
Hacking the Brain? Histories of Mind Control and Technology

16–17 June 2022

Room A7, Academieggebouw

University of Groningen

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Thursday 16 June

13:00-14:00 - Registration/lunch

14:00-15:30- Panel 1- British Mind Control

- Mike Jay, "Mind Control's Patient Zero: James Tilly Matthews and the Air Loom"
- Rhodri Hayward, (Queen Mary, London), "Poltergeists and Telepaths: Mind Control and the Problem of Agency in 1970s Britain."

15:30-15:45 - tea/coffee

15:45-17:15 Panel 2 - Brain Control

- Rebecca Lemov (Harvard), "Just Because They're After You: The Return of Brain Control in Anti-Violence Scientific Crusades of the 1970s."
- Anthony Enns (Dalhousie), "Brain Control: The Weaponization of Psychotechnologies in Cold War Science."

17:15-17:30 - tea/coffee

17:30-19:00 Panel 3 - Mind Control and Capitalism

- Bernd Bösel (Potsdam), "The Spectre of Digital Mind Control: Shoshana Zuboff's *The Age of Surveillance Capitalism* and its Critics."
- Natasha Dow Schull (NYU), "Custom Mind Control: Personalized Volatility in Digital Gambling."

Friday 17 June

12:00-12:15 - lunch

12:15-13:45 - Panel 4 - Control

- **Maarten Derksen (Groningen), "Control out of Control."**
- **Marc Tuters (Amsterdam), The Concept of 'Control 'in Media Theory and Conspiracy Theory about the Internet."**

13:45-14:00 - tea/coffee

14:00-16:15 Panel 5 - Cultures of Mind Control

- **Fleur Hopkins-Loferon (Paris), "Parasite Culture: Host Manipulation in SF Imaginary (1980-2020)."**
- **James Kennaway (Groningen), "Enchanted Technology: Musical Mind Control in Conspiracy Theory."**
- **Kenneth White (Binghamton), "Hyperventilation Syndrome: Media Cultures, Control Societies – circa 1970."**

16:15-16:30 - tea/coffee

16:30-18:00 - Panel 6 - Paranoia

- **Andreas Killen (City College), "Stroboscope and the Paranoid Style."**
 - **Jeffrey Sconce (Northwestern), "Field and Stream in Paranoid Ideation."**
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Abstracts

Bernd Bösel (Potsdam), “The Spectre of Digital Mind Control: Shoshana Zuboff’s “The Age of Surveillance Capitalism” and its Critics.”

In her widely discussed 2019 magnum opus “The Age of Surveillance Capitalism”, Shoshana Zuboff deals extensively with the recent history of Google’s discovery of “data exhaust” and its availability to predict behaviour on an unprecedented scale. This revenue-driven practice was quickly adopted by the other Big Tech companies and has become a staple of the so-called platform economy. But Zuboff’s book offers more than just a sinister new term for late-stage digital capitalism. It also suggests that there is direct lineage from the social behaviorist fantasies of B. F. Skinner to the social physics underlying Google’s and other companies’ ideas and practices of “behavior modification”. With the information technological revolution, the Cold War specter of governmental mind control now seems to have become our reality due to private companies’ ingenious usage of the data exhaust or “behavioral surplus” that every one of us produces. Zuboff even speaks of “a privileged priesthood of ‘tuners’” ruling “the connected hive” of digital users.

Even though the term “surveillance capitalism” was widely adopted, Zuboff’s depiction of a kind of digital mind control has come under scrutiny. The presentation will focus on two of her most prominent critics who have both long established themselves as bloggers and public intellectuals: Cory Doctorow and Evgeny Morozov. Doctorow picks up on the term “surveillance capitalism” in a long series of blog posts that subsequently were published as a non-fiction book titled “How to destroy surveillance capitalism”. He agrees to Zuboff’s basic premise that this form of digital economy challenges democratic norms and poses a threat to the human species. But he disagrees with her diagnosis why this is this case and ultimately blames her of actually aggravating the problem by depicting Big Tech as stronger as it actually is. – In his extensive review “Capitalism’s New Clothes”, Evgeny Morozov reconstructs Zuboff’s argumentation in detail and ultimately comes to an even harsher conclusion than Doctorow. Morozov’s reading is nevertheless quite insightful for our understanding of the specter of “digital mind control” since it takes seriously the claim that surveillance capitalism’s fundamental aspect is, at least in theory, the modification of behavior. And he concedes that “even erroneous analytical frameworks can produce beneficial social effects”, which he identifies with Google and Facebook coming under closer scrutiny by the audience of Zuboff’s book. Can we then read her analysis, for all its apparent shortcomings, at least as a prophetic warning of imminent forms of digital mind control?

Maarten Derksen, "Control out of Control."

The Dutch psychiatrist J.A.M. Meerloo coined the term 'menticide' for the same practices that others, like Edward Hunter, called "brainwashing." "Menticidal forces" threaten our society, and technology is at the heart of the problem. Technology, whether it is television, computers, or advertising, destroys our free will and rationality and turns us into Pavlovian stimulus-response machines. The ultimate consequence of the mechanisation of mind and society would be a world in which no one is in control. In my paper I will describe the psychology (a blend of behaviourism and psychoanalysis), from which Meerloo derived this nightmare. I will then discuss a recent psychological theory in which a very similar contrast between automaticity and rationality, mechanism and resistance, is given a more positive spin. In the psychology of priming, technology once again is said to allow bypassing consciousness and rationality to influence the irrational unconscious directly, but its proponents explicitly downplay fears of brainwashing. Priming research became a booming field of study in the first decade of this century, but is now the topic of controversy. It appears that priming effects are difficult to reproduce reliably, and priming researchers admit that the success of experiments may depend on a multitude of contextual variables that are difficult to predict and control. Once again, the study of influence produces a world, or at least a world view, where no one is in control.

Natasha Dow Schull, Custom Mind Control: Personalized Volatility in Digital Gambling."

In the 2000s and 2010s the casino industry developed sophisticated data-gathering systems and "behavioral intelligence" software to make sense of the preferences, tendencies, and behaviors of slot machine gamblers. Of particular interest to casinos is whether a given player prefers a steady stream of small wins (and thus enjoys "high hit frequency, low volatility" games) or is willing to abide long dry spells for the chance of a big win (as in "low hit frequency, high volatility" games), and where they fall along the spectrum between the two. Understanding the volatility preferences of player subgroups has allowed casinos to tailor their game offerings in a way that increases the time and money gamblers spend at machines. Recent designs in "deep personalization" promise even greater revenue extraction by endowing slot machine algorithms with the capacity to detect and appeal to the specific "sweet spots" and "pain points" of individual gamblers as they unfold in real-time

Anthony Enns, "Brain Control: The Weaponization of Psychotechnologies in Cold War Science."

In 1953, shortly before his appointment as director of the CIA, Allen Dulles gave a speech in which he claimed that the early twentieth century "war of ideologies" had been superseded by this new form of "brain warfare," as the brain could now be manipulated like "a phonograph playing a disc put on its spindle by an outside genius over which it had no control." This description of the brain as a media technology provided a conceptual foundation for the CIA's subsequent experiments in mind control. While the practice of "brainwashing" soon became a topic of widespread concern in the popular press as well as a recurring theme in popular culture, less attention was paid to the development of new psychotechnologies, such as neural stimulation, neural implants, and neural disruptors, which were similarly designed to transform human subjects into robots through the integration of minds and media. This paper will examine how the weaponization of these technologies was fueled by an increased fear of both Communist espionage and social unrest during the Cold War, as ideological and repressive state apparatuses no longer seemed capable of maintaining security and order. It will also examine how these devices were informed by a technological imaginary that consolidated two competing and somewhat contradictory theories regarding modern media, as they were clearly conceived as bodily extensions that could enhance and augment cognitive abilities, yet they were also perceived as a threat to the autonomy and integrity of the human subject by blurring the boundaries between the mental and medial apparatus.

Rhodri Hayward, "Poltergeists and Telepaths: Mind Control and the Problem of Agency in 1970s Britain."

Fleur Hopkins-Loferon, "Parasite Culture: Host Manipulation in SF Imaginary (1980-2020)."

Many science fiction and horror movies depict a mind control parasite (worm, slug, fungus, bacteria) capable of taking control of its host's mind while burrowing directly in its brain, or sticking to its neck. They directly stem from real parasite, turning insects into zombies to benefit their own cycle of reproduction. Imaginary parasites, where as they are aliens or laboratory-induced, do not need fancy technologies to access the nervous system as they form a bond with the host, and even act as a whole, a form of collective consciousness, usually in order to dominate the human race. This talk ambitions to unravel the parasitic topos and how it has nurtured technological imaginary as well, implying a brain chip is somewhat of an insect, crawling inside one's brain or that Neuralink is the next step to human an AI symbiosis.

Mike Jay - "Mind Control's Patient Zero: James Tilly Matthews and the Air Loom"

In 1810, while confined in Bethlem Hospital as an incurable lunatic, James Tilly Matthews produced a detailed technical blueprint of the Air Loom, a device that was being used to control his mind. It is easily recognisable as what would, a century later, be termed an 'influencing machine': it was predicated on advanced technology, controlled his actions and thoughts from a distance, and was operated covertly by malign conspirators. Matthews 'extraordinary personal story, together with the art and writing he produced in his Bethlem cell, offer clues to the origin and meaning of this terrifying secret weapon, whose mesmeric rays and mysterious gases were brainwashing politicians and plunging Europe into revolution, terror and war.

James Kennaway, "Enchanted Technology: Sound and Mind Control in Conspiracy Theory."

This paper considers the role of sound and music technology in discussions of mind control in conspiracy theories over the past two hundred years. In particular, it will look at the deep continuities between the idea of music casting magical spells to control others and supposedly modern secular discourses of the power of music technology to influence or brainwash listeners. Indeed, advances in sound recording and broadcasting technology have regularly led not to a decline but to a boom in magical thinking on the subject, especially in the context of conspiracy theories. The paper will also argue that, far from being a marginal phenomenon, such conspiracy theories, combining pop science with a garbled political critique and occult themes, have often been extremely influential on "mainstream" ideas.

Andreas Killen, “Stroboscope and the Paranoid Style”

Amongst the technologies of mid-century mind control the stroboscope is generally not accorded central importance. Yet beginning with its first appearance in the writings of neurophysiologist and cybernetician Grey Walter (*The Living Brain* 1953), strobe migrated across a wide social and cultural landscape, much of it shaped by the “paranoid style” of the early Cold War era. Using a range of literary and cinematic sources this talk will trace the process whereby strobe’s effect on brainwaves became imagined as a means of affecting, and ultimately controlling thought-waves.

Rebecca Lemov, “Just Because They’re After You: The Return of Brain Control in Anti-Violence Scientific Crusades of the 1970s.”

A “Second Wave” of psychosurgery marked the late 1960s and early 1970s. In its new form, psychosurgery – now defined as brain alteration for the purpose of behavior change and not due to organic disease – spread as a way of suppressing potential violence in a society seen to be full of would-be assassins, hijackers, and unruly social disrupters such as those who rioted in ghettos like Watts. Advocates for this new form of psychosurgery framed it as highly advanced, less invasive, and technically futuristic. Federal funds supported an experimental program at Massachusetts General Hospital, where several prominent neurosurgeons and psychiatrists at the forefront of the neo-psychosurgery movement set up a “Violence Research Unit” to explore their sci-fi aims of remote controlling human subjects and their more practical goal of applying psychotechnology to criminal justice. It may seem farfetched, even unbelievable, that dozens or hundreds (the numbers are not known) of such operations occurred in prisons and hospitals before a combination of grassroots activism and pivotal legal decisions squelched them in 1974.

Telling the forgotten history of *psychosurgery’s comeback as a behavioral technology*, this talk is structured around the tragic medical experiences of one man, a brilliant self-taught engineer from Cambridge, Massachusetts, named Leonard Kille. At the age of 34, the generally mild-mannered Kille, who suffered from panic attacks, stress, and a difficult family life, was deceptively recruited into a “treatment” that was in fact an experiment: Researchers implanted fourteen electrodes in his brain to test whether they could predictably alter his moods by stimulating certain portions of the amygdala. After months of such testing, his doctors made what they would describe as “delicate notches in the deep tissue using electronic searing strokes,” thus essentially burning away that portion of Kille’s brain. The chapter follows Kille from his initial personal and marital crisis to his entry into the Mass General Hospital violence unit, his post-surgical decline, and his subsequent decades of raging paranoia – during which he became convinced that doctors from Harvard and MIT were “after him” and had put electronic implants in his brain.

Jeffrey Sconce (Northwestern), "Field and Stream in Paranoid Ideation."

Psychoanalysis and cybernetics were often energetic foes in the mid-20th-Century, a divide prefigured by Freud's own transition from streams of Q-cathexis to the metapsychological fields of the second topography (id, ego, superego). Freud, in turn, integrated a Victorian poetics of electrical streams and magnetic fields, rational exchange and occult radiation. This paper examines how this durable poetics of "field" and "stream" figure in recent paranoid ideation concerning media and mental control, especially as the composite wired/wireless configuration of the Internet has come to dominate electronic paranoia.

Marc Tuters - The Concept of 'Control 'in Media Theory and Conspiracy Theory about the Internet."

The concept of 'control 'is central to both contemporary media theory as well as to conspiracy theory. This talk looks at how the concept is evoked in both of these discourses, offering a brief literature review for the first and overview of empirical web-based research for the second. Within media theory, Giles Deleuze (1990) famously developed the idea of 'societies of control 'in a short postscript to his monograph on Foucault, as periodization for what came after 'disciplinary societies'. For Foucault, institutional authorities such as prisons and schools, produced conforming individuals through the internalization of restrictive norms. In contrast to the disciplinary societies 'vast spaces of enclosure', control societies operate through 'modulation', which targets not the individual but the 'dividual'. This imagery has become extremely influential in contemporary media theory seeking to describe the 'soft biopower 'by which digital networks capture and incentivize our actions online (cf Cheney-Lippold 2011). Deleuze originally borrowed the term from William Burroughs, who in turn borrowed it from cybernetics (which Norbert Wiener defined as "the science of control and communications in the animal and machine"). In Burroughs's somewhat paranoid conception, control was essentially a technique of mass-media psychic manipulation, which he sought to disrupt through avant-garde writing practice. In my research into online conspiracy theories I have found a thriving discourse of what can be called "vernacular media critique" (Acland 2011), which echoes Burroughs's paranoid evocation of control. Drawing examples from YouTube videos, Instagram posts and Tweets collected during 2020-21, the talk offers illustrative examples of highly 'engaged with' conspiracy theories about 5G, surveillance microchips, the internet of things, artificial intelligence and so on. I compare selected themes from this vernacular media critique to scholarly media theory. While there is a demand for scholarly media theory that helps us to understand the operations of power, its homologous relation to its vernacular twin - to conspiratorial accounts of the functioning of contemporary new media systems - presents some challenges that this paper will explore.

Kenneth White, “Hyperventilation Syndrome: Media Cultures, Control Societies – circa 1970,”

My presentation derives from my book in progress, *HYPERVENTILATION SYNDROME: Media Cultures, Control Societies – circa 1970*, a history of film, media, and technology in the late Vietnam War era. *HYPERVENTILATION SYNDROME* describes how filmmakers and video artists questioned the foundational definitions of medium and media, agency and authorship, control and its loss, between 1968, the year of most intensive involvement of American forces in Southeast Asia, and 1976, the American Bicentennial – a period that historians describe as a society on the verge of unraveling, stricken by a “nervous breakdown.” How did artists engage this cultural impasse – a breakdown of narrative, of language, of agency and control – as a problem of “new media”? I claim that particular works of film and media of the period manifested a “hyperventilation syndrome,” a term from the medical sciences for a respiratory disorder induced by “a sense of terror”; I appropriate the term as a metaphor for a cultural disorder, an affliction of the social body, evinced in artists’ critical engagement with technological media, ever-expanding the scale of their engagement from specific devices to media environments, from lived conditions to ecological systems. I argue that these artists not so much raged against machines as raged against an assemblage of technocratic management, against a war defined through kill-ratios, against a cultural logic in which the basic processes of the autonomic system of the human organism – breath itself – was subject to calculation and management on terms of media technology. Their “hyperventilation syndrome” elucidates the political unconscious of an emergent society of control. Informed by what postcolonial literary scholar Rob Nixon has posed as the representational challenges, for both artists and activists, of the “slow violence” of environmental disasters and the toxic aftermaths of war, *HYPERVENTILATION SYNDROME* delivers new insight into who is responsible – even at fault – for a work of art.