



Photograph by Ralph Hinterkeuser

Between Benjamin and McLuhan: Vilém Flusser's Media Theory

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Vilém Flusser (1920–91) is without question an important media theorist in the Cold War period. His work has been recognized in Germany since the early 1980s and is often mentioned in the same breath as that of Friedrich Kittler, Peter Weibel, and Siegfried Zielinski. Yet Flusser's work is hardly known in the United States. One obvious reason—the reason, according to Zielinski, the director of the Flusser Archiv in Berlin—is that only a few of Flusser's books are available in English.¹ His concise book on photography, *Für eine Philosophie der Fotografie* (1983), has been translated as *Towards a Philosophy of Photography*, but other pivotal texts, such as *Ins Universum der technischen Bilder* (*Into the Universe of Technical Images*, 1985) and *Die Schrift: Hat Schreiben Zukunft?* (*Script: Does Writing Have a Future?* 1987), have not been translated, let alone his early work, such as *Die Geschichte des Teufels* (*History of the Devil*, 1965), or his late, brilliantly conceived, counter-science fiction *Vampyroteuthis Infernalis* (1987).² Another reason might be Flusser's

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1. Siegfried Zielinski, conversation with author, Berlin, January 12, 2008.

2. Vilém Flusser, *Für eine Philosophie der Fotografie* (Göttingen: European Photography, 1983); *Towards a Philosophy of Photography*, trans. Anthony Mathews (London: Reaktion, 2000); Flusser,

consistent (and defensible) refusal to comply with basic academic requirements: none of his books includes a bibliography or any other reference system, because—as Flusser professed himself—this would deviate from the clarity of his thoughts.³ But whatever the cause for the lack of scholarly interest in the United States, Flusser's oeuvre deserves serious attention in the Anglo-American context. Already after the first translations, Sean Cubitt concluded: "Imagine Walter Benjamin's essays of the 1930s had only just become available, or that Marshall McLuhan had died in obscurity but was now for the first time appearing in dribs and drabs. That is the significance of the translations of Flusser that have appeared in English in the last five years."⁴

The aim of this essay, therefore, is to illuminate the significance of Flusser's oeuvre for an English-speaking public and for all critical theory on media: Flusser both continues the critical tradition of German media theory since the 1920s—in the Marxist sense of mobilizing theory for practice—and upgrades that legacy to contemporary media conditions. Flusser's profoundly critical approach toward the (new) technological media clearly distinguishes his work from the writings of his colleagues in contemporary (German) media theory. Besides elaborating on Flusser's media criticism, I consider his work in the context of the topic of this special issue of *New German Critique*: a reassessment of Cold War culture twenty years after the fall of the Berlin Wall and related historical events. Although Flusser's entire oeuvre was produced between 1965 and 1990, it has never been brought into relation to the Cold War for the simple reason that Flusser lived far away from the conflicts between the United States and the former Soviet Union for most of his life. In addition, Flusser addressed the Cold War directly only once. In one of his last essays, "Die Macht des Bildes" ("The Power of the Image," 1990), he applies his spe-

Ins Universum der technischen Bilder (Göttingen: European Photography, 1985); Flusser, *Die Schrift: Hat Schreiben Zukunft?* (Göttingen: European Photography, 1987); Flusser, *Die Geschichte des Teufels* (1965; rpt. Göttingen: European Photography, 1996); Flusser, *Vampyroteuthis Infernalis* (Göttingen: European Photography, 1987). *Für eine Philosophie der Fotografie* and *Ins Universum der technischen Bilder* are hereafter cited as *PF* and *IU*, respectively.

3. In his autobiography Flusser comments on his outsider's position: "I was never 'academic' in the traditional sense of the word. . . . I could never—nor wanted to—overcome my aversion to all academicism, and . . . I was never fully integrated into the various establishments to which I belonged" (*Bodenlos: Eine philosophische Autobiographie* [Frankfurt am Main: Fischer Taschenbuch Verlag, 1999], 221). All translations are my own, with Max Bruinsma.

4. Sean Cubitt, review of *The Shape of Things: A Philosophy of Design, Towards a Philosophy of Photography, Writings, and The Freedom of the Migrant: Objections to Nationalism, Leonardo*, October 2004, 403–5. One wonders what Cubitt will write when all of Flusser's major work is translated.

cific media perspective in reflections on the broadcast execution of the deposed Romanian dictator Nicolae Ceaușescu, because he was concerned about the ever-increasing role of televised—and other technical—images in producing cultural history and memory.⁵ But even if Flusser almost did not comment on the Cold War, I argue that his media theory in the 1980s intersects with crucial issues of the Cold War period, because he frames his analysis of—and warning about—a society controlled by technical apparatuses as a theoretico-critical alternative to the dystopian scenarios produced throughout the Cold War, such as George Orwell's *Nineteen Eighty-four* (1949), Stanley Kubrick's *2001: A Space Odyssey* (1968), and William Gibson's *Neuromancer* (1989).

Since Flusser is relatively unknown in the United States, a prologue concerning the man and his work seems fitting. Born to a family of Jewish intellectuals in Prague, Flusser studied philosophy at Karls University in that city just before World War II. His father, Gustav, was a mathematician and physicist (who apparently studied with Albert Einstein) but was also active as a member of the Social Democratic Party in the Czech parliament.⁶ Flusser's entire family—his grandparents, parents, and sister—was killed in concentration camps during the war. Flusser himself, however, fled Prague before the German invasion on the prescient advice of his future father-in-law: together with Edith Barth, he escaped to London (1939) and then—after the bombings of that city by the Nazis—to Brazil (1940).⁷ Flusser stayed in Brazil for more than thirty years, where he was a professor in philosophy and communication theory at the University of São Paulo and other institutions in that city. Most notably, from 1964 through the 1970s he chaired the Faculty for Communication and Humanities at the Fundação A. A. Penteadó, where he established a new program and the *studium generale* for the field of communication theory.

5. Vilém Flusser, "Das Politische im Zeitalter der technischen Bilder," *Volkszeitung*, August 17, 1990. Within his basic idea of an ongoing dialectic between text and image, Flusser sees the fall of Ceaușescu's regime as almost apocalyptic evidence for his prognosis that text culture (which he links to the idea of "history") has been taken over by a culture of images (which marks a new phase, or *Nachgeschichte*) in what he calls our postideological world. As Flusser formulates it in the above-cited lecture published in the *Volkszeitung* after the dramatic events of 1990: "We are gathered here today to try to understand what happened during the Romanian revolution. If the considerations presented here hold, then we can state that the media have taken over control."

6. See the Vilém Flusser Archive, www.flusser-archive.org/aboutflusser/biography.

7. Edith Barth tells the whole story of their difficult escape from Prague through the Netherlands to London and then Brazil, whereby she and Flusser crept through the eye of the needle several times and survived only thanks to other people, some of them complete strangers. See Anke Finger, "Prager Erinnerungen: Ein Interview mit Edith Flusser, 30. Januar 2007," *Flusserstudies.net* 05, November 2007, www.flusserstudies.net/pag/archive05.htm.

During that period Flusser published his first writings on communication theory, which were collected much later in the anthology *Kommunikologie (Communication Theory)*, 1990).⁸ Flusser's first book on communication theory, *Lingua e realidade (Language and Reality)*, came out in 1963. Furthermore, he published *A história do diabo* (1965), a book first written in German as *Die Geschichte des Teufels* in the late 1950s. In this pivotal book, in which he lays the foundation for the cultural criticism of later work, Flusser questions the pillars of modern Western civilization (science, technology, art, etc.) and the West's underlying belief in progress and rationality through the parable of the seven deadly sins (envy, rage, etc.). At the beginning of the 1970s, however, when the political situation in Brazil hardened under a new military dictatorship, Flusser and his wife returned to Europe, where they settled in Italy and later in France. As a communication theorist, Flusser became involved in the flourishing German media scene in the early 1980s and befriended major players in the field, such as Kittler and Zielinski. The first book born of this encounter with German media theory was *Für eine Philosophie der Fotografie*. After this successful book, Flusser expanded his thesis on photography into a general book on the status of the technical image in contemporary culture, *Ins Universum der technischen Bilder*. This book—which I consider the most important of them all—was followed by another key work, *Die Schrift: Hat Schreiben Zukunft?* which interrogates the status of text after his philosophical reflections on the image. Flusser's bizarre but erudite text about the life of the deep-sea vampire squid, *Vampyroteuthis Infernalis*, was conceived in collaboration with the artist Louis Bec and appeared in the same year. This philosophical parable tells about the complex mechanism of this remarkable cephalopod, which can turn its membrane inside out at the approach of danger and release glowing particles, all of which made it a perfect real-life model for topical questions of the emerging field of artificial life. A few years after this rather touching piece, Flusser died in a car accident on the border of Germany and Czechoslovakia on his way back from a lecture in his native city, Prague. Shortly after, *Kunstforum International* published an issue in memory of Flusser and his work.⁹

I interpret Flusser's media theory on the nexus of two radically different thinkers, whose work is generally not linked for good reasons: Walter Benjamin and Marshall McLuhan. Benjamin wrote "Das Kunstwerk im Zeitalter seiner

8. Vilém Flusser, *Kommunikologie* (Frankfurt am Main: Fischer, 2007), 354. This collection of texts on communication theory was originally published in 1996.

9. See Florian Rötzer et al., *Kunstforum International* 117 (1992): 68–111.

technischen Reproduzierbarkeit" ("The Work of Art in the Age of Mechanical Reproduction," 1936) three years before World War II.¹⁰ He realized that if photography and film were appropriated for political goals, they could be used for manipulating the masses—or, as he called it, for "die Ästhetisierung der Politik" (the aesthetization of politics).¹¹ However, photography and especially film could also develop in the opposite direction, namely, as art forms with a great democratic potential. While Flusser argued something very similar in regard to the emerging new media in the Cold War period, he also understood the limitation of Benjamin's work from a contemporary perspective: Benjamin necessarily did not go beyond the—by now almost archaic—media of film and photography. This is where McLuhan enters the Flusserian universe, because McLuhan not only popularized the term *media* (which Benjamin did not use) but also was among the first to undertake the cultural task of theorizing the "new" media of television and the computer in place of the "old" media of photography and film. Like Benjamin, McLuhan argued that we should consider these new media art forms, but his media explorations lack the overt political and ethical dimension of Benjamin's "Work of Art." Flusser's media explorations, then, are closer to Benjamin's thought, because even if McLuhan warns of the dangers of technology, he has generally been identified as a technoteleologist who pays little attention to the relation between aesthetics and politics that characterizes Benjamin's work.¹² Nonetheless, Flusser largely takes over McLuhan's epistemological framework on alphabetic culture versus media culture as developed in *The Gutenberg Galaxy* (1962) and *Understanding Media* (1964). These best sellers form an interesting pair with Flusser's pivotal works, *Ins Universum der technischen Bilder* and *Die Schrift*, albeit in reverse; that is, McLuhan first addresses the visual "galaxy" produced by the phonetic alphabet and then the synesthetic realm of the new media, while Flusser begins with the

10. Walter Benjamin, *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit: Drei Studien zur Kunstsoziologie*, 11th ed. (Frankfurt am Main: Suhrkamp, 1977). Benjamin's essay appears as "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn (New York: Schocken, 1969), 217–53.

11. Benjamin, *Kunstwerk*, 42.

12. John Fekete established the perception of McLuhan as a technoteleologist by describing McLuhan's "one-dimensional fetishism of technology" and "technocratic-religious eschatology" in an otherwise interesting analysis and synopsis of McLuhan's work in the context of the New Criticism. This reductive technological reading of McLuhan and his work by Fekete and other leftist intellectuals has been corrected by many authors, in particular Donald Theall, who revisits McLuhan's work through the arts (especially literature). See Fekete, *The Critical Twilight* (London: Routledge and Kegan Paul, 1982), 180–89; and Theall, *The Virtual Marshall McLuhan* (Montreal: McGill-Queen's University Press, 2006).

“universe” of media and then interrogates the “future” of script. Because of this dialogue with McLuhan’s work, Flusser has been depicted as a European McLuhan, but there is one major difference between the two: whereas McLuhan welcomes the defeat of writing for a wide variety of reasons, Flusser considers the image culture brought forth by the media a serious challenge to historical consciousness and critical thinking. All in all, Flusser oscillates between McLuhan and Benjamin: while his work is unthinkable without McLuhan, Flusser disagrees with his approach to the whole environment of media in the Cold War period. Flusser believes that an entirely new form of critical theory—and not the mere “understanding” of media—is the right response to the new media society. In a 1973 letter to his friend René Berger, he wrote: “Maybe one day we can make (the two of us) a communication theory of media against McLuhan: you from the point of view of the media, and I from the point of view of the (phenomenologically conscious) receiver.”¹³ Given Flusser’s criticism of McLuhan, on the one hand, and his advocacy of critical theory in a Benjaminian spirit, on the other, this essay takes Flusser’s desire to formulate a media theory “against McLuhan” seriously by way of Benjamin.

Towards a Philosophy of Photography

Flusser’s first book after his return to Europe was *Towards a Philosophy of Photography*. The publisher, Andreas Müller-Pohle, remembers in his memorial in *Kunstforum International* that he met Flusser at a 1981 symposium on photography in Schloß Mickeln in Düsseldorf, where the media theorist delivered a lecture.¹⁴ After reading a few more of Flusser’s essays on photography, Müller-Pohle proposed that Flusser develop a book on the topic for Müller-Pohle’s series, *European Photography*.¹⁵ Flusser responded to the publisher right away: “We’ll call it ‘Towards a Philosophy’ of Photography. We’ll organize it in a focused way, let’s say, in nine chapters. That would be sixty pages. Do you agree?”¹⁶ Müller-Pohle further recalled that Flusser finished the book in exactly nine months, as promised, and that it indeed had sixty pages. Apart

13. Vilém Flusser to René Berger, May 16, 1973, Folder Bienal 1, Vilém Flusser Archiv, Universität der Künste, Berlin (hereafter cited as VFA). My deepest thanks to Marcel René Marburger, the archive’s scientific supervisor, without whom I would not have found this crucial letter and other material.

14. “Ist Fotografie Kunst? Gehört Fotografie ins Museum?” Internationales Fotosymposium, Schloß Mickeln, Düsseldorf, 1981.

15. Most of these essays are collected in Vilém Flusser, *Standpunkte: Texte zur Fotografie* (Göttingen: European Photography, 1998). Müller-Pohle undertook the task of publishing Flusser’s oeuvre after his death.

16. Andreas Müller-Pohle, “Der Tod des Anderen: Über Vilém Flusser,” *Kunstforum International* 117 (1992): 85.

from Müller-Pohle's rather apt description of Flusser's personality, I refer to the beginnings of their professional relationship because it is the same publisher who captures Flusser's philosophical ambition in his photography book with utmost precision: "The 'photophilosophy,' his first book in German, his native language, is philosophically the 'most serious' among the subsequent publications. The central category of his investigation, which reaches far beyond photography, is the camera as prototype for the ontologically conditioning apparatuses of postindustrial society—an analysis that ultimately aims at the ethics of photography."¹⁷

In this quotation Müller-Pohle states that Flusser takes photography as the prototype for all technical apparatuses of the present-day, postindustrial world. In addition, he labels Flusser's *Towards a Philosophy of Photography* as his most serious book because it deals with ethical questions relevant to contemporary media society at large. One aim of the following analysis of Flusser's "photography book" is to clarify this politico-ethical dimension of his critical theory through his own definition of photography. The building blocks of his theory—as well as a reminder of its "seriousness"—are in the last chapter, "The Necessity of a Philosophy of Photography," where Flusser runs through his project:

In the course of the foregoing attempt to capture the essence of photography, a few basic concepts came to light: *image-apparatus-program-information*. They must be the cornerstones of any philosophy of photography, and they allow for the following definition of photography: Brought forth and distributed by mechanical means according to a program, it is an image whose supposed function it is to inform. (*PF*, 69)

The first two terms of Flusser's definition, *image* and *apparatus*, can be described as a classic pair, because photography is usually described in terms of images automatically produced by an apparatus. Still, it is useful to review Flusser's arguments to uncover the strong relation of his ideas to the critical legacy of thinkers affiliated with the Frankfurt School, in particular Benjamin (image) and Bertolt Brecht (apparatus).¹⁸ Flusser's book is based on the

17. *Ibid.*, 86.

18. I hesitate to trace the lineage of Flusser's ideas more definitely, since he employs no references in his work. Thus statements and conclusions about his sources reflect interpretations based on close readings of his work, sometimes facilitated by what Flusser writes about other authors in his innumerable letters (no one has counted them yet) or confirmed by the presence of certain books in his traveling library (apart from the letters and his twenty-four hundred essays, this library is also kept in the Flusser Archiv).

assumption that there is a fundamental difference between the traditional and the technical image, which is exactly the same claim that underlies Benjamin's "Work of Art." Benjamin elaborates on this distinction by comparing the painter and the cameraman: the first "maintains in his work a natural distance from reality," while the second "penetrates deeply into its web. There is a tremendous difference between the pictures they obtain."¹⁹ Benjamin's thought about the image can be discovered everywhere in Flusser's book. The first two chapters, for example, are titled "The Image" and "The Technical Image." In the second chapter Flusser makes the case, in total agreement with Benjamin, that traditional and technical images are not only historically but also ontologically different from each other (*PF*, 13). Although Flusser never refers to Benjamin's concept of aura directly, he seems to work through this most famous thesis of Benjamin's carefully when he states that "the magic character of images must be considered when deciphering them" (*PF*, 9).²⁰ In "The Technical Image," however, Flusser disagrees with Benjamin's claim that the image's auratic character has disappeared through the techniques of reproduction. To Flusser, it has only taken on a different form: "The difference between old and new magic can be summarized as follows: Prehistoric magic is ritualization of models known as myths; current magic is a ritualization of models known as programs" (*PF*, 16). I return to Flusser's distinction between "myth" and "program" later on, but the point here is that Flusser fully agrees with Benjamin's thesis that the traditional and the technical images are "tremendously different." If we do not grasp the significance and consequences of the fact that "the technical image is an image brought forth by an apparatus," Flusser holds, we will fail to come to a critical understanding of today's universe of technical images (*PF*, 13).

Even if one can show through a close reading of Flusser's work that he develops his thought in dialogue with Benjamin's, the book takes a very different approach toward photography than its predecessor's. Benjamin looks at photography (and film) from a historically earlier perspective. He theorizes how these new technical means of reproduction have changed our concept of art. Consequently, he compares these new "art forms" (a term that Benjamin *does* use in contrast to "media") with painting. But Flusser theorizes photography through the lens of the new media that developed in the postwar period, such as television and the computer. Consequently, he uses contemporary com-

19. Benjamin, "Work of Art," 233.

20. Flusser does refer to Benjamin's concept of aura in other essays, such as "Kunst und Kom-puter," in *Lob der Oberflächlichkeit* (Bensheim: Bollmann, 1993), 259–64.

munication and media theory to theorize photography. So while both Benjamin and Flusser consider photography as a theoretical—even philosophical—object, they do so at very different historical moments: for Benjamin, photography still represents a new technical invention; for Flusser, it has become a traditional medium. Thus Benjamin looks forward through photography, while Flusser looks backward. Indeed, because of Flusser’s reassessment of photography through the lens of what has been called, since McLuhan and Norbert Wiener, the electronic or cybernetic age, we realize how much Benjamin’s analysis of photography results from his reflections on the preceding mechanical or industrial age.

The second term in Flusser’s definition of photography is *apparatus*, which evokes another thinker associated with critical theory and the Frankfurt School: Brecht. It is well known that Benjamin derived many of his ideas from Brecht. Therefore it comes as no surprise that Brecht’s ideas seem to resonate in Flusser’s work, especially in regard to the Marxist playwright’s notion of “apparatus.”²¹ In his declaration “The Radio as an Apparatus of Communication” (1932), Brecht argues that it often takes time before the potential of a new technical apparatus is culturally understood. He continues that this is the case with radio in 1932, which until then was mainly used as “a substitute for theatre, opera, concerts, lectures, café music, local newspapers and so forth.” Brecht suggests that the time is ripe for a different use of this medium: radio as an apparatus of communication rather than as a means of distribution. He implies that radio could—in his Marxist view, should—be used in two directions: “The radio would be the finest possible communication apparatus in public life. . . . That is to say, it would be if it knew how to receive as well as to transmit, how to let the listener speak as well as hear, how to bring him into a relationship instead of isolating him.” “Any attempt by the radio to give a truly public character to public occasions,” he concludes, “is a step in the right direction.”²² In Brecht’s vision, then, radio will transform from a mere apparatus that the listener turns “off” and “on” into a participatory medium. In a similar vein, Flusser argues that photography is more than an apparatus on which you merely click the button, as Kodak’s sales motto would have it. Of course, Brecht and Flusser write about entirely different media. Radio is a transmission medium, whereas photography is not, but the basic argument that technical media are not merely apparatuses but means of communicating information is

21. I use the term *seem* deliberately because Flusser cites no references.

22. Bertolt Brecht, “The Radio as an Apparatus of Communication,” in *Brecht on Theatre: The Development of an Aesthetic*, ed. and trans. John Willett (New York: Hill and Wang, 1964), 51, 52.

essentially the same. Like Brecht in the case of radio, Flusser in the case of photography advocates a dynamic interaction between the apparatus and its user. Photography is conceived as far more than a technological tool that automatically produces an image; it is a complex mechanism that the photographer has to “prepare” for making that image. Flusser ponders the meaning of the term *apparatus* through the Latin verb *apparare*, “to prepare.” An image produced by the camera is always already “prepared” by the apparatus. The photographer should become aware of the technological characteristics of his apparatus to be able to use its potential in a cultural or “public” context. Just as Brecht makes the case that radio could become “the finest communication apparatus in public life,” Flusser makes the case that photography should focus on relevant information for culture and society.²³ The figure of the photographer, in Flusser’s McLuhanesque thought, is an information gatherer.

The second pair of concepts in Flusser’s definition of photography is *program* and *information*. To specify his concept of information, Flusser introduces two rather straightforward but intrinsically opposed terms: *redundancy* versus *nonredundancy*. Through this categorical distinction of two kinds of information, Flusser wants to make clear, above all, that he is interested not in *all* photographs but only in photographs that are informative in the accurate sense of giving form: information, in other words, that has that quality to *inform* and contribute to cultural knowledge:

Indeed, in theory one can take a photograph over and over again in the same or a similar way, but that is uninteresting for the photographic act. Such images are “redundant”: They carry no new information and are superfluous. In the following, redundant photographs will not be taken into account, which limits the concept of photography to the making of informative photographs. Obviously, this means that the majority of all snapshots will fall outside the scope of this analysis. (*PF*, 24–25)

Flusser’s choice of the terms *redundant* and *nonredundant* can be read as a response to the classic essay “Mathematical Theory of Information” (1948), by Claude Elwood Shannon, one of the fathers of communication theory. In Shannon’s theory, information is interpreted in terms of bits in the context of the entire collective of technological means of communication. Shannon’s mathematical communication theory tells us how to measure the rate at which a message source (or apparatus) generates information. Thus Shannon formu-

23. Perhaps the equivalent today would be the Internet-ready cell phone (i.e., it is both public and private).

lates a quantitative concept of information, for which the *kind* of information is irrelevant. Kittler describes precisely what is at stake in Shannon's innovative theory of communication:

After World War II had produced massive innovative thrusts in the field of telecommunication engineering, especially in television and radio, it became historically necessary to produce not only theories of particular media, such as all sorts of people, from Hugo Münsterberg to Walter Benjamin, had done for film but also to raise the simple and universal question as to what telecommunication media do *in general*.²⁴

With the distinction of redundant and nonredundant information, Flusser questions Shannon's *mathematical* theory from a cultural perspective.²⁵ Flusser makes clear that things are slightly more complex in the cultural realm, because the quality of information matters as much as its quantity. On the basis of this cultural assessment, Flusser counters Shannon's quantitative information with the idea of qualitative information. Still, Flusser is interested in information as such, like Shannon. In this context, I would like to recall Müller-Pohle's words that photography in Flusser's work is a prototype for all technical apparatuses taken together—what Kittler describes as “media . . . in general.” So Flusser does not intend to provide the conceptual tools for analyzing specific photographs, but he is in search of a broad theory of media—specified by the example of photography—that enables us to go against the uncritical acceptance of the overload of redundant images in contemporary society. Flusser's analysis of photography also relates to the cultural insights of Wiener, that other founder of information theory and cybernetics. In *The Human Use of Human Beings* (1954)—which is the follow-up to his classic *Cybernetics; or, Control and Communication in the Animal and the Machine* (1948)—Wiener explains the consequences of the cybernetic revolution in nonmathematical terms for a broader public by outlining challenges of the upcoming information society:

Information is a name for the content of what is exchanged with the outer world as we adjust to it, and make our adjustment felt upon it. The process

24. Friedrich Kittler, *Optische Medien: Berliner Vorlesung, 1999* (Berlin: Merve, 2002), 43. Translation by Max Kramer. My emphasis.

25. Flusser's two terms have become essential in developing software to digitize “information” (the strings of bits that represent music, images, and video). The removal of redundant information (e.g., high tones that cannot be heard by humans but are nevertheless recorded by microphones) is key in storing and transmitting nonredundant information (the music we do hear).

of receiving and of using information is the process of our adjusting to the contingencies of the outer environment, and of our living effectively within that environment. The needs and the complexity of modern life make greater demands on this process of information than ever before. To live effectively is to live with adequate information. Thus communication and control belongs to the essence of man's inner life, even if they belong to his life in society.²⁶

Flusser's approach to the concept of information makes his analysis of photography distinct from other important theories of photography, from Benjamin's to Roland Barthes's, even if Flusser shares the latter's concept of photography as a piece of information. Already in 1961 Barthes conceives of the photograph as "a message."²⁷ In "The Photographic Message" Barthes concludes that since the photograph is a message—he is thinking of news photography—the photograph asks to be *read*. At the same time, he recognizes a contradiction with the fact that the photograph is a mechanically produced image. To resolve this dilemma, Barthes develops the notion of the photographic paradox, which he defines as a blend of denoted and connoted messages: "The photographic paradox can then be seen as the co-existence of two messages, the one without a code (the photographic analogue), the other with a code (the 'art,' or the treatment, or the 'writing,' or the rhetoric, of the photograph)."²⁸ Barthes, in other words, mobilizes a conceptual tool kit derived from communication theory to address photography as—to paraphrase Brecht—an apparatus of communication. In *Towards a Philosophy of Photography* Flusser similarly examines the news photograph. But instead of Barthes's sophisticated semiological analysis of the photographic message in terms of connotation and denotation, Flusser limits himself to the above-described terms of *redundancy* versus *nonredundancy*. It is tempting to relate Flusser's central distinction to the two terms of Barthes's later work, the *studium* and the *punctum*. In *Camera Lucida* (1980), which came out a couple of years before Flusser's book, Barthes describes the *studium* as all those levels of cultural connotations that together make a good news photograph, whereas the *punctum* is what makes such a photograph stick out. The *punctum*, as Barthes explains the term, "pricks," "wounds"; in short, it is what triggers the viewer

26. Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society* (New York: Doubleday, 1954), 17–18.

27. Roland Barthes, "The Photographic Message," in *Image, Music, Text*, trans. Stephen Heath (New York: Hill and Wang, 1977), 15.

28. *Ibid.*, 19.

to engage with a picture.²⁹ In contrast to the studium, which can be understood objectively, Barthes approaches the punctum in subjective terms, because he realizes that it will be different for everyone. However, he introduces the term to express something commonly recognized, namely, that from a plethora of news photos one can suddenly stick out and have a different effect on us. Is Barthes's punctum, then, just a more precise explanatory term for Flusser's (all too?) general notion of nonredundant information? As my excursion into the theories of Shannon and Wiener shows, I do not think so. Although both Barthes and Flusser rely on the idea of photography as information, Barthes remains the semiologist, who wants to decipher the meaning or "rhetoric" of the image, whereas Flusser is a "kommunikologist," who singles out the photographic message as a model for other technically produced images.

Program is the last and most original concept in Flusser's definition of photography. While it might seem counterintuitive to relate a concept associated with the computer to the medium of photography, the originality of Flusser's analysis of photography lies precisely in the fact that he rethinks photography through the computer: "Computers are apparatuses that process information according to a program. This is the case for all apparatuses anyway, even simple ones, such as the camera. . . . In the case of the computer, however, this condition is particularly clear: when I purchase a computer, I have to buy not merely the apparatus (hardware) itself but also the programs (software) that go with it."³⁰ "Program," in Flusser's definition, should first be understood on a basic technological level, like all the operations that an apparatus can be set to perform automatically: that which the apparatus is programmed to do. In the case of photography, "program" also refers to a photographer's technical decisions while making a photo, and all of them are conditioned by the programmatic possibilities built into the apparatus: what the apparatus programs the user to do. Yet Flusser's concept of program extends this technological definition. It also refers to the broad cultural context of present-day, postindustrial society in which photography operates. The news photograph, for instance, is said to be "preprogrammed" by the whole structure of the illustrated newspaper business—or "industry," as Flusser also calls it—where it not only illustrates reportage but also incorporates and evokes preexisting cultural codes and contexts:

29. Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill and Wang, 1981), 25–27.

30. Flusser, "Kunst und Komputer," 259.

There are thus two entwined programs in the camera: one causes the camera to automatically make pictures, the other allows the photographer to play. Beyond these are further programs—that of the photographic industry that programmed the camera; that of the industrial complex that programmed the photographic industry; that of the socio-economic system that programmed the industrial complex; and so on. Clearly there can be no “final” program of a “final” apparatus, since every program requires a metaprogram on account of which it is programmed. The hierarchy of programs is open at the top. (*PF*, 28)

With this passage we are back to critical theory, because Flusser has recalled the work of other thinkers related to the Frankfurt School, such as Siegfried Kracauer's discussion of photography in the 1920s and Max Horkheimer and Theodor W. Adorno's chapter on the culture industry in the late 1940s. Although none of these authors employs the term *program*, Kracauer is among the first to take the news photograph seriously as a sociocultural object of critical inquiry, and Horkheimer and Adorno introduce the idea of industry and apply it to culture. In his essay on photography Kracauer describes the everyday representation of the world through the news photograph as a sweeping cultural change:

The most striking proof of photography's extraordinary validity today is the increase in the number of *illustrated newspapers*. . . . The aim of the illustrated newspapers is the complete reproduction of the world accessible to the photographic apparatus. . . . Never before has an age been so informed about itself, if being informed means having an image of objects that resembles them in a photographic sense.³¹

More than half a century before Flusser, in other words, Kracauer evaluated photography's infiltration into all aspects of culture and society. He also contrasts the photographic image with the memory image, which he considers “essentially different.”³² While the memory image recalls only significant moments and is therefore fragmentary, photography more objectively captures a specific spatial (and temporal) moment. What one infers from Flusser's reasoning, however, is that the photographic image has much more in common with the memory image than Kracauer wants us to believe, because photography is highly selective and fragmentary, too. Because of this selective

31. Siegfried Kracauer, “Photography,” in *The Mass Ornament: Weimar Essays* (Cambridge, MA: Harvard University Press, 1995), 57–58.

32. *Ibid.*, 50.

character of the photograph, according to Flusser, it is ahistorical in essence. That is, photography changes our relation to time: from the linear notion of historical time inherent to alphabetic script, to the disjunct sense of time that characterizes the culture of the (photographic) image. It is precisely this ahistorical quality of the technical image that Flusser is concerned about in his essay on the Romanian revolution, as it implicates a return to “cult” and “magic” in a posthistorical guise. In this new situation, in which magical culture has triumphed over historico-critical text culture, the relationship between the world and the images related to it can become inverted: “Instead of showing the world they signify, they hid this world. . . . This reversal of ‘image-reality’ relationship, which caused people to live in the function of images, is what the prophets called ‘idolatry,’ and what modern philosophy terms ‘alienation.’”³³ The Marxist concept of “alienation” binds Flusser again with Kra-cauer, as both aim to demythologize the estranged world represented to us by the (news) photograph.

Flusser’s concept of program also intersects with *Dialectic of Enlightenment* (1948). In the chapter “The Culture Industry” Horkheimer and Adorno argue that culture has become a kind of industry, in which the media are entirely engulfed.³⁴ Flusser repeatedly employs the term *industry* for the contexts in which photography operates (see “Photoindustrie,” “Industriepark,” etc.), but he pushes Horkheimer and Adorno’s late capitalist idea of the culture industry forward into the next phase of postindustrial society. Thus Flusser’s preference for *program* over *industry* and *postindustrial* over *industrial* is absolutely central, because these novel terms adjust Horkheimer and Adorno’s concepts to new historical conditions: those of the Cold War. Since Flusser’s analysis is rooted in communication theory and cybernetics, his thought is, not surprisingly, in tune with that of Wiener, who already made this distinction between industrial and information society in 1948:

Perhaps I may clarify the historical background of the present situation if I say that the first industrial revolution . . . was the devaluation of the human arm by the competition of machinery. . . . The modern industrial revolution [the computer revolution] is similarly bound to devalue the human brain. . . . The answer, of course, is to have a society based on human values other than

33. Flusser, “Zeitalter der technischen Bilder.”

34. Max Horkheimer and Theodor W. Adorno, “The Culture Industry: Enlightenment as Mass Deception,” in *Dialectic of Enlightenment: Philosophical Fragments*, ed. Gunzelin Schmid Noerr, trans. Edmund Jephcott (Stanford, CA: Stanford University Press, 2002), 94–137.

buying and selling. To arrive at this society, we need a good deal of planning and a good deal of struggle.³⁵

Flusser's cybernetic approach toward photography explains not only the relevance of terms such as *program* and *information* but also the originality of his theory compared with anything else written on the topic, from Kracauer and Benjamin to Barthes. However, what he shares with all of these thinkers, including the early Barthes, is his commitment to critical theory, albeit upgraded to the questions and concerns that arise with the information society. That Flusser takes his critical task seriously is particularly evident from a lecture that he gave at the symposium "Against the Indifference of Photography," in which he focused on the necessity of an entirely new critical thinking—or photo criticism—in relation to photography. Aware of the conceptual history of terms, Flusser begins his lecture "Critical Thinking" by reflecting on the term *criticism*. The Greek verb *krinein*, as Flusser explains, is analogous to the German words *teilen* (to divide) and *brechen* (to break), but its actual meaning is closer to that of *urteilen* (to judge) and *entscheiden* (to decide). Flusser uncovers the implied connection of *krinein* with *verbrechen* (to commit a crime), in particular, to make a strong case for good and relevant criticism. Flusser's main claim is that we need an entirely new model of criticism for analyzing today's photographic images:

The thesis I want to defend in this contribution is this: critical thinking in the sense of a critique of the image, as it has been worked through in the course of our history, is not applicable to photographs (and the other technical images). . . . If there are people who believe that one could criticize photographs in the same way that one criticizes traditional images (paintings, mosaics, or glass windows), then they are in error. When faced with photographs and other technical images, critical thinking finds itself in a crisis. It finds itself forced to work out new criteria in order to criticize the myths projected by photographs and the magic brought forth by photographs.³⁶

Having clarified Flusser's basic position on a new critical theory of photography, it remains to elucidate why he considers his book a philosophy (which further sets Flusser apart from McLuhan; if Flusser can be seen as a

35. Norbert Wiener, *Cybernetics; or, Control and Communication in the Animal and the Machine* (New York: Wiley, 1948), 6.

36. Vilém Flusser, "Kriterien-Krise-Kritiek," in *Gegen die Indifferenz der Fotografie: Die Bielefelder Symposien über Fotografie, 1979–1985; Beiträge zur ästhetischen Theorie und Praxis der Fotografie* (Bielefeld: Marzona, 1986), 164.

European McLuhan, then he certainly is a philosophical version of the Canadian media theorist). This question of philosophy brings us back to Müller-Pohle's pointed observation that Flusser's book is ultimately about ethics. In this ethico-philosophical context it is important to discuss one more prominent concept in Flusser's book, namely, *Funktionär*. In English, this term would be translated as "official" or "clerk," but in German the term is derived from the verb *funktionieren*, "to function." Thus the German term has bureaucratic connotations: a *Funktionär* is an employee in a bureaucratic system who executes orders. The photographer's first responsibility, according to Flusser, is *not* to become a function of his or her camera, or the apparatus's clerk. The figure of the *Funktionär* is also the protagonist of Orwell's *Nineteen Eighty-four*, which contains some of the sharpest criticism of the totalitarian state in twentieth-century literature. The gruesome police state that Orwell depicts is technologically advanced, which means that it keeps its people under control with the help of an all-seeing surveillance system of cameras and other monitoring equipment. Flusser's photo criticism can be related to the Cold War through his mobilization of this Orwellian figure, this *Funktionär*, whom Müller-Pohle associates with "the photographer as apparatchik" and with whom he sees an ethical dimension enter Flusser's argument—a moral choice between being the "apparatus's *Funktionär*" or "its creative counterpart."³⁷ The book on photography ultimately intersects with philosophy, or more precisely with ethics, because according to Flusser the essence of photography touches on the question of "freedom" in the modern sense of the word since Kant's *Groundwork of the Metaphysics of Morals*. In Flusser's vision—motivated by his own experience of World War II and the common fear for the potential recurrence of another totalitarian state during the Cold War—this deeper ethico-philosophical question of freedom and autonomy depends on our ability to come to terms with contemporary technological apparatuses that affect our very being, to begin with a simple apparatus such as photography. Flusser clearly conveys this deep philosophical dimension of his cultural analysis at the end of the book:

The hypothesis proposed here is that, if such a philosophy should succeed in fulfilling its task, this would be of significance, not only for the field of photography, but for post-industrial society in general. Admittedly, the photographic universe is only one of many mechanical universes, and surely there are much more dangerous ones among them. But the next chapter will

37. Müller-Pohle, "Über Vilém Flusser," 85.

show that the photographic universe can serve as a model for post-industrial society as a whole and that a philosophy of photography can be the starting point for any philosophy engaging with the current and future existence of human beings. (*PF*, 68)

Ins Universum der technischen Bilder

Ins Universum der technischen Bilder is the successor of *Towards a Philosophy of Photography*. In this second book in the German language, Flusser takes Benjamin's statement that traditional and technical images are "tremendously different" as his starting point, but combines this basic premise with Martin Heidegger's ontological philosophy. In the opening paragraphs of the first chapter on these categorically different images, Flusser presents his ontological position: "[The present essay] will claim that technical images differ in nature from earlier, 'traditional' images, as I will call them here. . . . To reinforce this claim this chapter proposes a model with which the distinguishing 'ontological thesis' of the traditional and the technical images will be clarified" (*IU*, 10). Heidegger's philosophical presupposition that technology determines our human condition already underlies Flusser's book on photography, but there he does not relate his theory as clearly to the Heideggerian term *ontology*. Given Heidegger's involvement with fascism in the 1930s and early 1940s (when, according to his own confessions in the 1960s, he cut all relations with the fascist regime), it might come as a surprise that a Jewish intellectual such as Flusser, who lost his entire family in the concentration camps, engages in a simultaneous reading of Benjamin and Heidegger. In a rare interview in which he disclosed decisive influences, Flusser admits that he struggled with Heidegger's work:

Heidegger was suspected of having maintained murky or perhaps even too clear relations with Nazism. I knew that when I first encountered his thought. It was during the war, I was in Brazil, forced by the events in Germany. My whole family had been exterminated there. I did not know that yet, but I suspected it. You can thus imagine that I opened the first book of Heidegger that I stumbled upon with great reservation; I would even say with utmost antipathy. But the effect the reading had on me was so profound, it has so much changed my vision of things that it became difficult for me to remember my initial doubts when I encountered this thought.³⁸

Given Flusser's philosophical interest in the status of the technical image in contemporary culture, it is understandable that he judges Heidegger's *work*

38. Vilém Flusser, "Heidegger et le Nazisme: 'Nous sommes face à l'expression la plus importante de la pensée de notre siècle,'" *Calades* 86, February 1988, VFA.

positively even if he rejects the *man* (“I have nothing to do with Mr. Heidegger,” he adds in the interview).³⁹ Samuel Weber—who also reads Benjamin’s and Heidegger’s work concurrently—observes that the concept of the image is central to both philosophers’ work. Consequently, Weber concludes that “any attempt such as Heidegger’s to situate the question of the *Bild* at the problematic center of modernity can hardly be indifferent to Benjamin’s project.”⁴⁰ For his part, Flusser responds to Heidegger’s ontological thesis on modern technology and science in postwar essays such as “The Turning” (1949) and “The Question concerning Technology” (1955), in combination with one crucial prewar essay, “The Age of the World Picture” (1938).⁴¹ In these essays Heidegger argues that modern science and technology have advanced to such a degree that we cannot escape them as a conditioning factor in our life and consciousness anymore. In “The Turning” Heidegger describes the development of modern technology as an irreversible process, which—he warns—we need to face to address the dangers that it entails for our existence. In “The Age of the World Picture,” his first extensive criticism of modern technology and science, Heidegger argues that humanity is born into this technological condition and therefore might not be fully aware of it. He employs the metaphor of three-dimensional perspective in painting here, in which the subject—his point of view—is conceived of as part of the total system. Likewise, technology surrounds and captivates us in such a way (the best example is an immersive movie) that we are not just part of but “in” this technological environment. This leads Heidegger to the thesis of an irreversible “turning” of technological progress that produces our “world picture,” which is also the underlying premise of Flusser’s book on the universe of technical images but then—to evoke Brecht again—is upgraded to “the technical standard” of our time:

The subject of this essay is the universe of technical images: the same universe that, in the form of photos, films, videos, television screens, and computer terminals, has for a number of decades been taking over a function that until now was fulfilled by linear texts; the function, namely, of carrying

39. *Ibid.*

40. Samuel Weber, *Mass Mediauras: Form, Technics, Media* (Stanford, CA: Stanford University Press, 1996), 77. Weber thinks through the work of Benjamin and Heidegger together much later than Flusser did. In other books Weber’s work shows an affinity—if not a resemblance—to Flusser’s (earlier) ideas, too. See, e.g., Weber’s work on Brecht and the “gestus” in his most recent book on Benjamin: “Citability—of Gesture,” in *Benjamin’s Abilities* (Cambridge, MA: Harvard University Press, 2008), 95–115. I would further suggest that if Flusser can be identified with a “European McLuhan,” then Weber can be seen as an “American Flusser.”

41. See, for all of these essays, Martin Heidegger, *The Question concerning Technology, and Other Essays*, trans. William Lovitt (New York: Harper and Row, 1977).

existentially important information, both for society and for the individual. It concerns a cultural revolution of which we are only beginning to sense the scope and consequences. (*IU*, 9)

But however much Flusser's work takes up Heidegger's ontologico-philosophical thought, he at once realizes that the German philosopher does not sufficiently address contemporary technological conditions. Or as McLuhan already sharply commented on this in 1962: "Heidegger surf-boards along the electronic wave as triumphantly as Descartes rode the mechanical wave."⁴² Furthermore, Flusser's own political, ethical, and aesthetic convictions, in regard to the new media—as explained in the context of *Towards a Philosophy of Photography*—are closer to Benjamin's views and to critical theory more generally. Flusser makes this commitment to critical theory crystal clear in the introduction of *Ins Universum*, which bears the distinctly Heideggerian heading "Warning":

It [the essay] clings to the contemporary technical images, it "criticizes" them. In this sense it represents a prolongation and correction of the arguments put forward in a previous essay, namely, in *Towards a Philosophy of Photography*. Therefore this essay should be read not (or not primarily) as a futurization of the fantastic but as a critique of the present—even if the invasive and overwhelming feeling of relentlessness in the emergence of the new will resonate in this criticism. (*IU*, 7–8)

As for my investigation into the relation of Flusser's work to the Cold War, the crucial phrase in the quotation above is the critical theorist's declaration that he does not want his analysis to be "a futurization of the fantastic." What Flusser may have in mind are the books and film mentioned at the beginning of this essay by Orwell, Kubrick, and Gibson. Since I have discussed Orwell's book in the context of Flusser's philosophy of photography, and Gibson's novel appears only after Flusser's *Ins Universum*, I focus on Kubrick's film. Like *Nineteen Eighty-four*, Kubrick's spectacularly filmed masterpiece deals with the growing fear during the Cold War of a society totally controlled by weapons and other technology. Significantly, the film was made when the space race between the United States and the Soviet Union reached its climax: it came out one year before the triumphant U.S. landing on the moon. Without wanting to give a full analysis of Kubrick's movie—an icon of the Cold War—it certainly fits into Flusser's category of "a futurization of the fantastic." The film's sec-

42. Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (Toronto: University of Toronto Press, 1997), 294.

ond part is particularly interesting in this context, because that is where the computer HAL wrests control of the spaceship from the crew. HAL stands for “Heuristically programmed ALgorithmic computer” and is further described in the film as the best computer that artificial intelligence had produced until then, with all kinds of human capabilities, from playing chess to reading human emotions.⁴³ Kubrick’s film dramatizes the possibility of a radical reversal of the relation between humans and apparatus, which is precisely what Flusser theorizes in his book when he concludes that the potential threat of the current situation of technical apparatuses is that “the original man-machine relationship” will be overturned (*IU*, 57). Such a *Kehre* (turn) marks one of the film’s climaxes, when HAL “decides” to kill the crew members when they realize that the computer does not properly function anymore or, more accurately, functions too properly: HAL is programmed not to allow the mission to be aborted, which is what the last remaining crew member intends to do. Flusser’s criticism of this type of “futurization” is that it hides behind spectacular and aestheticized science fictions, thus failing to address the daily reality of the ever-increasing world of technical apparatuses, let alone of making us intelligently reflect on what to do with this situation. Hence Flusser responds to this kind of “futurization” with his more down-to-earth critical theory or “critique of the present.”

Flusser already developed most of the key concepts of his media theory on the nature and status of technical images in *Towards a Philosophy of Photography*. In *Ins Universum*, however, he both revises and adds concepts. One such concept concerns the idea of “projection.” An essential aspect of most technically produced images, Flusser argues, is that they are projected. For Flusser, this has far-reaching consequences, because it fundamentally changes the meaning of images and their role in contemporary society from the symbolic realm to their functioning; they acquire sense by way of direction. The main question, then, is not “what they mean” but “why they mean.” Context, in other words, produces content. As Flusser phrases it:

The question “What does a technical image mean?” is formulated incorrectly. Technical images do not represent anything (although they seem to do that); rather, they project something. The meaning [*signifié*] of technical images is something projected [*Entworfenes*] from the inside outward . . . , and it is out there only after it has been designed [*entworfen*]. For that reason, technical images are to be deciphered not as signified [*signifié*] but as

43. Interestingly, the three letters of the name HAL are each one letter shift from the three letters in IBM. Whether this is a coincidence is disputed. Kubrick denied any correlation.

signifier [*signifiant*]; on the basis not of *what* they show but of *which* direction they show *in*. (IU, 53)

Flusser concludes this passage by observing that “not what is shown in a technical image but the technical image itself is the message” (IU, 53). In this way, he reformulates McLuhan’s theorem that the “medium is the message,” although the medium is replaced by the notion of the image. Besides introducing a novel term such as *projection*, Flusser expands on terms that he theorized before by combining them with other terms. The concept of program is an example. A central concept in Flusser’s continued analysis of the term *program* is automation, which he defines as follows:

For this is indeed the definition of “automation”: a self-regulating computation of coincidences from which human intervention has been eliminated, and an interruption of this course at informational situations intended by humans. The difference between apparatus and universe, therefore, is that the apparatus is under human control. However, it cannot stay this way in the long run: in time, the automaticity of the apparatus must “emancipate” itself from humans. (IU, 24)⁴⁴

Many media theorists (and others) in the postwar period have theorized the notion of automation. The technological reading of the term is directly related to the computer, which used to be referred to as automation. McLuhan, for instance, explains the principle of the computer—which in *Understanding Media* he calls automation indeed—as the “instant synchronization of numerous operations,” which sets it apart from the old mechanical principle of the separation of various operations.⁴⁵ Automation, McLuhan specifies, allows for a new form of flexibility between programmatic control and permutational change. Kittler defines the core of the computer as “structural programmability,” which he further describes with the idea of “combinatory freedom” built into the hardware—or “essence”—of the computer.⁴⁶ In agreement with McLuhan and Kittler, Flusser points to the computer’s double character as an apparatus somewhere between control and chance by describing it as “a self-regulating computation of coincidences,” but in *Ins Universum* he emphasizes another connotation of the automaton: its autonomy. The apparatus, accord-

44. Flusser’s definition of *automation* perfectly describes Kubrick’s HAL.

45. Marshall McLuhan, “Automation,” in *Understanding Media: The Extensions of Man* (Cambridge, MA: MIT Press, 1995), 349.

46. Friedrich Kittler, “Hardware, das unbekannte Wesen,” hydra.humanities.uci.edu/kittler/hardware.html (accessed January 13, 2009).

ing to Flusser, develops in the direction of greater independence from human beings. One might question Flusser's technoteological view as a symptom of typical Cold War thinking, which links him again to Kubrick, in whose film the computer gradually functions more and more autonomously. The spectator is made aware that the computer has taken control of the spaceship in unforgettable scenes such as the one in which HAL softly says to the main character, who attempts to reenter the spaceship after he has unsuccessfully tried to rescue a comrade drifting off into space: "I cannot do that, Dave." The interesting aspect of Flusser's book is that although it might be part of the same Cold War rhetorics and fears as Kubrick's "fantastic" film, one really cannot miss his message—or "warning"—that we need to work extremely hard to become conscious and knowledgeable of the workings of the media and their projected images, while Kubrick's *2001* is even today adored by many technopopists who allow themselves to be totally immersed in the hallucinatory and aesthetic flow of images, while taking the underlying message of the danger of advanced technology with a grain of salt. As one fan, who had seen the film countless times as a teenager, expressed it about thirty years later: "I felt *2001* was an optimistic film . . . aside from the jabs at technology. . . . It was only later that I saw the 'dark side' of it all."⁴⁷

The critical message communicated by Flusser's *Towards a Philosophy of Photography* and *Ins Universum* is that we cannot allow ourselves to negate contemporary technological conditions. As Kittler declares forcefully, "Media determine our situation."⁴⁸ What media society calls for, in other words, is both a critical analysis and a critical attitude. In Flusser's words: "If we commit ourselves to a humane society, we must come to terms with the new technologies" (*IU*, 70). Flusser describes the current state of affairs as nothing less than a Copernican revolution in which not "we," human beings, but "they," the apparatuses and their images, are the center of the world. In this context Flusser states that "the relationship between technical image and man, the intercourse between them, is therefore the central problem of any future cultural critique" (*IU*, 57). Although one might object that Flusser reduces *everything* to a problem of technology here—which also explains his aloofness to the ideological problems of the Cold War and his early stance on the idea of a post-ideological age—we touch on the core of Flusser's convictions and position:

47. Quoted in *2001: A Space Odyssey* Internet Resource Archive, www.palantir.net/2001/meanings/essay07.html (accessed April 12, 2010).

48. Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford, CA: Stanford University Press, 1999), xxxix.

the idea that the most important political questions today *are* technological in essence. Whoever is in control of technology and the media, in other words, controls society and culture as a whole. This ultimately links Flusser to Marx's materialist analysis of capitalism, which assumes that power is in the hands of those who control the technological modes of production, although in Flusser's books adapted to the context of technology and the media of contemporary information society.

In the same introduction—or “warning”—of *Ins Universum* Flusser also makes clear that we do have a choice in this technologically driven society: we can either face the complicated media situation or succumb to it. Flusser's main task throughout this book is to outline what he sees as the best, democratically structured model for contemporary media society on the basis of the two radically different utopian scenarios: “Now, if one accepts the contemporary technical images in this way, then one recognizes two diverging basic tendencies within them. One points in the direction of a centrally programmed totalitarian society of image receivers and image officers [*Bildfunktionäre*], the other toward a dialogical, telematic society of image producers and image collectors” (*IU*, 8). Flusser identifies the first tendency with the just-described society as a “negative utopia” and the second as a “positive utopia.” While Flusser is critical of both tendencies—the one is totalitarian, the other too idealistic—his own argument shows more affinity with the second option of a dialogical society and is opposed to Kubrick's (or Gibson's) dystopian or “negative” scenario. Flusser's central question, then, is what the possibilities are to lead media society into the right—dialogical instead of totalitarian—direction. Underneath Flusser's ambition to advance a democratic society on dialogical grounds lies a similar optimism with regard to technology and the media as in Benjamin's “Work of Art,” even if both philosophers show an awareness of the threat of technology fostering a totalitarian outcome if employed for the wrong purposes. Flusser's concrete political questioning of how we can work toward a democratic society in the current situation of the (electronic) media and the universe of technical images is utterly relevant today, when the masses are still continuously incited (and manipulated) by and through the media and when elections tend to be broadcast television events, to be consumed rather than to participate in. The media, in other words, have attained such power and influence over the entire business of politics that one can truly speak of what Thomas Meyer and others have identified as a “mediocracy.”⁴⁹ Flusser's books remind us of the possibility of alternative

49. Thomas Meyer, *Mediokratie: Die Kolonisierung der Politik durch die Medien* (Frankfurt am Main: Suhrkamp, 2001).

solutions to this situation and suggest how the technical apparatuses and their images could be mobilized to foster a democratic media society: “The apparatuses can be technically modified in such a way that they serve society. They allow themselves, technically, to be transformed into a ‘democratic function’” (IU, 85). “Not, therefore, programmed democracy,” he concludes, “but democratic programming” (IU, 85).

In this political context Flusser further elaborates his ideas for a democratically structured, telematic society. About halfway through his book he distinguishes among a dialogical society, a discursive society, and a combination of the two. Notwithstanding Flusser’s affinity with dialogical society, his “ideal society” would be based on a mixture of the discursive and the dialogical models. By introducing the terms *dialogical* and *discursive* into his vocabulary, Flusser displays his familiarity with the new theories of communication in the 1980s, which moved away from the traditional communication models with their roots in Shannon’s classic text. In brief, communication theory developed from theories of communication as a one-directional process to other models in which communication is seen as an interactive process. Shannon formulated a groundbreaking theory that applies to all forms of communication: his mathematical model describes communication as a process from a transmitter (or source) to a receiver by coding and decoding the information itself, whereby the subjects are considered *passive* recipients of messages. The later dialogical and discursive models, however, assume a more complex interplay between transmitter, receiver, and message, in which the subject is seen also as an active participant in the communication process. These psychological and social models also consider various nonmathematical factors that come into play in the act of communication.

So Flusser applies these dialogical and discursive models to his political theory of the “ideal” media society. In a dialogical society, of course, communication or dialogue is central, while a discursive society is conditioned by some dominant discourse (religion, socialism, etc.). Driven by the logic of late capitalism, the media society has the tendency to develop into a discursive society. But if I understand Flusser correctly, media society can also develop *too far* in the direction of a dialogical society, where everything is based on instant communication without any discursive framework of values. A discursive society is dangerous, because it can derail into a totalitarian state—“apparatus totalitarianism,” in Flusser’s Cold War rhetoric. A purely dialogical society is an idealistic fiction, too, because a successful society without any underlying discursive structure—whether religious, ideological, mediological, or other—does not exist and is not desirable, either, for the reasons sketched above. Thus

only a combination of the two described models will result in a functioning democratic society, because it allows for dialogue with, and interaction in, an essentially discursive context. If the current media society is interspersed with such dialogical elements, Flusser holds, we can foster a concrete and humane media society. In this original political theory on contemporary media society, which in many ways suggests a rereading of Aristotle's idea of the "middle" (in the *Politics*) by way of novel terms derived from communication theory, Flusser argues that in a well-functioning, democratically organized media society, discourse and dialogue should be balanced.

Flusser's philosophical engagement with political theory in *Ins Universum* is amateurish in some respects, but all the same he is one of the few authors to propose a concrete model. His main point, I think—"telematic society" tends to develop into a "discursive society"—is well taken. If the capitalist market had things its way, it would keep commerce and big business in control of the development of the apparatuses and their software programs, which might indeed result in the "apparatus totalitarianism" that Flusser describes. How often we feel powerless when in everyday situations machines take over, from a simple money transfer that does not come through because the computer does not recognize a code, to something as complex as the total control over our lives exerted by monitoring computers in an airplane or hospital. One must also remember that Flusser formulated all his insights into the dramatic turn in the human-machine relation and the consequent threat of apparatus totalitarianism well before the personal computer, the software industry, and the Internet—before, that is, the state of affairs in which software conditions almost everything we do, from dating to banking, had become a reality. The only actors in this sociocultural field that can actively enter into a dialogue with these apparatuses—and the condition they produce—are hackers and computer programmers, who can produce their own programs (*Eigenprogramme*, as Flusser calls them)⁵⁰ or infiltrate existing ones. The danger of an ever-increasing influence of the apparatus is also one reason that a scholar such as Kittler—who finds it ridiculous that most people want computers to be as simple as washing machines—warns that an open-source movement in both software and hardware is crucial to academic freedom.⁵¹ For all of these reasons, I consider Flusser's book not only prescient but also a reminder of the need to become aware of our own situation and to reflect on other models for

50. Flusser, "Kunst und Computer," 259.

51. Friedrich Kittler, "Wissenschaft als Open-Source-Prozeß," hydra.humanities.uci.edu/kittler/os.html (accessed January 13, 2009).

our interaction with our technological environment beyond the commercially driven Internet 2.0. But whether or not Flusser foresaw these digital environments (Facebook and other social networking sites), they make one skeptical, like him, of the desirability of a completely dialogical media society, even if the open-source movement and free software sites are hopeful examples—little islands—of the dialogical model. In any case, Flusser is one of the first theorists to insist on this reflection of technological society from a dialogical and interactive perspective.

Just as his book on photography has a deeper ethical and philosophical meaning, so *Ins Universum* possesses a certain “seriousness.” In this book Flusser claims that in a commitment to critical theory in regard to the media lies the only hope of reviving a new sort of humanism, whose innocence we have lacked since World War II: “To bring forth a new consensus against mass culture, and in favor of a humane media culture” (*IU*, 76). In the footsteps of Benjamin, Flusser displays confidence: “The contemporary structure of society can, with some optimism, be seen as a transition phase toward this emerging culture” (*IU*, 76). This drive to create a new humanism and a new society is remarkable for a Jewish intellectual who barely escaped the concentration camps. But according to his close friend, the media artist, theorist, and current CEO of the Center for Art and Media in Karlsruhe, Peter Weibel, this and other experiences drive Flusser’s work. As Weibel states in his affectionate and insightful memorial in *Kunstforum International*: “I believe it was an extraordinary sensibility and intuition, shaped by the experiences of this century, the Holocaust, the atomic and ecological threats, totalitarian politics and the explosion of media and machines, which almost paradigmatically enabled him, the Jew in exile, to respond to everything with a keen eye and a sharp ear.”⁵² If Weibel is right, then we have in Flusser a thinker whose thought is completely informed by the Cold War: by the beginning of it, because of his direct confrontation with World War II (which produced the ideological conflicts, after all), and by the end of it, because he died in 1991, or close to that historical moment when the Cold War ended because of the fall of the Berlin Wall—altogether more than reason enough to consider Flusser’s media theory through a Cold War perspective.

52. Peter Weibel, “Vilém Flusser, a Brave Man for a Cruel Old World,” *Kunstforum International* 117 (1992): 97.

