

Was Foucault a Philosopher of Technology?

Jim Gerrie

Wilfrid Laurier University

It is hard to specify the exact philosophical focus of Michel Foucault. He has been described as a post-structuralist, post-modernist, sociologist, phenomenologist, social theoretician, transcendental historicist, and even a nihilist. Another way that his work has been categorized is as a contribution to the field of epistemology. Ian Hacking, for instance, describes Foucault's book *The Order of Things* as being about "some immature sciences—chiefly those whose foci are 'life, labor, and language'" (Hacking 2002, 88). Hacking concludes that Foucault's work "is philosophical because life, labor, language and 'Man' are among the topics of philosophy. It is also philosophical because it exemplifies a theory of knowledge, in both theoretical and practical terms. His archaeology, as he calls it, is a way of investigating the groundwork of bodies of knowledge" (88). In the index of Hacking's book *Historical Ontology*, in which he examines *The Order of Things* very closely, the term "technology" is listed only once. I find this to be a curious fact, because in the first dozen pages of the *Order of Things* one finds numerous instances of technological terminology and metaphor, such as the following: "system", "schema", "framework", "procedure", "structure", "technique", "institution", "formulas"; "division of labor", "system of institutions", "systems of exclusion", "complex grid", "ritualized forms", "forms deployed", "instrumental investments", "strata of practices", "system of books", "prodigious machinery", "construction of new statements" and "a play of rules and definitions, of techniques and instruments" (Foucault 1998, 1-12). In the following I argue that an apt title for the field of Foucault's work might be that of the Philosophy of Technology.

Foucault's reflections on power uniquely parallel a position accepted by a significant segment of philosophers of technology, that is that technology is not simply an ethically neutral set of artifacts by which we exercise power over nature, but also always a set of structured forms of action by which we also inevitably exercise power over ourselves. According to this position, technology can be "associated with diverse human behaviors, with distinctions among them often less clear than for either artifacts or cognitions. Technological activities inevitably and without easy demarcation also shade from individual or personal into group or institutional forms" (Mitcham 1994, 209). The elaboration of the theoretical origins, justification and cultural impact of human institutions is one of the hallmarks of the analysis of power undertaken by Foucault. His work, therefore, could make a valuable

contribution to the discussion of the position in the field of the Philosophy of Technology, of those who view technology primarily as activity. Yet in three recent North American introductions to the field, one finds only a single minor reference to Foucault.¹ Foucault's work on power and his prolific use of technological metaphors should be investigated more thoroughly by philosophers of technology.

What Foucault concludes through his unique archeological method of study is that the most important aspect of power is not the control exercised by certain strong individuals over certain weak individuals, but rather, the control that all individuals exercise over themselves and others through widely accepted forms of organized behavior. He puts this point as follows: "We have yet to fully comprehend the nature of power" and therefore we should investigate "the relays through which it operates and the extent of its influence on the often insignificant aspects of the hierarchy" (Foucault 1983, 213). Andrew Feenberg suggests that,

according to Foucault, power/knowledge is a web of social forces and tensions in which everyone is caught as both subject and object. This web is constructed around techniques, some of them materialized in machines, architecture, or other devices, others embodied in standardized forms of behavior that do not so much coerce and suppress the individuals as guide them toward more productive use of their bodies. (1991, 71)

Foucault wants to overcome the traditional dichotomy of ruler and ruled, which he calls the "juridical-political theory" (1980, 103). Instead, he focuses his discussion of power on specific human institutions, such as prisons, schools, barracks, hospitals, factories, cities, lodgings, families, and medical clinics. In the case of prisons, his main concerns are with the "whole army of technicians" who "took over from the executioner" (Foucault 1977, 11) and the "prolix technology of the prison" (234).

In the juridical-political theory, human individuals are seen as the source of power. It is the model of a hierarchy where power flows downward from specific individuals or groups at the top. The political theory of seventeenth century thinkers, for instance, was based almost entirely on this model. Their preoccupation was to define the nature of sovereignty, that is, the source of a political leader's legitimate right to exercise overt political control. Foucault suggests that one of the ultimate theoretical discussions of the juridical-

political theory can be found in Thomas Hobbes' *Leviathan*. Hobbes states that "the obligation of subjects to the sovereign is understood to last as long, and no longer, than the power lasteth, by which he is able to protect them" (Hobbes 1962, 167). In Hobbes' work, according to Foucault, we find the image of the sovereign as the source of power. However, although it is easy to conceive of leaders as the most important source of political power, as Foucault points out, their abilities to interfere in the lives of most people are actually quite limited. A seventeenth century monarch, for example, could do little to change the daily activities and thoughts of most individuals and so traditional discussion of the notion of sovereignty, according to Foucault, tended to be linked to "power that is exercised over the earth and its products, much more than over human bodies and their operations" (Foucault 1980, 104).

Foucault's conception of power, in contrast, sees power as something that is at work in every instance of our lives. He, therefore, is not particularly concerned with focusing his critique on obvious abuses of political authority.² Instead, according to Foucault, power is most commonly a result of extremely complex and pervasive amalgams of human practice. One example of such amalgams he labels "bio-power". In his book *The History of Sexuality* he encapsulates eighteenth century attitudes towards sex as follows: "A panic theme appears concerning child masturbation" (56). Over the course of that century a new kind of power began to manifest itself in European societies through a broadly accepted emphasis on controlling and manipulating sexual behavior. Since these societies were becoming increasingly focused on highly organized production, a social pressure began to develop to facilitate the productive discipline of individuals. As a response to the focus on production, there arose in families, though "not of their [conscious] initiative" (56), a complex system of controls for manipulating sexual activity modeled on the controls implemented for disciplined production.

Foucault does not label this new way of dealing with and discussing human reproduction as necessarily repressive. For him, the attitudes and customs of the industrial era were not arbitrarily imposed from above by a single powerful individual, say, Queen Victoria, or even the narrow attitudes of a prudish bourgeois elite. Rather, they develop out of numerous "micro-mechanisms of power" (1980, 101). Foucault acknowledges that his stance conflicts with those who believe that the sexuality of the industrial era is something that necessarily requires a sexual revolution. He refuses to lay blame and calls for no particular strategy of reform. He seems to adopt an ambivalent attitude when it comes to reform,³ not because he is a relativist, conservative, or

wishes to remain objective as a social theorist, but rather because he realizes how extremely difficult it is to thoroughly examine the immensely complex institutions of sexuality, in order to effectively “put a bead” on power as it actually manifests itself through “technologies of the self” (Macey 1994, 417).

Foucault seems to believe that if we examine power in this way we will come to recognize certain misconceptions that lead to our unwitting participation in the creation of potentially equally problematic new forms of power. One of the most persistent of these misconceptions is precisely that power must always emanate from some easily identifiable human individual. Foucault, to the contrary, seeks to consider how power operates in people’s lives through the mundane habits of daily living. As he puts it, “power is employed and exercised through a net-like organization. And not only do individuals circulate between its threads; they are always in the position of simultaneously undergoing and exercising this power” (Foucault 1980, 98). One can never be outside the influence of power because, as David Macey points out, it manifests itself in every aspect of human existence through “forms of rationalization” that are “inscribed in specific practices” (Macey 1994, 404). Power is present in all types of social relation, and not just relations in which overt punishment or coercion can be seen to operate. Power is what “delineates domination” (404), but it can also be said to serve our interests.

According to Foucault, existing forms of power are continually faced by a multiplicity of resistances. These resistances, though, are simply manifestations of other forms of power. Foucault, here, draws on the image of electricity. Power flows in a circuit (Foucault 1980, 98). The resistance he refers to is more akin to electrical resistance in which a current is simply transformed or diverted. The trick, therefore, according to Foucault, is to stop relying solely on the tactic of looking for ways to resist power (especially in the form of tangible authority figures) and instead concentrate on recognizing the expansive and pervasive “structures” through which power is actually transferred (98). It is only by becoming consciously aware of these structures that people can then consider the possibility of their complete withdrawal from certain points of participation in them, so as to achieve an ethically necessary “reversal of power” rather than simply an augmentation of power (214).

I find that Foucault’s views on the workings of power are very similar to those of Marshall McLuhan. McLuhan describes the process of technological

development as a process of people creating new ways of acting in response to difficulties caused by already established ways of acting. As he puts it, “it is the accumulation of group pressures and irritations that prompt invention and innovation as counter-irritants” (1964, 46). For McLuhan, the only way to effectively temper the excesses of this endless cycle is the conscious withdrawal of one’s individual participation in particular forms of technological activity, or as he suggests, “we can if we choose, think things out before we put them out” (49). This is similar I believe to Foucault’s concern with exposing the origins and workings of all the “corrective technologies of the individual” (Foucault 1977, 235), and in the role of individuals in helping to bring about the actual reversal of power and not just endless creation of new forms of resistance.

In Foucault’s insistence that power is best understood in relation to human institutions we can also find a perspective similar to that of Jacques Ellul who defines technology as “the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in *every* field of human activity” (Ellul 1964, xxv). For Foucault, institutions like the prison, the hospital, and the Gulag represent specific attempts at the rational formalization of human behavior and it is this fundamental rational disciplining of behavior that is the real source of power. As he puts it: “Discipline may be identified neither with an institution nor with an apparatus; it is a type of power, a modality for its exercise, comprising a whole set of instruments, techniques, procedures, levels of application, targets; it is a ‘physics’ or ‘anatomy’ of power, a technology” (1995, 32-33).

It is human institutions, both small and large, and their attendant systems of thought, which are the essential elements for the emergence of new capabilities which allow for the control of nature, human or otherwise. The rise of the modern mental hospital, for example, increases the ability of the new professionals of mental health to manage and treat the insane,⁴ but the endlessly changing courses of treatment examined by Foucault highlight precisely their artificial, and hence, completely ethically charged nature. According to Foucault, power is “constructed and functions on the basis of particular powers, myriad of issues and myriad of effects of power” (1980, 189). That is, power emerges from very complex interacting forms of practice. It seems possible that it is this expansive understanding of power, as something which emerges everywhere there are new forms of rationalized human behavior, which leads Foucault to conclude that we should focus less on determining who has it and more on, to borrow a term of McLuhan, the media through which power is generated and transmitted in its endless cycle.

In other words the medium is the message, or, the medium is the *massage* (1989), as McLuhan liked to pun.

Foucault argues further that power takes the form of a matrix or a “tightly knit grid of material coercions” in which we are all embedded as “objects of power” (Foucault 1980, 104). An examination of one such matrix is exhibited in his work on bio-power. Foucault asserts that the more modern understanding of sexuality as repressed is itself simply another construct of power in the form of a new kind of sexual knowledge about correct practice. The critical ethical task according to Foucault is not to focus only on the so called “recuperation” of sexuality by trying to cast off all older prohibitions, but to comprehend the complexity of the social matrix which gives a particular understanding of sexuality its force. As Foucault points out, to seek to revolt against sexual repression involves acceptance of the idea of sexuality as being somehow a natural and unquestionable part of human existence. Such resistance to power, therefore, risks simply allowing power to manifest itself in new ways in the form of new apparatuses of a liberated sexuality. In the response of the revolt against sexual repression, power brings forth the “exploitation of eroticism” where,

Responding precisely to the revolt of the body, we find a new mode of investment which presents itself no longer in the form of control by repression but that of control by stimulation. “Get undressed—but be slim, be good looking, tanned!” (Foucault 1980, 57)

Foucault points out that the new sexuality of fulfillment follows the development of consumerism, which in turn is a result of various developments in mass production and marketing. The point is to understand that in either the repression or stimulation of the sex drive, power can still exert itself in our lives in the form of conceptions of how it is best to act, which are intimately related to various changes in other areas of rationalized and formalized human activity.

In his seeming ambivalence about different forms of human power, Foucault seems to see truth ultimately only in terms of power. Truth is relative to the specific systems of ideas that attend different practices. The idea of insanity, for example, is what gives meaning to the institutions for the management of the insane and Foucault’s exploration of this idea reveals that at its core lies a “mute institution, act without commentary, immediate knowledge—a great motionless structure” (Foucault 1988, xii). The idea of sexuality is what gives

meaning and purpose to the institutions for the management of lust. For Foucault, therefore, sexuality seems to constitute a form of knowledge that is “true” only in the sense that these ideas are accepted and acted on. Foucault calls the process by which such structured forms of thought and practice are widely adopted, normalization.

He finds a helpful image for the process of normalization in Jeremy Bentham’s vision of the Panopticon. This device is meant as an ultimate prison design, which provides for the continual observation of prisoners. Its design consists of,

a perimeter building in the form of a ring. At the center of this is a tower, pierced by large windows opening on to the inner face of the ring. The outer building is divided into cells each of which traverses the whole thickness of the building.
(Foucault 1980, 147)

The purpose of the Panopticon is to put each prisoner into a position where they are potentially subject to the gaze of the guard in the central tower. The power of this new prison lies in its ability to promote the internalization of behavior. Since each prisoner is potentially subject to the gaze of a guard at any time there can be no escape from a sense that one is possibly being observed. The only way to deal with this possibility is to make conformity a habit. However, the guard is also part of the machine, and he or she is subject to the rule of its functioning in that actual observation and discipline must occur at least occasionally. In this entire regime it can be said that no one is in ultimate control in the sense that everyone in the machine is subject to the basic parameters of the working of the machine. For Foucault, this device provides an ideal image of power. As members of organized communities, each of us is subject to the power of discipline, in the forms of habitual practices, methods, approaches and roles, which we accept for various practical reasons. Power takes the form of self-control and does not necessarily represent a system of rules only imposed from without, but a system of rules we also self-impose in order to create and maintain a functioning community, or society. According to Foucault, therefore, what we impose on ourselves is a regime of truth. What the Panopticon represents is not an actual “structure or a certain force with which certain people are endowed; it is the name given to a complex strategic relation in a given society” (236). For Foucault, the origin of oppression is not big individuals with authority but a myriad of self-imposed forms of structured activity, which is why, in analyzing what anti-authority struggles have in common,

Foucault finds that “the main objective of these struggles is to attack not so much ‘such and such’ an institution of power, or group, or elite, or class, but rather a technique, a form of power” (Foucault 1983, 212).

The fact that power is something that emerges through the activity of “immediate everyday life” (212) forces Foucault to develop a particular method of historical inquiry in order to get his “bead on power”. His inquiry focuses on two questions. The first of these questions is genealogical. He wishes to understand the historical progression of social change in order to make intelligible “the *objective* conditions of our social present” (223). The second question is archaeological. He wishes to discover the sources of current forms of discourse and action through an examination of their “material, historical conditions of possibility and their governing systems of order, appropriation and exclusion” (223). The following is an example of his approach to historical inquiry:

From around 1825 to 1830 one finds the local and perfectly explicit appearance of definite strategies for fixing the workers in the first heavy industries at their work-places. At Mulhouse and in northern France various tactics are elaborated: pressuring people to marry, providing housing, building *cités ouvrières*, practicing that sly system of credit slavery that Marx talks about, consisting in enforcing advance payment of rents while wages are paid only at the end of the month. Then there are the savings-bank systems, the truck-system with grocers and wine merchants who act for the bosses, and so on. Around all this there is formed little by little a discourse, the discourse of philanthropy and the moralization of the working class. Then the experiments become generalized by way of the institutions and societies consciously advocating programs for the moralization of the working class. Then on top of that there is superimposed the problem of women’s work, the schooling of children and the relations between the two issues...—so that you get a coherent, rational strategy, but one for which it is no longer possible to identify a person who conceived it. (203)

It is not surprising that Foucault calls his work “archaeology” because his method involves digging up, piecing together, and examining an extremely complex, but also always fragmentary, array of components which comprise any human institution and attempting to extrapolate from these social

constructs some insight into the beliefs of modern society. As he puts it, “among the cultural inventions of mankind there is a treasury of devices, techniques, ideas, procedures, and so on, that cannot exactly be reactivated, but at least constitute, or help constitute, a certain point of view which can be very useful as a tool for analyzing what’s going on now—and how to change it” (236). In other words, understanding the immense array of possible historic and present alternatives provides the only way of making an informed choice about the technologies and techniques in which one can participate.

As I have already suggested Foucault’s work displays a great similarity to that of McLuhan. McLuhan railed against the lack of interest most people have in seeking to understand the complex social impacts wrought by the introduction of any technology. For example, as Philip Marchand points out in his biography of McLuhan,

McLuhan’s point was that most people are trained not to look for the ground of any situation. They focus on one part and ignore the rest. If people consider the motorcar, for example, they focus on the car itself, rarely perceiving the network of gas stations, highways, neon signs, parking lots, and all the altered habits and perceptions that arise out of the existence of the car—the ground, in other word, of the automobile. (Marchand 1990, 248)

Foucault in a similar fashion tries to shift the emphasis in his discussions of power away from the imposing political figures who appear to emanate it, to the multitude of novel, but mundane institutions and actions from which power is ultimately derived and the effects these have on what we take to be knowledge.

In this regard Foucault’s work is also similar to the work of Harold Innis, another pioneer in the field of media studies and a colleague of McLuhan. Innis’ later work focused on what he called “monopolies of knowledge” that emerge in civilizations with the adoption of new technologies. In an interesting variation on the non-neutrality thesis of technology, Innis suggests that all technological changes inevitably create definable groups of people who are differentially benefited and harmed by the cultural impact of these changes. These various “elites,” as he calls them, therefore, are the primary sources of both social conflict and innovation, in complex forms of interaction that David Godfrey describes as “the equivalent of a cultural gene

pool” (Godfrey 1986, 142). This emphasis on the complexity of the power relations of society is probably what leads Arthur Kroker to assert that “long before the French philosopher, Michel Foucault, said that *power* is the locus of the modern century, Innis in his studies of neotechnical capitalism had already revealed exactly *how* the power system works: by investing the body through capillaries of diet, lifestyle, and housing...” (1984, 120). Like Innis, Foucault also seems to eschew traditional Marxist categories of domination, with simple top-down structures. As he states, “We know that it [power] is not in the hands of those who govern. But, of course, the idea of the ‘ruling class’ has never received an adequate formulation, and neither have the other terms, such as ‘to dominate,’ ‘to rule,’ ‘to govern,’ etc. These notions are far too fluid and require analysis” (Foucault 1983, 213). Like Innis’ focus on the “capillaries” of everyday practice and the multiplicity of “knowledge monopolies”, Foucault places his focus instead on the multitude of “relays” through which power operates. And like Innis, Foucault is interested in the fact that “no one, strictly speaking, has an official right to power; and yet it is always exerted in a particular direction, with some people on one side and some on the other” (213). The understandings of technology developed by Innis, McLuhan or Ellul in response to technology, therefore, might help shed some useful light on Foucault’s ethical position on power.

Foucault tended to use the idea of “power/knowledge” rather than that of “technology” to describe his philosophical focus. But the intriguing similarity between his ideas about power and the ideas of philosophers of technology who view technology primarily as activity leads me to believe that this outward difference in terminology may be largely unimportant. Perhaps, somewhat ironically, like many people he simply may have felt more comfortable confining the term “technology” to artifacts. His discussions of power and frequent use of the term *technique*,⁵ however, seem compatible with wider definitions of technology such as those espoused by Ellul, McLuhan and Innis, as well as an increasing number of others in the field of the philosophy of technology.⁶ Also, his discussions focus on what are clearly complex technical arrangements—prisons, schools, barracks, hospitals, factories, cities, lodgings, medical clinics. In moving to a post at the Collège de France, Foucault constructed a new designation for his office “Professor of the History of Systems of Thought” (Smart 1985, 13). I think we can sense in his desire to focus not just on the history of human thought as such, but the history of human thought as formalized and expressed in systems, that he was moving towards a broader conception of technology which attempts to include the whole penumbra of activity and discourse attached to any particular technology or technique. At the very least, his

discussion of power is riddled with technological metaphors. It would be potentially fruitful, therefore, for students of Foucault to familiarize themselves with the work of philosophers of technology, and vice versa.

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Notes

1. See Durbin 1989, Ferré 1995, Ihde 1993.

2. An example of this emphasis can be found in Foucault's support of the Iranian Revolution. He was unwilling to harshly criticize the atrocities of the new regime, choosing instead to emphasize the widespread spirit of revolt which had inspired the revolution. See Miller, 1993, 306-314.

3. "No one has a right to say, 'Revolt for me: the final liberation of all men depends on it.' But I am not in agreement with anyone who would say, 'It is useless for you to revolt; it is always going to be the same thing.' One does not dictate to those who risk their lives facing a power. Is one to revolt, or not? Let us leave the question open. People do revolt; that is a fact. And

that is how subjectivity (not that of the great men, but that of anyone) is brought into history, breathing life into it" (Foucault 1994, 452).

4. "In the time of Pinel and Tuke [two pioneers of the Asylum], this power [to heal] had nothing extraordinary about it; it was explained and demonstrated in the efficacy, simply, of moral behavior; it was no more mysterious than the power of the eighteenth-century doctor when he diluted fluids or relaxed fibres" (Foucault 1988, 274).

5. "Just as it is necessary to study and compare the different techniques of the production of objects and the direction of men by men through government, one must also question techniques of the self" (Foucault 1983, 250).

6. For a broad sampling of the views of academics who have views of technology which encompass more than mere artifacts see Mills 1997.