

Introduction to the *Bioapparatus*

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Introduction

This publication documents the proceedings of a two-day seminar held at the Banff Centre for the Arts, October 28 and 29, 1991. The seminar took place within the framework of a ten-week residency on the *bioapparatus*, a collaborative project of the Art Studio and Media Arts programs of the Banff Centre. Through its ongoing residency programs, the Centre offers a unique context for bringing together a multidisciplinary group to address important cultural issues.

Given today's "hyperreal" environment of image saturation on the one hand, leaving art and artists in what has been called a crisis of representation, and the development of highly sophisticated representational technologies on the other hand, it has become crucial to open up and expand the discourse on art and new technologies. This territory has been interpreted most often through the lens of technology itself, disconnected from the broad range of art practices and cultural discourses circulating today.

The artists, composers and writers in the residency have been brought together principally for the purpose of advancing their own art production. In addition, we have built a parallel objective into the residency – namely, to map significant shifts in philosophical and representational issues that are coextensive with technological change.

The Virtual Seminar

One of the intentions of the residency has been to expand the discourse around technology and culture. As organizers of the seminar, we wanted to encourage debate and to involve a large number of people in mapping this vast territory. To this end, we invited short submissions in response to a text outlining issues concerning the *bioapparatus*. These contributions, submitted by residents as well as interested people who could not attend the residency, formed the discussion document for what became known as the virtual seminar on the *bioapparatus*. As forums for diverse voices, the seminar and publication reflect unresolved and contentious positions in this field rather than a universal perspective.

The papers in the discussion document were grouped into ten chapters, each of which addressed a specific concern related to the *bioapparatus*. Five of these were addressed on each day. The discussions surrounding each area began with a presentation by one of the residents who summarized and responded to issues raised in the papers. At the end of each presentation, the debate was opened up to residents to continue the exchange of ideas that had been taking place since the residency began on October 6. At the end of each day, the discussion was opened up to the floor. This publication draws on the transcripts of the proceedings and is structured to reflect the organization of the seminar itself. The proceedings have been edited and slightly reordered for clarity.

Genealogy

The term *bioapparatus* was coined specifically by us for the residency. It combines an understanding of particular philosophies of technology with theories about the technological apparatus, the technologized body, and the new biology. To describe the origins of such an open-ended word, one that seems to resonate even without explanation, is to offer only a

précis of a large and complex territory. Presented here is a synopsis of the theoretical frameworks that have shaped our conception of the *bioapparatus*.

The philosophical grounding of our thinking on technology is influenced by the perspectives of three thinkers working within a Canadian context. Arthur Kroker published an insightful study of the Canadian philosophers of technology Marshall McLuhan, Harold Innis and George Grant, who propose what he calls an original and comprehensive discourse on technology.¹

McLuhan is widely known in North America as the electronic media guru of the 1960s. Kroker characterizes McLuhan as a rhetorician and a technological humanist in comparison to the existentialist Grant and Innis the realist. McLuhan's cosmos is not a futureworld of processed experience but a global information environment already in place. Among his more revolutionary propositions, several of which have become platitudes of the media age, is the idea of body extension: "All media are extensions of some human faculty – psychic or physical."² So the *technological sensorium* is an extension of ourselves which envelops us and in which, from McLuhan's redemptive perspective, we can all participate with creative freedom.

George Grant's lament for humanity as trapped creatures, "half-flesh/half-metal," exemplifies his Nietzschean pessimism about technological society. He envisions the emergence of the "will to technique" as "will to power," in fact the "will to will." What seems here to be an unredeemable conception of the modern world, a 1960s mindset very different from McLuhan's, offers at least a warning about the impact of the technological drive for mastery and for progress. Taken as a fixed and cul-de-sac position, it offers a starting point for deconstructive readings that break out of the limits of Grant's fundamentally conservative categories of thinking and feeling.

Innis is the political/cultural observer who saw clearly, in writings as early as the 1930s, the position of the Canadian psyche, "trapped between the cultural legacy of its European past and the expanding 'space' of American empire."³ For Innis, media technologies are "monopolies of space" that work against time, time as historical remembrance. His is not a nostalgic vision of the past, but a probing of possible identity and of survival.

Through this synopsis philosophical overview, the technological sensorium emerges as a reflection of shifting yet specific social and cultural value systems. The debates that developed in the mid-seventies around the workings of cinema as an ideological apparatus, particularly through the British journal *Screen*, are a second theoretical underpinning to the *bioapparatus*. Articles published around 1975 by Jean-Louis Baudry, Christian Metz and Laura Mulvey are key to this area.⁴ Baudry proposes the cinematographic apparatus as constituted through the entire context, structure, and signification system of cinema. It is a closed system that creates its own desire for itself. It instills this desire, among others, in the spectator through its simulation of individual subjectivity. Metz and Mulvey add that scopophilia (or pleasure in looking) and the spectator-text relationship in cinematic narrative are, in psychoanalytic terms, the very conditions of subjectivity.

Paul Virilio, on the other hand, specifically examines cinema as an apparatus of war. Many of his insights anticipated what more recent technologies have made apparent. "Space is made translucent and its military commander clairvoyant...by technological processes of foresight and anticipation."⁵ This cinematic process is no longer reserved for the high command, but has become a public visual display (in the new world order). Through these theorizations of the ideological apparatus, it is possible to conceptualize individual subjectivities as constructed through technologies. The *bio* of *bioapparatus* is primarily an issue of subjectivity, how it is constituted and how it is located in relation to the body.

1 Arthur Kroker, *Technology and the Canadian Mind: Innis/McLuhan/Grant* (Montreal: New World Perspectives, 1984), 7. Arthur Kroker has added his own perspective on technology in a series of works, the most recent being *The Possessed Individual: Technology and the French Postmodern* (Montreal: New World Perspectives, 1992).

2 *Ibid.*, 56.

3 *Ibid.*, 95.

4 Jean-Louis Baudry, "Ideological Effects of the Basic Cinematographic Apparatus," *Film Quarterly* 28:2 (Winter 1974-75), 39-47; Christian Metz, "The Imaginary Signifier," *Screen* 16:2 (1975), 14-76; Laura Mulvey, "Visual Pleasure and Narrative Cinema," *Screen* 16:3 (1975), 6-18. See also *The Cinematic Apparatus*, eds. Teresa de Lauretis and Stephen Heath (New York: St. Martin's Press, 1980).

5 Paul Virilio, *War and Cinema, The Logistics of Perception* (London: Verso, 1989), 77.

The cinematic apparatus can be linked to another apparatus, the bachelor machine. Constance Penley considers Baudry's theory to be a "bachelor construct," because of its phallic position in the unconscious and its mechanism for reproducing itself by itself – for situating desire only within its own closed masculine terms.⁶ The bachelor machine construct actually has its origins in the art domain, in Marcel Duchamp's infamous *La mariée mise à nue par ses célibataires, même* of the 1920s. As a dadaist anti-art gesture and as the deconstructive device described by Penley, this artist's machine has taken on a much broader role as a literary trope referring to a (masculine) auto-erotic and nihilistic narrative logic.

In this context, a brief mention of the "influencing machine" is also in order. Joan Copjec writes about this model, proposed by Victor Tausk, a contemporary of Freud. Freud's patients describe the influencing machine as controlling them, persecuting them, and making them "see pictures:...the machine is generally a magic lantern or cinematograph."⁷ The "phallic machine reproducing only male spectators"⁸ is thus deeply embedded in psychoanalytic discourse and consequently in poststructuralist thought including feminist theories.

If psychoanalytic discourse has been the central construct for examining issues of the subject, the notion of simulation has become another trope for much postmodernist theorizing. It has provided grounds for reflection on contemporary culture as well as an oblique link with developments in representational technologies (Virilio, Deleuze, Baudrillard, Lyotard, Kroker and Eco). The notion of an apparatus becomes specific – both as metaphor and diagnosis of a general condition.

Gilles Deleuze comments on the links of the apparatus of power with new technologies. He observes that "psychoanalysis...is the forced choice...because it gave the binary machine new material and a new extension, consistent with what we expect of an apparatus of power."⁹ These observations support his encompassing reflection of "the machine as social in its primary sense...in the structure it crosses, to the men (sic) it makes use of, the tools it selects, and the technologies it promotes":¹⁰ that is, the apparatus can be seen as deeply embedded in the social fabric.

This conception of a fully implanted technological order is also evident in the new biology discourse of boundary transgression, whose foremost theoretician is Donna Haraway. Her conceptualization of the feminist cyborg is a triple characterization of a machine and organism hybrid, a creature of social reality and a creature of fiction.¹¹ Haraway describes the place for both pleasure and responsibility in the breakdown of boundaries between human, animal and machine. She merges the social with myth and fiction in perceiving both the machine and organism as "coded texts," both engaged in questions that are as radical as survival itself.

Situating Technology, Considering Gender Issues

In formulating the residency, the seminar and this publication, we have approached technology in the widest possible sense. Technology often specifically refers to an instrument or a tool which might be articulated in hardware or software. Here, it is considered to be a product of cultural, social and political practices that are already firmly in place. As such, technology develops within existing frameworks that specify what counts as valid knowledge and how it can be obtained. The framework is in place long before the will or the resources are directed towards making a specific instrument: relational models are crystallized into technological objects. Therefore, technology is not neutral but embedded in social and cultural contexts.

This position on technology underlies our approach to specific technologies such as virtual reality or virtual environment technology. Virtual reality is particularly interesting for its

6 Constance Penley, "Feminism, Film Theory and the Bachelor Machines," *m/f* 10 (1985), 39-59.

7 Joan Copjec, "The Anxiety of the Influencing Machine," *October* 23 (Winter 1982), 54. See also Jeanne Randolph, "Ambiguity and the Technical Object," *Vanguard* 13:7 (1984), 24-27.

8 *Ibid.*, 57.

9 Gilles Deleuze and Claire Parnet, *Dialogues*, translated by Hugh Tomlinson Barbara Habberjam (New York: Columbia University Press), 21.

10 *Ibid.*

11 Donna Haraway, "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980's," *Socialist Review* 80 (1985), 65-107.

extreme intimacy with the body. In fact, this technology is driven by reading signals from the body. As our most recent form of representational technology, it raises questions about the construction of self (or subjectivity). It also challenges traditional thinking that relies on a distinction between subject and object as it functions directly with the body's multi-sensory physiological thresholds.

The intense public attention directed toward virtual reality over the past two years has little to do with the hardware and software itself. In effect, a public mythology is being constructed about what virtual reality will be. The development of this mythology is as important as the development of the technology itself. The narratives and metaphors imply logical solutions within which research, development and representation will take place. For example, one of the phrases borrowed by the technological community from recent science fiction is "jacking into cyberspace,"¹² which is used to describe entering a virtual environment. This kind of phrase incorporates assumptions about how the simulation of communication and physical experience can be imagined and acted upon.

To address technology in a cultural context requires a range of input. The artists in this residency range from those who integrate technology as the means and/or the subject of their work to those who address issues related to the contemporary technoscape. In this way the residency was designed to generate a broad interdisciplinary discussion, and the pertinence of various art practices in the social field has been addressed throughout the process.

Questions concerning gender have been central to contemporary art practices of the last decade, and the *bioapparatus* is certainly a gendered territory. The body is biologically and socially gendered and, in an equally profound sense, technology can be seen as gendered. The gendered nature of technological development itself poses questions about authorship, intrinsic structure and power. The relation of technology to the body and to subjectivity and the effects of technologies on femininity and masculinity as they are constructed in different social contexts are issues that constitute a very complex subject area.

Rather than create a category in the discussion paper that focused on gender issues, we preferred to have these questions, like questions of race, class and cultural differences integrated as much as possible into all of the discussions. For example, several of the respondents addressed the ideological conditions that shape the western notion of progress through science and technology. This idea encompasses gender issues that can be raised within a reexamination of historical and contemporary constructs of nature and culture, mind and body, and machine and spirit.

What follows is the call for submissions that invited participation in the seminar and formed the basis of this publication.

12 William Gibson, *Neuromancer* (New York: Ace Books, 1984).