a "clean facility" are assumed to be potentially contaminated. Since we don't know which if any of these persons are guaranteed to be free of contaminants, everyone must undergo decon (decontrabanding and decontamination).

This involves a 2 step process:

1. decontrabanding: removal of shoes, followed by removal of all clothing, jewellery, and personal effects;
2. decontamination: removal of contamination (shower).

In this exhibit of 2002 August 29th, 7pm, attendees had the option of processing through decon, or not attending the event, although in an actual incident, military forces would be present to require all civilians to undergo decon. In this exhibit, all but one person chose to undergo decon. The one ejectee was escorted out through the back door, into the parking lot, whereas everyone else was processed through decon to attend the event. Interestingly, the ejectee spent almost the next hour across the street from our decon facility, staring at the front window, perhaps curious as to what was occurring within, and perhaps contemplating his own decision to exclude himself. Perhaps, under certain circumstances, being excluded from the process of submitting to authority in such an invasive fashion might instil some measure of self-doubt and regret. At the very least, partaking in the process of being excluded is itself an experience, and perhaps the process of providing this experience for the one ejectee, was itself a part of the exhibit, or at least a form of conceptual art.

Persons entering the exhibit are referred to as "suspects" because we do not know whether or not they are contaminated or carrying contraband, so we suspect them of being contaminated or of carrying contraband.

All suspects must remove their shoes at the door, upon entry into the exhibit space. At the entrance, each suspect is given a large heavy duty clear plastic bag, called a "contrabag" (contraband bag), in which to carry their own shoes in. Additionally, each suspect is tagged with a neck-worn numbered identification tag. The suspects gather in the main exhibit hall to hear the initial address by Professor Arthur Kroker, followed by an address by Professor Derrick de Kerckhove (Director of the McLuhan Program on Culture and Technology).

Figure 1:
Podium outside decontrabanding room.

Suspects are next separated by gender. Suspects are processed in groups of 12 persons of the same gender at a time. Initially 12 men were admitted into the decontrabanding gallery, where Julia Scher provided her address remotely, by way of loudspeakers placed in the decontrabanding gallery. Her comforting voice helped to make the suspects feel safe and secure. The decontrabanding gallery is a nice clean white space, free of contamination, as shown in Figure 2.

Figure 2: Decontrabanding gallery showing wooden bench, stainless steel table, and body scanner, all under a glass ceiling (windows in the ceiling provide natural light and 'transparency'').

In this gallery there is a wooden bench that is exactly 12 feet long, upon which the 12 men are asked to seat themselves. There is a stainless steel surgical table in front of the bench. Initially a decon officer asks each person to empty his pockets onto the table to make sure that there is no obvious contraband (guns, knives, nail clippers, box cutters, etc.). Next the men are asked to remove all clothing, jewellery, and personal effects. They are each instructed to place these items into the clear plastic contrabag with their shoes. Contrabags are checked in at the bagging counter, where a bagging officer seals the bags with a tie wrap gun with a serial-numbered evidence tag. The bagging counter is illustrated in Figure 3.

Figure 3: Bagging counter and clothing check-in. Notice also the body scanner rightmost in the picture. This will be explained later, and is used after the suspects return from decontamination.

Panoptic shower

Next the 12 suspects (at this time naked) were lined up against the back wall. Six men were asked to move forward into the decontamination chamber. The decontamination chamber features a six-person sensor operated column shower that contains six video cameras built into a stainless steel column, together with six shower nozzles, as shown in Figure 4.

Figure 4:
'Panopdecon'.
Panoptic shower as interactive video installation using six built-in video cameras with computer vision system for body tracking to create an interactive shower spray that follows the users.

The cameras are connected to six video capture cards in a six-slot rack mounted computer vision system, running our custom hexagraphic algorithms. The shower is in a clean white room, having three design elements: a partially silvered mirror/window; a water control system; and the shower itself. See Figure 5.

Figure 5:
Three design elements (appearing left-to-right):
1. a partially silvered mirror/window;
2. a Leonard Water Temperature Controls regulator and (de)control panel (detailed in Figure 6);
3. the six-person column shower itself

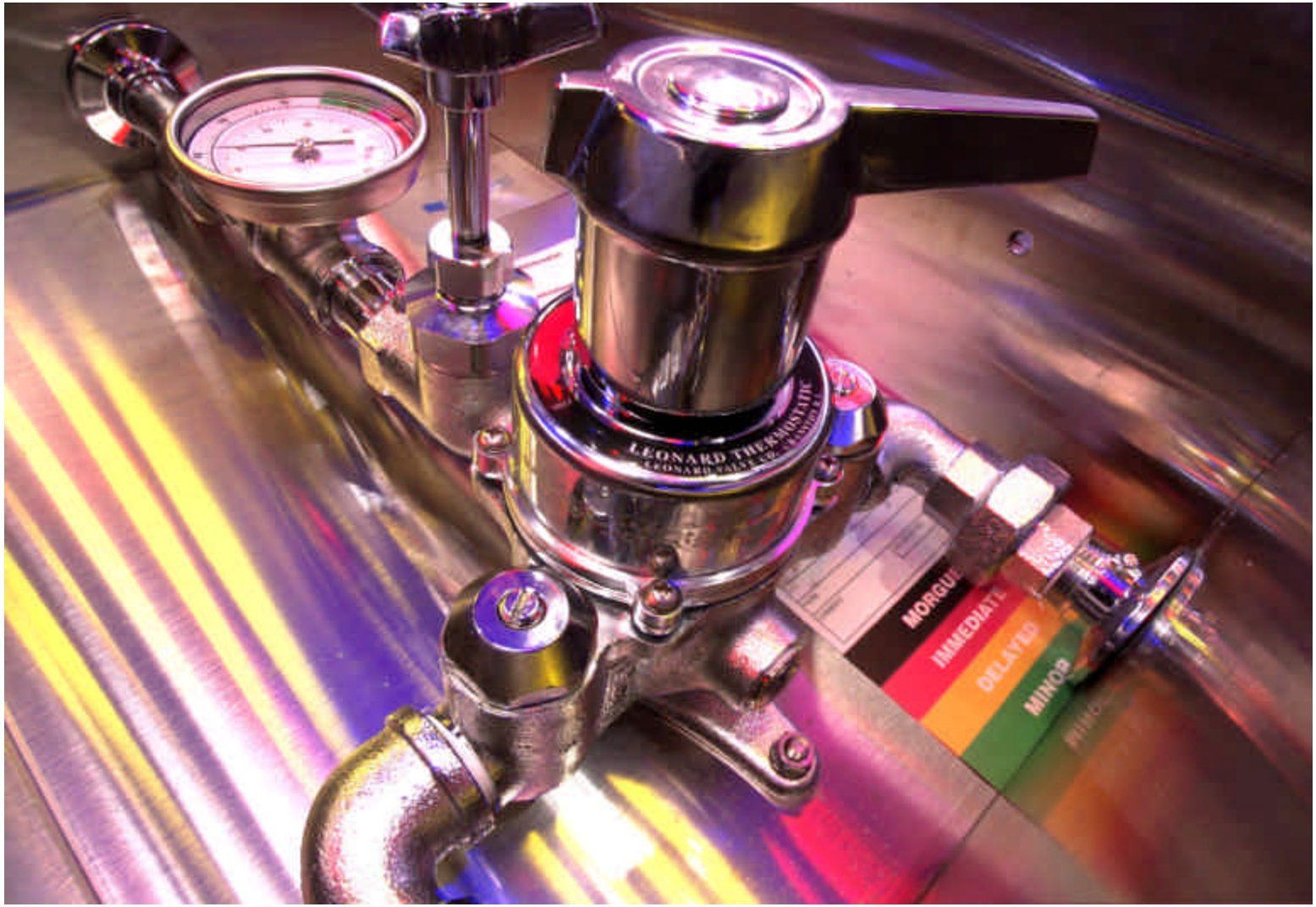

Figure 6: Closeup detail of the water control system.

Behind the mirror is the (de)control room where the plumbing, process controls, and computer vision system reside. A computer vision system uses simple image statistics to compute where bathers are located, and thus direct water flow (under computer program control) at the bathers. Additionally, for safety and security, a shower operator is stationed in the (de)control room to manually override the system, if necessary. Figure 7 shows a screen grab from the decontrol room operator's computer console that displays the automated computer vision algorithm progress.

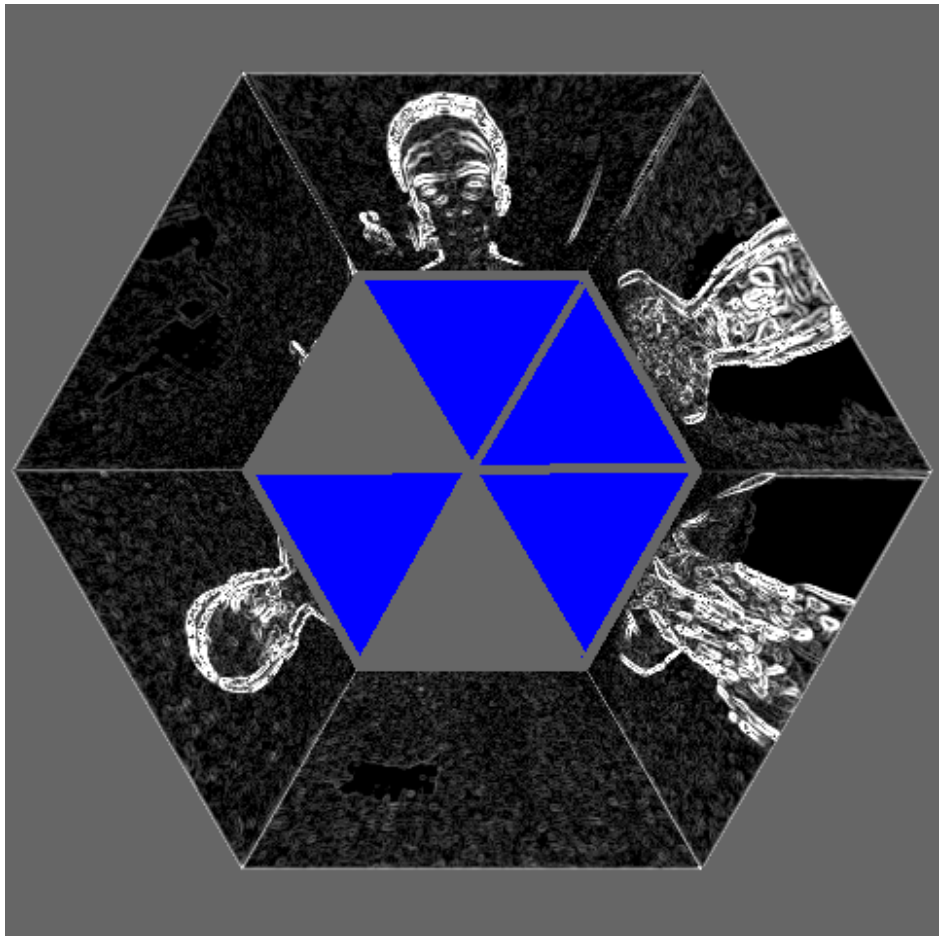

Figure 7:
Screen grab from decontrol room.
Blue regions indicate water flow in sectors where the computer vision system has detected a properly positioned bather. Here four bathers have been detected.

Manual override may be done with a hexagonal-shaped (de)control panel, as shown in Figure 8.

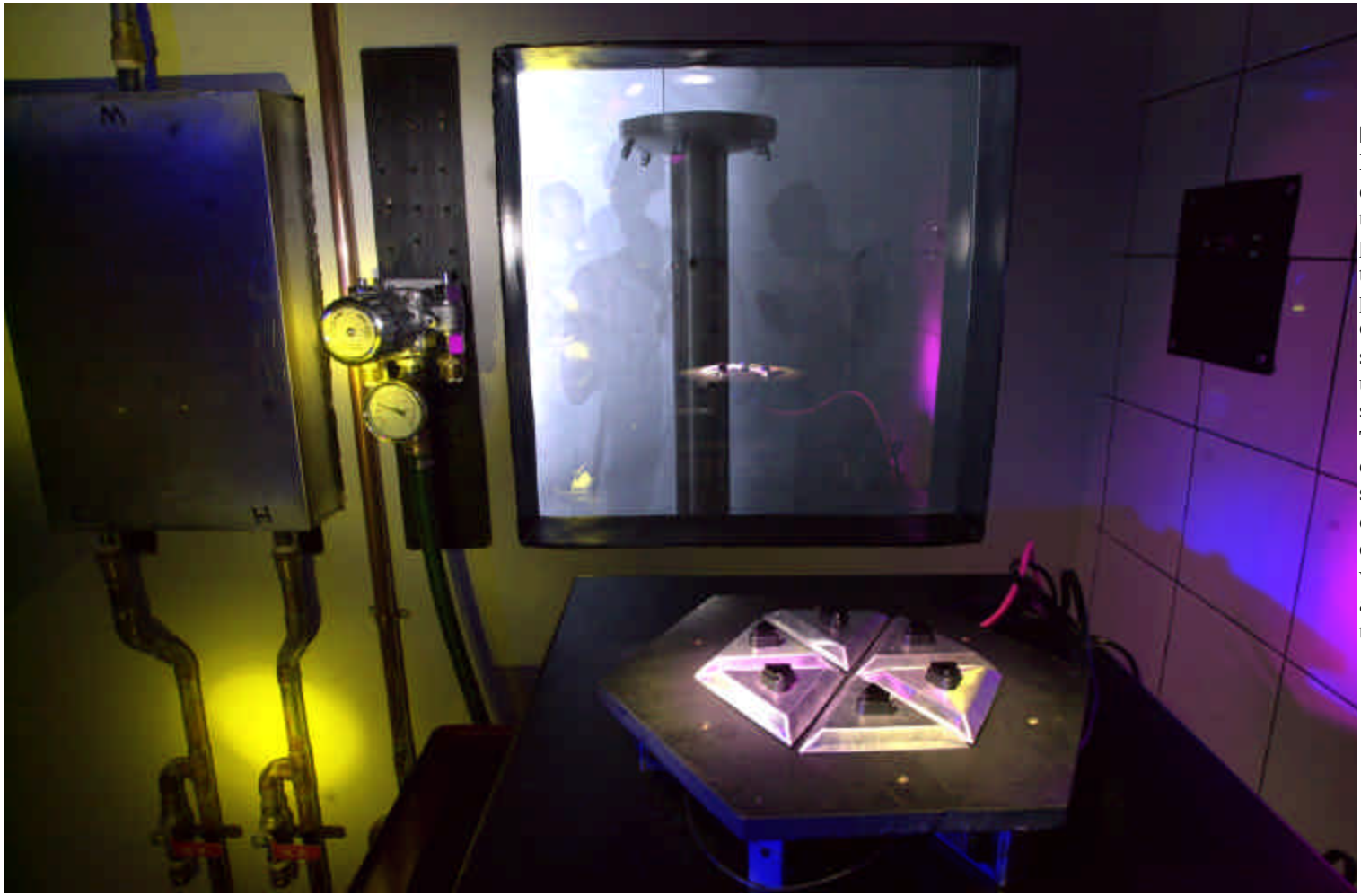

Figure 8: Decontrol panel comprising six triangular metal plates with a triangle-shaped pushbutton switch on each one. The six triangles make up the hexagonal shape of the panel. The panel is oriented and wired so that there is a one-to-one correspondence with the six nozzles as viewed through the mirror/window.

Because the decontrol room is dark, the mirror/window functions as a mirror when viewed from the shower room, and as a window when viewed from the decontrol room side. In order to protect the privacy of the decontaminees, the Chief Privacy Officer (CPO) ensures that the operator is a person of the same gender as those undergoing decontamination. As the first six men are undergoing decontamination, the next six men are directed into the shower room. After the two sets of six men have been decontaminated, all 12 of them line up along the wall opposite the bench. They are directed one-by-one to stand in front of the body scanner.

Figure 9: Full-body scanner for scanning suspects immediately after they return from the showers.

The body scanner comprises an infrared sensor array connected to a DEC Alpha supercomputer. It calculates body dimensions, and computes the optimal design for a uniform. This information can then be used to either custom-tailor a uniform, or to select from a fixed stock of pre-made uniforms. In this exhibit, the uniforms are all pre-made, of white Tyvek (TM). The limited selection of sizes available corresponded, perhaps, to the common approach of decon officials with regard to decontaminating society - of toxic substances, toxic individuals or toxic ideas. Figure 10 shows a screen capture from the body scanner.

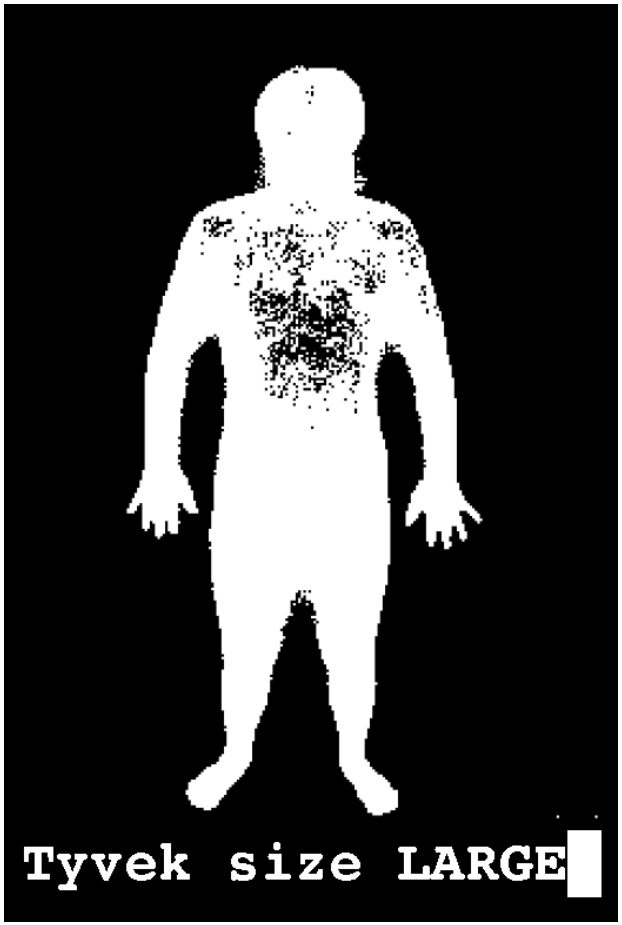

Figure 10:
Screen capture from body scanner.

The process is very streamlined and works quickly, so that thousands of people could, in principle, be processed in such a facility, in a short period of time. Figure 11 illustrates the streamlining process.

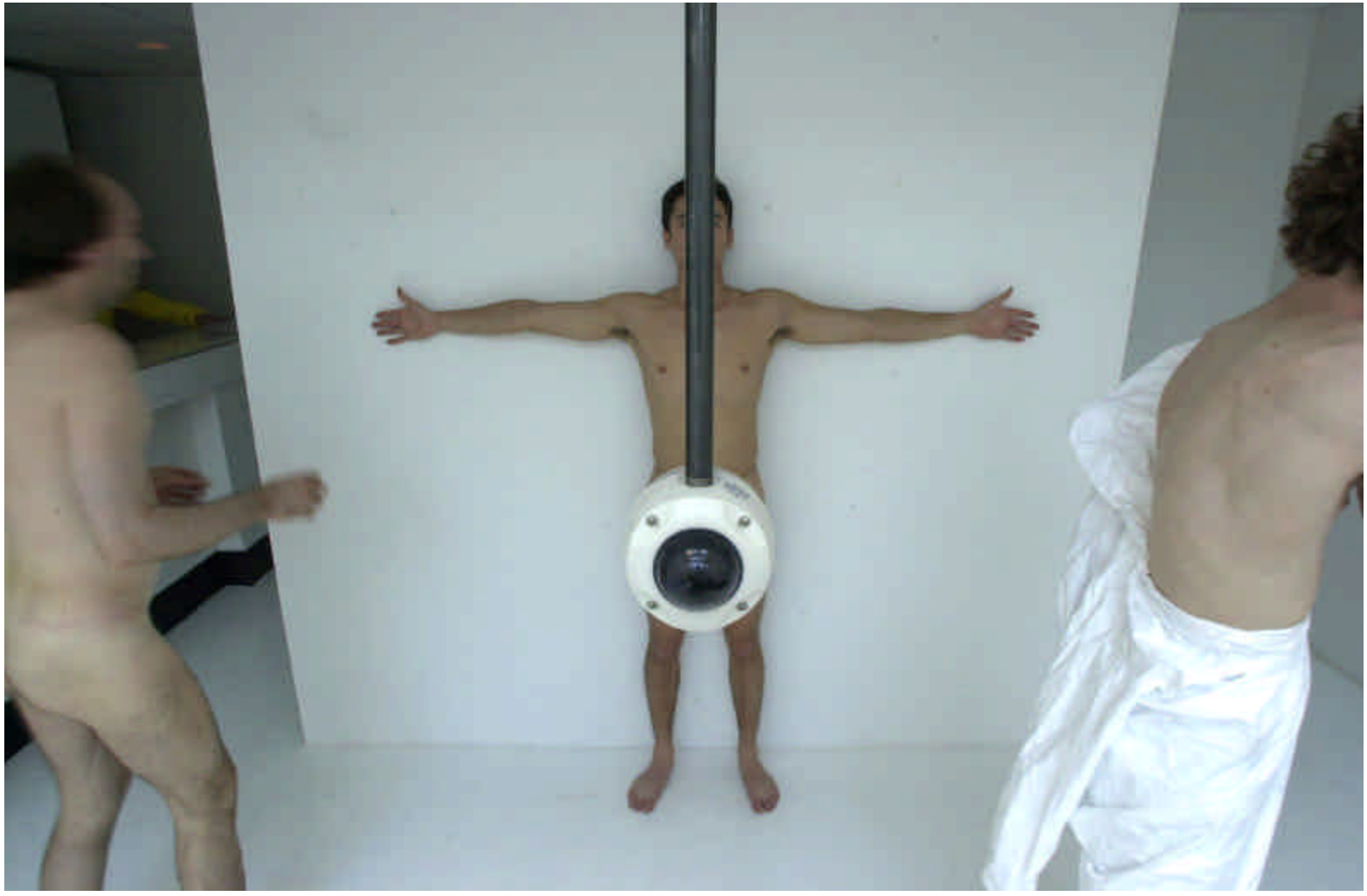

Figure 11: People lined up at the left proceed to be scanned, and are quickly handed a Tyvek (TM) jumpsuit in their size, and then put it on and line up at the right. The white jumpsuits have no pockets in which to conceal contraband.

The body scanner is mounted from the suspended ceiling by way of steel tubing, and all the wiring runs inside the steel tubing to give it a nice clean look, as shown in Figure 12.

Figure 12: Closeup view of full-body scanner.

After the 12 men are processed, and clad in the white jumpsuits, they are led upstairs to the upper room, and out onto the roof.

When all of the men are clear from the decontrabanding gallery and decontamination gallery, there is a staff change, wherein the male decon officers are replaced with female decon officers, and then 12 women are admitted into the decontrabanding gallery. The process alternates, roughly 15 minutes for men, 15 minutes for women, and so on, until all of the attendees have processed through decon.

At this point there is a rooftop address: the keynote address (Mann) followed by an address by CAE's Steve Kurtz.

Then a wine and cheese reception took place one floor down, as the official opening of the exhibit, with informal discussion, etc.

The post-postcorporeal era

In some sense, we may regard postmodernism, posthumanism, poststructuralism, etc., as being of the ``cyborg age" of mind over body. Deconference was an exploration in post-cyborgism (i.e. what comes after the postcorporeal era), and thus explored issues of postpostmodernism, postpoststructuralism, and the like. To understand this transition from ``pomo" (cyborgism) to ``popo" (postcyborgism) we must first understand the cyborg era itself. Foucault describes the transition from corporeal punishment, toward a ``punishment of the mind" rather than the body. The past century also provided us with many examples in which the body had become something of diminished importance. Improvements in medicine and health care had allowed us to temporarily forget the body, and focus more on the mind. Additionally, we began to see a decrease in racial and gender discrimination, such as to begin to attain a state of it's ``what's inside that counts".

Reduction in corporeal discrimination allowed us to draw together as a society, and through the World Wide Web, we connected into what was beginning to be a collective consciousness. With the advent of the ``new wave androgyny" many establishments no longer had separate washrooms for men and women. For example, in many North American night clubs, dance clubs, etc., men and women shared a single communal washroom. At this time it also became fashionable, in some circles, to be androgynous, and thus blur the gender boundary that had formerly been a hard and discriminatory boundary.

At around this time, university dormitories began to have communal showers that were no longer separated by gender. For example, MIT's East Campus dormitory has co-ed showers and commodes. The end of the segregation of gender had thus hit mainstream academia, and even the MIT pub had a single communal washroom for both genders.

Some European countries are also tending toward lesser corporeal emphasis. For example, the main conference hotel in Stuttgart Germany has a communal locker room in their hotel fitness center. Men and women shower naked together in a large open room with shower nozzles around the outside. Likewise in many of the surrounding bathing establishments such as Schwaben Quellen, Das Leutz, Isle der Ruhe, etc., whereas one of the few remaining bathing establishments with separate areas for men and women (Berg) is an historical site, maintaining its more than 100 year old tradition. Thus it appeared that the old days of having men and women stand in separate lines had come to an end, at least among the segments of the population more focused on the mind than the body.

But something changed all that, and suddenly, in the age of terror, the body came back into focus. With the recent rise in global terrorism we now see racial profiling --- a return to racial discrimination. Thus the kind of body that a person has suddenly matters. When the table salt spills at a restaurant, and the National Guard is called in to deal with a ``mysterious white powder'', patrons are detained, separated by gender, and stripped for decontamination showers. Like cattle, detainees and disease suspects are separated by gender, by race, or by other corporeal categories, and then processed in a mechanized fashion. To quote a recent article, ``It's like putting humans through a car wash after first destroying their garments.'' (http://wearcam.org/decon/)

DECONference raised many important questions regarding this transition from the postcorporeal (cyborg) era to the postpostcorporeal (postcyborg) era. However, a number of relevant questions remained: Are we seeing a return to significance placed on the body, or is the body merely seen as a crude marker for what might exist in the mind? Has the body truly fallen into obsolescence with regard to its ability to influence society, marked by its ubiquity throughout the culture and its shift from utilitarian consideration into something more akin to art? To be sure, there is a relatively recent increase in the prevalence and popularity of ``body art'' such as scarification, tattooing, and body piercing, and cosmetic surgery. Gratuitous use of the body has become ubiquitous throughout our popular culture. According to Marshall McLuhan (1988) ubiquity and the shift to art (or recreation) are key indicators of a medium's obsolescence. Thus, in the cyborg (postmodern) era, it seemed as though the body was obsolete.

But now, the notion of the body as obsolete (art) is itself obsolete, as we witness a renewed emphasis on physical characteristics as markers of intention, such as when those in charge of security select those with darker complexions for closer scrutiny. Such renewed emphasis on the body may suggest that the mind is the new medium to eventually be made obsolete. This takes us to the postcyborg

age where the ``mind is obsolete". This notion of the mind-as-art is how we, as a culture, are restructuring the mind through various technologies and modifications.

The Signifire and the Signifried

Among other important, but as-yet unanswered questions of the postcyborg age, is what happens when the new heroes of society are placed in such high regard that they fall outside the scope of scrutiny. Take for example the fireman. From fire extinguishers to riot extinguishers (big cans of pepper spray), the need for crowd control has been marketed as a new social order. And with fire hoses for crowd control the need for the fireman has changed from controlling fire to controlling people. As crowds of people are hosed down to prevent them from leaving the scene of a suspected white powder spill, one might ask: Is he the firefighter cum people fighter? Or has his Freudian desire to control fire merely evolved into a desire to control people? (Freud, 1932)

Inverse Panopticon: Turning the body inside out

While DECONference explored the outside of the body (the naked body, the corporeal envelope, the boundary), two subsequent events, DECONversation and DECONcert, also held at DECONism museum/gallery space under the umbrella theme of ``Cyborg Echoes" probed the mind and its relationship to the body, as a kind of inverse panopticon. (See: http://wearcam.org/deconversation/index.htm and http://wearcam.org/deconcert/index.htm.)

Unlike previous work in inverse surveillance, known as ``sousveillance" (a direct inverse panopticon), DECONcert explored the notion of community, interaction, and connectedness among participants.

DECONversation engaged the author, Steve Mann and Stelarc, in a lively conversation to explore the technological extensions of the body. Stelarc argues that the body is obsolete, and that we exist in a post-corporeal age in which our cybernetic extensions define a new sort of physical existence: "The body has been augmented, invaded, and now becomes a host, not only for technology, but also for remote agents. As the internet provides extensive, interactive ways of displaying, linking and retrieving the body information and images, it may now allow unexpected ways of accessing, interfacing and uploading the body itself".

Stelarc's notions of being ``augmented, invaded'' and becoming a host for ``remote agents'' are informed by various of his performance pieces, including Exoskeleton, Stimbod, Fractal Flesh, ParaSite, among many others.

The author (Mann) on the other hand, makes explicit our more real and immediate experience of being cyborgs, through the use of technological extensions of the cellular phone, internet connections, personal digital assistants, ubiquitous video and digital cameras, and, in true McLuhan fashion, our clothing.

The author, himself an explicit cyborg for over thirty years, was unfortunately and unwillingly ``de-cyborged'' during an interaction with Air Canada (Virilio, 2002 :96-99). While perhaps being the first to ``bump into'' the post-cyborg forces around us, the author is not the only one who will likely be affected by these forces. These are forces that will affect all of us profoundly, for in the era of terror, anything can happen, in a direction beyond the postmodern.

The modern panopticon is served well by Stelarc's vision. With our bodies technologically extended and connected to a ubiquitous network, able to be invaded and remotely accessed, surveillance cameras that now pervade our public spaces will become a cumbersome and redundant artefact. Rather, one can easily imagine a society in which we are all uniquely addressable and locatable via current technologies. Given the current psycho-technological climate in the United States, for instance, the total surveillance scenario is not at all far-fetched:

The Total Information Awareness database proposed by the Defense Advanced Research Projects Agency, combined with the USA PATRIOT Act, and its sequel, the Domestic Security Enhancement Act of 2003, will be able to construct a composite profile of almost anyone based on behaviours inferred by computationally recorded activities. The missing link, to physically locate and track suspected individuals, may easily be addressed by the numerous technological extensions to our body that we willingly and eagerly embrace. Thus, the obsolescence of the body, and its replacement by our cyborg outgrowth could encroach on our personhood and personal freedom in favour of alleged or false promises of safety and security.

The author's life-long skepticism of the benign nature of this authoritarian paternalism hopefully calls into question the alleged trade-off between safety and security: That which makes us safe does not necessarily make us free, or even secure.

The mediated reality of cyberspace, where our acts and thoughts can be watched not only by one guard but by many different guards, creates simultaneous feedback for our own awareness of the control we have over our own body.

The prisoners in Bentham's panopticon were aware that they were being watched by the guards, although each prisoner remained isolated from all the other prisoners. The modern panopticon of cyberspace is a reversal of Bentham's original. The guards are hidden from our view and our consciousness, although we are not only aware of the other prisoners, we are encouraged to connect to them. However, in doing so, we may unwittingly be inviting the panopticon's unblinking technological gaze by becoming constrained cyborgs.

However, cyborg extensions are neither exclusively, nor inevitably, detrimental to our existential freedom. One criticism and common complaint about the (post)modern condition is its isolation. By extending ourselves via internet connections and other means of instantaneous communications, our computational beings may connect, but we may lose a humanistic element. Is there a way to use technological extensions to connect humanistically to one another? This is an important goal of Connected Collective Humanistic Intelligence (CCHI, or ``Hintelligence", for short, see: Mann, 2001).

Further, in using cyborg technology to explicitly connect mind to mind, there is the possibility of a restructuring of the mind that occurs that we might consider beneficial to our evolution as a culture. These were the goals of the exploration undertaken during the Cyborg Echoes DECONcert (http://wearcam.org/deconcert/index.htm ``Music in the Key of EEG").

DECONcert used electroencephalogram (EEG) sensors which sensed electrical activity produced in the brains of participants. 48 participants were equipped with EEG sensors, and the signals from the brains of the participants were used as signals to modify (e.g. modulate, etc.), and in some ways generate, a computationally controlled soundspace. DECONcert allowed participants to form a computational feedback loop with the process of musical composition, using an implementation of Humanistic Intelligence.

This formed a collective feedback loop where output from the group of participants is sensed by the computer. The computer then generates music based upon this response, which the participants experience. That experience of course changes their brainwave patterns, so that the participants collectively affect the computer and the computer affects the participants. Thus a collective stream-of-deconsciousness arises, much like a dreamlike meditative state of multi-threaded thought that is neither conscious, subconscious, nor unconscious.

Thus we have an implementation of Intelligent Signal Processing to continually re-generate the music as part of this feedback loop, with the kind of enhanced perceptual sensitivity characterized by early regenerative radio receivers.

Bentham's panopticon isolated the prisoners from each other, while keeping them visible to the guards. DECONcert, in contrast, allowed the participants to interact deconsciously with each other. DECONcert makes explicit the mind, and thus reverses the effect of the panopticon, as a cultural probe into both the mind and body.

The apparatus used in DECONcert required no prostheses, tools, devices, or personal belongings from the participants. Participants formed a collective atmosphere with only their thoughts and thus it was a collaborative system which could function even when participants were relieved of their shoes, clothing, jewellery, and personal belongings which could be considered potential "contraband."

Moreover, the interaction in DECONcert took place even with participants physically isolated from each other. The physiological signals generating this interaction can come from the minds of the participants in the manner of an Ouiki (http://wearcam.org/ouiki/index.htm) and thus be outside the visibility of the guard.

DECONcert was a tangible extension and of the previous night's DECONversation. Rather than using technological extensions to invade, surveil and isolate people from one another, DECONcert connected multiple minds as a single musical instrument, with physiological signals operating "in concert", i.e. together, to create a unique technosocial harmony. Sound from DECONcert can be heard at http://www.mcluhan.utoronto.ca/deconcert_begin.mp3 and
http://www.mcluhan.utoronto.ca/deconcert_end.mp3

The interaction of technology with mind resulted in a collective telematic prosthesis of the mind. Such mind modification transcends body modification and explicit cyborgism that merely extends the body. In DECONcert we explored the comparison of the robotic body and the cyborg minds.

Telematic Tubs Against Terror ("Bapterrorism")

A project called "Bapterrorism" (Telematic Tubs Against Terror) was a simultaneous exploration into the panoptic mind-body relationship of the post-cyborg age. Initially, as with DECONcert, Bapterrorism explored the collective stream-of-deconsciousness implications of the public bath. Tubs were remotely connected together over the Internet, to create a communal bathing space. In addition to visual continuity afforded by web cameras and web browsers, the brainwave electrodes created a collective immersive multimedia experience (Figure 13).

Figure 13: Telematic Tubs Against Terror ("Bapterrorism")

The idea of having people in different places bathing in the same wave state (same temperature water, same wave patterns, etc.) is accompanied with projections of shadows on the translucent outer surfaces of the tub. Additionally, there is provided a notion of "hysterical relaxation". The hot tub is traditionally a place to relax, but in the age of bioterror, is a place to be free of contamination, free of contraband, and free of the liberty to conceal. Moreover, the word "hysterical" derives of the womb, which is further suggested by the umbilical cord formed by the electrodes worn by each participant.

Conclusion

Our current technological state is one of explicit cyborgism, as Stelarc demonstrates, and as the author (Mann) has experienced over the past thirty years. We have extended our minds and bodies through the use of and adaptation to our technological prostheses. In so doing, we have created easily penetrated "back doors" through which the modern panopticon might reach. At the same time we, paradoxically, find it increasingly difficult to truly connect to one another, as we, with our prostheses build barriers around ourselves. Are we connecting to each other, or growing increasingly estranged from the elements of culture and society that would otherwise draw us together? These issues build upon questions of social mediation raised by using cyborg, postcyborg, and pastcyborg technology (Mann and Niedzviecki, 2001).

The author suggests clothing as the border of the sovereign nation, as well as an architecture of one (e.g. a building built for a single occupant). The interplay between cyborg, postcyborg, and postpostcyborg (deconism) is a war at the corporeal boundary defined by our clothing and other technological prostheses. Yet we may also explore the low-intensity peacefare inherent in the telematic interfaces that connect these borders. The archiotic (architectural semiotics) elements of clothing allow us to redefine the naked cyborg of the postcyborg era.

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