

# Humanities and Technology Review

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# HUMANITIES AND TECHNOLOGY

## REVIEW

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## Editor's Note

This is the thirtieth edition of *Humanities and Technology Review (HTR)* and the fifth edition of *HTR* that will come to print under my editorship. Since the Fall 2007 edition, the Department of History and Government at Bowie State University has hosted the journal. I would like to acknowledge the strong support of Dr. M. Sammye Miller, Chairman of the Department, for hosting *HTR*.

The theme of the journal continues to have great importance to our self-understanding and our praxis. For this reason I am optimistic that the journal will continue to draw quality article and book review submissions and its readership will continue to grow. I expect the electronic version of *HTR*, brought online thanks to Asaf Bar-Tura in 2010, will help us to expand our readership.

*HTR* is the journal of the Humanities and Technology Association (HTA). The HTA Conference is, to a significant degree, the dialog that culminates in some of the papers that appear in the journal. This HTA—*HTR* relationship aims at facilitating a community of scholars and practitioners interested in the interface between the humanities and technology. Dr. Andreas Michel, who is both president of HTA and an associate editor, has helped to maintain this bridge between conference presentation and print publication for a decade. Furthermore, there has been a remarkable growth in participation in the conference under the leadership of the current conference chairman, Dr. George Sochan. So there are good reasons to be optimistic about the future of HTA-*HTR*.

As the number of article submissions has grown over the past five years, so too has our editorial board. The board has expanded from eight editors in 2006 to twenty-four editors today, and there are several more scholars who have offered to join our board for the next editing cycle.

In looking to the future, I encourage associates of HTA to consider joining our editorial board. I also believe this is the right time to identify the next editor of *HTR*, someone who will commit to high standards, support the theme of the HTA, and continue to grow the journal. I am grateful to the President of HTA, Dr. Andreas Michel, for having had the confidence in me to take on this rewarding post and run with it for five years.

Frederick B. Mills  
Bowie State University

## **Transforming the Symbolic Animal: Ernst Cassirer and the Posthuman**

Dennis M. Weiss  
York College of Pennsylvania

Addressing the issue of whether we ought to transform humanity presupposes a clear philosophical grasp of two terms central to the debate: human nature and technology. And yet this has been lacking in the debate over the posthuman. Transhumanists and bioconservatives lack a sufficiently thick and rich framework in which to address these issues. This essay seeks to address this lack, suggesting that Ernst Cassirer's account of the human being as a symbolic animal provides a philosophy of culture, philosophical anthropology, and philosophy of technology that might serve as the building blocks of such a framework.

Keywords: philosophical anthropology, Ernst Cassirer, bioconservative, transhumanist, human enhancement

Ernst Cassirer opens his 1944 *An Essay of Man* arguing that while self-knowledge is the highest aim of philosophical inquiry, today man's knowledge of himself is in crisis. Cassirer points out that no former age was ever in such a favorable position with regard to the sources of our knowledge of human nature. As he notes: "Psychology, ethnology, anthropology, and history have amassed an astoundingly rich and constantly increasing body of facts. Our technical instruments for observation and experimentation have been immensely improved, and our analyses have become sharper and more penetrating" (EM p.

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22)<sup>1</sup>. And yet, Cassirer argues, we have no method for the mastery and organization of this material. We have a mass of disconnected and disintegrated data which seem to lack all conceptual unity. This anarchy of thought, Cassirer notes, leaves us without a frame of reference or general orientation and our wealth of knowledge threatens to become little more than a mass of disconnected and disintegrated data. This, Cassirer notes, is a danger, a theoretical as well as a practical problem. As he writes: "That this antagonism of ideas is not merely a grave theoretical problem but an imminent threat to the whole extent of our ethical and cultural life admits of no doubt." And on this point he cites Max Scheler who notes that "in no other period of human knowledge has man ever become more problematic to himself than in our own days" (EM pp. 21 – 22). Cassirer worries that modern philosophical thought has become increasingly pessimistic and fatalistic and that philosophy has abrogated its ethical responsibility to speak to these theoretical as well as practical crises.

Cassirer's reference in *An Essay on Man* to Max Scheler is particularly noteworthy as his 1928 work *Man's Place in Nature*, from which Cassirer quotes, is widely regarded as the work initiating the German tradition of philosophical anthropology. For both Scheler and Cassirer, the way out of this crisis is a renewal of anthropological thought and, indeed, within the tradition of philosophical anthropology, Cassirer's notion of a crisis in self-knowledge and the need to situate that crisis within anthropological thought was quite common. In his 1954 book *The Social Self*, Paul Pfeutze eloquently gave voice to this sentiment, which he found widespread. "There is," he writes,

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<sup>1</sup> In this essay I will employ the following abbreviations to reference works by Cassirer: EM: *An Essay on Man*, FT: "Form and Technology," SMC: *Symbol, Myth, and Culture*, MS: *Myth of the State*, and PSF: *Philosophy of Symbolic Forms*.

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a crisis and revolution in modern culture and in man's knowledge of himself which has occasioned a revival of interest in anthropology both in philosophical and in theological circles. Modern man has become a problem to himself, and all over the world men are inquiring with fresh zeal into the nature of man. What is man? What is the meaning of human existence? In the confusion of voices, a deep disquietude has fallen upon the human race. On all sides one finds moral disaster, political confusion, spiritual discontent, mental breakdown, and a growing suspicion, now amounting to a certainty, that during the last few centuries man has so far misinterpreted his own nature as to make tragic and catastrophic use of his powers and technics. (p. 19)

There is, Pfeutze notes, the growing suspicion that until now we have gotten things wrong and misinterpreted our nature as human beings. And this misinterpretation is, at least in part, responsible for the tragic and catastrophic misuse of our powers and technics. In his 1930 essay "Form and Technology" Cassirer as well references this awareness of our misuse of our powers and technics. He raises concerns over technology's breadth and growing power (FT p. 2), its subjugation of modern culture, and its role in severing the human being from organic life. He quotes philosopher Ludwig Klages' observation that the human being is possessed by technology, a vampiric and soul-destroying power (FT p. 31) and worries over the grave inner damages of a technological culture which throw the human being into a "never ending vertigo" (p. 49). Evident in "Form and Technology" is the debate, already extensive by 1930, over the impact of the primacy of modern technology and whether it should be blessed or cursed and whether it is a source or symptom of the crisis facing culture.

In light of this crisis of self-knowledge, Cassirer and these other figures turned to philosophical anthropology as a path out of the crisis. Each raises the anthropological question: what am I that I am a human being? Pfeutze speaks of the fresh zeal with which scholars were turning to the question of the nature of the human being, a zeal that brings with it a renewed hope that a new form of anthropological thought may rescue us from moral disaster, political confusion, spiritual discontent, and mental breakdown. For Cassirer too, the “clue of Ariadne” which will lead us out of this labyrinth lies in a fresh approach to the anthropological question and a recognition of man’s symbolic nature. Beneath the sense of crisis and catastrophe, then, lies the hope that if we can approach the anthropological question without misinterpretation, then perhaps we might avoid these mistakes, or at least go some way towards correcting them.

Fast forward some fifty years, though, and it is precisely the anthropological question that is rendered problematic by the advance of our powers and technics, for those very powers and technics are now being turned back on the human being. Developments in genetic engineering, biotechnology, neuro-pharmacology, robotics and prosthetics raise the specter that the human being itself may be refashioned and reengineered. Indeed, in setting out to describe our current situation, it is clear that there is a widespread presumption that humanity may be at a turning point. Issuing from a variety of perspectives and motivated by a cross-section of theoretical concerns, comes the claim that especially owing to technological developments human beings are on the cusp of profound change. Consider, for example, historian Michael Bess’ recent essay “Icarus 2.0”. Bess argues that we are in the early stages of an “epochal shift” that will prove as momentous as such great transformations as the transition from hunting and gathering to settled agriculture and the substitution of steam power for human and animal energy. We are, he suggests, at a turning point that will shake ethical

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and social foundations, as we apply the technologies of human enhancement (which he identifies as pharmaceuticals, prosthetics/informatics, and genetics) to the reinvention of our own physical and mental capabilities. “Though advances in each of these three domains are generally distinct from those in the other two, their collective impact on human bodies and minds has already begun to manifest itself, raising profound questions about what it means to be human” (Bess, 2008, p. 114). And like Cassirer some fifty years earlier, Bess’ essay often refers to these developments as destabilizing, dramatic, and disorienting, emphasizing the sense of crisis that attends the birth of the posthuman. Today, though, that crisis extends to the very question Cassirer posed in his *Essay on Man*: “What is man?” What is man when his nature can be reengineered through the technologies of human enhancement? While it is clear that our techno-sciences have continued to develop and advance, producing an ever greater array of facts, data, procedures, and tools, and while it is likely true that, as Bess notes, within the lifetime of today’s college seniors, “our society is going to face some very tough choices about whether to use, and how to use, these extraordinary genetic powers” (p. 121), it seems equally clear that today we are no better off than we were fifty years ago when Cassirer noted that we lack a general orientation or frame of reference in terms of which to address these theoretical and practical crises.

It is to this matter of a general orientation or frame of reference to which I will now turn. As these aforementioned quotes from Cassirer and Pfeutze make clear, the debate over these matters is not entirely new, though it has certainly ramped up over the past twenty years or so. But despite the already extensive debate on transforming humanity, little progress has been made on addressing the issue whether these developments are fantasy, dream, or nightmare. At least part of what has made this debate difficult is the absence of the kind of general orientation or frame of reference of which

Cassirer bemoaned the absence some fifty years ago. And part of what has made such a general orientation hard to come by is the relative scarcity of attention that has been paid to what are arguably the most central concepts to the debate over transforming humanity: technology and human nature. In the absence of such clear thinking, we have arrived at something of a stalemate in the debate over the issue whether these developments represent a dream or a nightmare. Permit me for a moment to be overly stark in characterizing the two positions in this debate:

The Transhumanist Position<sup>2</sup>

- There is no stable, constant human nature.
- Human nature is fundamentally malleable.
- The human being is obsolete and biology/the body is flawed and limited.
- Denial of discontinuity: human beings are not significantly different from animals or machines (leaky conceptual borders; cyborg ontology).

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<sup>2</sup> As a representative example, consider “Obsolete Bodies,” an early statement from the Australian performance artistic Stelarc: “It’s time to question whether a bipedal, breathing body with binocular vision and a 1,400 cc brain is an adequate biological form. It cannot cope with the quantity, complexity, and quality of information it has accumulated; it is intimidated by the precision, speed, and power of technology and it is biologically ill-equipped to cope with its new extraterrestrial environment....In this age of information overload, what is significant is no longer freedom of ideas but rather freedom of form—freedom to modify, freedom to mutate your body. The question is not whether a society will allow the freedom to express yourself, but whether the human species will allow you to break the bonds of your genetic parameters—the fundamental freedom to determine your own DNA destiny.” (Earlier Statements: Obsolete Bodies)

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- Culture and technology have outstripped biology and biological evolution.
- Science and technology provides a means for controlling and improving upon nature/biology.
- A largely instrumental/neutral view of technology according to which tools have no substantive value independent of how they are used.
- Consciousness is epiphenomenal and the self is decentered, distributed, multiple.
- Embracing technology is fundamentally pleasurable and liberating.
- Neo-liberal, utilitarian ethical view.
- Strong constructivist bent.

### The Bioconservative Position<sup>3</sup>

- There is a substantive human nature which exists independently of its cultural manifestations.
- Ethics rests on a substantive foundation of human nature (Aristotelianism).

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<sup>3</sup> As a representative example, consider the following from Leon Kass' essay "The Moral Meaning of Genetic Technology": "Is there any elevated view of human life and human goodness that is proof against the belief, trumpeted by contemporary biology's most public and prophetic voices, that man is just a collection of molecules, an accident on the stage of evolution?...What chance have our treasured ideas of freedom and dignity against the teachings of biological determinism in behavior, the reductive notion of the 'selfish gene, the belief that DNA is the essence of life, and the credo that the only natural concerns of living beings are survival and reproductive success?... They fail to see that the scientific view of man they celebrate does more than insult our vanity. It undermines our self-conception as free, thoughtful, responsible beings, worthy of respect because we alone among the animals have minds and hearts that aim far higher than the mere perpetuation of our genes" (p. 37).

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- Nature/human nature is a source of values limiting technological development.
- Ontological gap: the uniqueness and dignity of the human being (maintaining the purity of borders).
- Repugnance at bio-technological merger.
- A largely substantive view of technology in which technology substantively determines values and shapes culture.
- There is an essential mystery underlying consciousness and human nature.
- The essential inwardness of human being: the self as private, solitary, source of dignity.
- Technology does not promise freedom but enslavement (Huxley's *Brave New World*).
- Strong essentialist/realist bent.

Granted, these are something of a caricature, but they capture something of the diametrically opposed visions behind this debate over transforming humanity. Central to those visions are antithetical views of both technology and human nature, views which are fairly thin and which fail to draw on any substantive work in either philosophy of technology or philosophical anthropology. Technology is often approached in this debate with either a "love it" or "leave it" mentality, presupposing either instrumental or substantive views of technology long criticized by scholars in philosophy of technology. Accounts of human nature follow a similar tack, where the notion of human nature is either drained of any significance, as in the social constructionist debate, or heavily freighted with moral substance from a more conservative standpoint. In both cases and with both concepts, we have poorly thought-out positions that do little to wrestle with the complex nature of the phenomena being discussed. No wonder then that when the two terms come together and are joined in the debate over transforming

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humanity, the debate has been loud, acrimonious, and seldom enlightening.

So what are we to do? Returning to my opening gambit, I propose that we look back toward some of those earlier attempts to wrestle with these problems in which the focus on human nature and technology was more central, less thin, and less riven by ideological axes being ground. For the purposes of this essay, I propose to explore those resources available in Ernst Cassirer's philosophical anthropology and philosophy of technology for locating a general orientation or frame of reference in which to address the complex issues raised by transforming humanity. As we have already seen, Cassirer was well aware of this problem of human orientation and, as we shall see, he is clearly aware of how technology is implicated in this problem, leaving him well situated for addressing the issue of transforming humanity.

Cassirer's *An Essay on Man* suggests that to face squarely man's crisis in self-knowledge we must arrive at a theory of man. But in order to develop a satisfactory account of the human being we need to understand the human being's particular milieu, culture, and in order to come to grips with human culture, we must engage in a study of the elements of culture, the symbolic forms. Our crisis in self-knowledge, then, impels Cassirer down a path wherein he must confront the multiplicity of symbolic forms: myth and religion, language, art, history, science, and, importantly, technology. While Cassirer's philosophical anthropology, philosophy of culture, and philosophy of symbolic forms are complex, multifaceted, and spelled out over his lifetime, permit me to identify those key elements of which we should take particular note that are relevant to our discussion and which suggest Cassirer's unique position in the debate over technology and human enhancement.

First, Cassirer very explicitly situates the human being and culture in the organic realm. The work of the biologist Johannes von Uexkull and his account of the outward life and

inward life of animals provides the backdrop to much of Cassirer's philosophical anthropology. Uexkull's study of animal form provides a way of avoiding the dualism of biology/culture life/spirit that Cassirer thought doomed previous philosophical anthropologies. As he puts it: "A philosophical anthropology has to conform to the maxim of Spinoza that man is not to be regarded as a 'state in the state.' He is only a single link in the general chain of evolution. Cultural life is always bound up with the conditions of organic life" (SMC p. 168). We must begin with the human being situated in his physical environment. The human being cannot live without constantly adapting himself to the conditions of the surrounding world (EM p. 3). Culture, the symbolic forms, does not represent the alienation of the human being from nature or an organic realm. Rather, the symbolic forms are the very conditions of human life (EM p. 25). And yet, while appropriating Uexkull's scheme, Cassirer argues that in the case of human beings, the functional circle between outward and inward life includes a new element, the symbol. Man, Cassirer observes, no longer lives in a merely physical universe but in a symbolic universe (EM p. 25).

Second, the distinguishing feature of the human being is not some new feature or property, not some metaphysical essence. The human being's distinctiveness is his work. "Man's outstanding characteristic," Cassirer writes, "his distinguishing mark, is not his metaphysical or physical nature—but his work. It is this work, it is the system of human activities, which defines and determines the circle of 'humanity.' Language, myth, religion, art, science, history are the constituents, the various sectors of this circle. A 'philosophy of man' would therefore be a philosophy which would give us insight into the fundamental structure of each of these human activities, and which at the same time would enable us to understand them as an organic whole" (EM 68). In focusing on this functional capacity of the human being,

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Cassirer avoids identifying human nature with some timeless metaphysical essence or substance.

Third, Cassirer insists on the diversity of the symbolic forms. Cassirer's philosophy of symbolic forms extends Kant's Copernican revolution to cover every principle by which human beings give form to the cultural world. In addition to investigating the function of cognition, then, we must also seek to understand the function of linguistic thinking, of mythical and religious thinking, artistic thinking. Each of these constitutes a symbolic form entirely independent of science with its own categories and concepts. Each is a particular way of seeing with its own measure and criterion of truth and meaning. In his account of the symbolic forms, Cassirer emphasizes the perpetual strife of diverse conflicting forms. Philosophy, he cautions, cannot "overlook the tensions and frictions, the strong contrasts and deep conflicts between the various powers of man" (EM p. 228). Each is a different step made by the human being in its reflective interpretation of life, an activity in which the human being attempts to make reality coherent, understandable, and intelligible.

And yet, here is my fourth point, this multiplicity of forms does not, Cassirer says, denote discord or disharmony and it is precisely the task of philosophy to understand the system of culture as an organic whole. Philosophy begins with the hypothesis that the heterogeneous activities of human culture can be brought into a common focus (EM p. 222). The question of the unity of the symbolic forms is in fact central to Cassirer's understanding of the crisis of culture. The various and conflicting symbolic forms are a coexistence of contraries held together in a dynamic and functional unity by a conformity in their fundamental task (EM p. 222) which Cassirer identifies in the final paragraph of *An Essay on Man* as the task of freedom: "Human culture taken as a whole may be described as the process of man's progressive self-liberation. Language, art, religion, and

science, are the various phases in this process. In all of them man discovers and proves a new power—the power to build up a world of his own, an ‘ideal’ world” (EM p. 228). The world of culture, the symbolic forms, opens up to the human being a realm of freedom. In some of the most evocative paragraphs of *An Essay on Man*, Cassirer describes how Helen Keller’s grasp of the principle of symbolism is a magic key giving her access to the world of human culture. “A new horizon is opened up, and henceforth the child will roam in this incomparably wider and freer area” (p. 35). We might say then that the symbolic forms converge on this task of freedom. It’s clear, though, that this task is an ongoing one. Cassirer rejects any form of a Hegelian absolute spirit or telos transcendentally directing the symbolic forms. There’s a ceaseless struggle among the forms of human culture and we human beings have the ongoing task of bringing some equipoise to the centrifugal forces of human activity, in which especially the mythical elements are controlled by the constructive powers of logical and scientific thought, ethical forces, and the creative energies of artistic imagination (SMC p. 246).

In turning briefly to Cassirer’s account of technology, permit me to make two final points. First, Cassirer situates his analysis of technology in the context of his philosophy of symbolic forms and in such a way that it would be inappropriate to conclude that technology represents the alienation of either culture or our nature as symbolic animals. In “Form and Technology,” it is clear that Cassirer wants to avoid overly quick and simplistic analyses of technology in terms of a blanket condemnation or praise of its effects or works. “We may bless technology or curse it, we may admire it as one of the greatest possessions of the age or lament its necessity and depravity—in judgments such as these, a measure is applied to it that does not originate from it” (FT p. 10). Philosophy’s task is to inquire into the possibility of technology as a symbolic form, examining the form,

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meaning, and essence of technology and the way in which technology constitutes a way of having a world. Cassirer argues that myth, language, and technology are the basic cultural forms out of which other symbolic forms develop. As John Michael Krois notes in *Cassirer: Symbolic Forms and History*, technology comprises “a particular way of having a world—a way of informing temporal and spatial perception, the conception of the object and the subject, and so forth” (p. 204). While Cassirer never fully developed an account of technology as a symbolic form, Krois insightfully argues that in a technical perception of the world the world takes on the form of mere happenings or events (p. 206). As Krois notes, “From a purely technical point of view, people and things temporarily fill functions that in a fast-changing world are themselves only temporary. Technik is innovative to the extreme” (p. 207).

Cassirer repeatedly draws parallels between language and technology as symbolic forms. The human being is both a rational being and a tool-forming being (FT pp. 13-14). Indeed, for Cassirer, language and tool use constitute a turning point for the human being, opening up a world of symbolic meaning and beginning the human being on a slow and gradual process of growth—a progressive increase or strengthening of his self-consciousness. As Cassirer significantly notes, “A new world-attitude and a new world-mood now announce themselves over and against the mythical-religious worldview. The human being now stands at that great turning point in his destiny and self-knowledge that Greek myth embodied in Prometheus” (FT p. 28). As we saw earlier, Michael Bess suggests that with the development of new technologies we are witnessing a turning point in human life. For Cassirer, it would be perhaps more correct to suggest that what makes possible the 21<sup>st</sup> century references to a turning point lies far earlier in our history and with the development of the symbolic forms. The transition to the first tool, Cassirer suggests in “Form and Technology,” contains

the turning point in knowledge (p. 23), and that turning point comes in the opening up of the world of forms and culture and the break with the magical-mythic past, not in the particular developments of technology.

Cassirer's analysis of technology as a symbolic form precludes him from embracing Ludwig Klages' account of technology as the alienation of human beings from their own essence (FT p. 29). In fact, contrary to Klages' view, Cassirer, following philosopher of technology Ernst Kapp's suggestion, points out that knowledge of the body and the I are tied to the form of technical doing (FT p. 33). Cassirer agrees with Kapp's basic insight that the human being is only able to gain insight into the body through the artificial counter-image, through the world of artifacts he has created, and he notes: "technological efficacy, when directed outward, likewise exhibits a self-revelation and, through this, a means of self-knowledge" (FT p. 35). Cassirer notes, for instance, that the eye was the model for all optical apparatuses but that the properties and function of the eye are better understood through these apparatuses. Cassirer adopts Kapp's insight that technical efficacy exhibits a self-revelation and so a means of self-knowledge and emphasizes the conclusion that follows from this insight: "with this first enjoyment of the fruit from the tree of knowledge the human being has cast himself out forever from the paradise of pure organic existence and life" (FT p. 35).

While Cassirer resists a substantive approach to technology that casts it as an alienating force in human culture, he was concerned with developments in modern technology that he found antithetical to his analysis of symbolic forms. These worries take two forms. In "Form and Technology" Cassirer worries about the power of technology to usurp the other symbolic forms. In situating technology within the "whole of the mental world of forms," Cassirer argues that it threatens to disrupt the equipoise of the coexistence of contrary symbolic forms. As he notes:

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... as technology unfolds, neither does it simply place itself *next* to other fundamental mental orientations nor does it order itself harmoniously and peacefully with them. Insofar as it differentiates itself from them, it both separates itself from them and positions itself against them. It insists not only on its own norm, but also threatens to posit this norm as an absolute and to force it upon the other spheres. Here, a new conflict erupts within the sphere of mental activity, indeed, on its very lap. What is now demanded is no simple confrontation with “nature,” but the erection of a barrier within mental life itself -- a universal norm that both satisfies and restrains individual norms. (p. 40)

While Cassirer observes that the human being is “thrown by technological culture into a never ending vertigo that moves from desire to consumption, from consumption to desire” (FT p. 49), he argues that this is not due to the form of technology but to its connection with a “certain form and order of commerce,” a concrete historical position (FT p. 50). The more basic problem is technology’s setting itself up as a leader and an end itself rather than a servant collaborating to carry out goals in the context of the ethical task of culture as man’s progressive self-liberation. The danger that technology presents is that it usurps the other symbolic forms, the unity of the symbolic forms, and sets itself up as the dominant if not sole symbolic form.

In his later work, especially *The Myth of the State*, Cassirer articulates a different worry over modern technology, emphasizing the sense of crisis confronting modern human beings. And in periods of crisis, we are always wont to return to the realm of myth. As Cassirer notes, “myth reaches its full force when man has to face an unusual and dangerous situation” (p. 278). In the midst of the events

of the 1940s, Cassirer documents the emergence of what he refers to as a new technique of myth:

It has been reserved for the 20<sup>th</sup> century, our own great technical age, to develop a new technique of myth. Henceforth myths can be manufactured in the same sense and according to the same methods as any other modern weapon—as machine guns or airplanes. That is a new thing—and a thing of crucial importance. It has changed the whole form of our social life. (MS p. 281)

This new form of rationalized myth combines two incompatible elements: homo faber, man as technician, and homo magus, man as magician. Where previously, we passed from the age of magic to the age of technics, today's technicians reach back to the realm of magic and myth and in the combination of myth and technology forge an unlikely alliance with unprecedented power. Cassirer was concerned that this unprecedented power accorded the new rationalized myths ultimately led to fatalism, acquiescence, and a loss of freedom. The task of philosophy is to remind us that “ethical freedom is not a gift with which human nature is endowed; it is rather a task, and the most arduous task that man can set himself” (MS p. 287). Ultimately, Cassirer's account of culture, the symbolic forms, and technology provides an orientation in which that task can be understood and carried out and which serves to counter the power of rationalized myth.

We've seemingly come a long way from our starting point in worries over transforming humanity. And yet, having traversed this distance with Cassirer, his philosophical work does, I think, provide something of a road map for situating and thinking more deeply about this predicament. Allow me to conclude then by rather schematically posing some ways that this outline of a framework drawn from Cassirer's work on culture and symbolic forms provides some direction to this

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debate. If we take seriously this notion of the human being as the symbolic animal, what are some of the implications for our understanding of the debate over transforming humanity? I'd like to highlight seven key points.

I think one of the first things we gain in turning to Cassirer is an understanding of the broader historical framework of the debate over transforming humanity, and this in a number of ways. We see, for instance, that our current dilemma in fact predates the emergence of the most recent technosciences and their implications for humanity. Already in 1930, at the time Cassirer is writing "Form and Technology," there is a vigorous debate over technology's impact on our humanity. In the recent fascination with the rhetorical tropes of turning points and posthumans, one has the sense that these problems are newly emergent and represent a break with our humanist past. While more perceptive accounts trace these discussions back to J. D. Bernal's 1929 *The World, the Flesh, and the Devil*, they typically stop there and take little notice of the many debates occurring throughout the first half of the 20<sup>th</sup> century. Furthermore, Cassirer's emphasis on symbolism traces that turning point even further back in our history, at that moment that opened up a symbolic world for human beings. Rather than emphasizing some recent break with humanity and some turning point in the development of technology, Cassirer helps us understand how some of these forces of transformation have been continuous throughout human history.

This leads directly to my second point, for it is not difficult to see how this lack of historical awareness often plays out in the debate over transforming humanity in the completely inadequate accounts of human nature presupposed by bioconservatives and transhumanists alike. Bioconservatives such as Leon Kass, Francis Fukuyama, and George Annas are routinely and rightly criticized for predicating their critiques of biotechnology on substantive

views of human nature that ignore the historical, cultural, and social factors that shape human nature. Transhumanists themselves, though, often presuppose a thin, ahistorical account of the protean, liberal, individual self in their defense of human enhancement. Bioconservative and transhumanist alike presuppose a metaphysically indefensible account of the human being that locates our specialness and dignity in some timeless substance, whether it be the substance of a biological human nature (Kass, Fukuyama) or the liberal self (Nick Bostrom, John Harris). Even more perceptive accounts of the posthuman, such as Katherine Hayles' *How We Became Posthuman*, presuppose a straw man Cartesian version of human nature in critiques of humanism and human nature. Cassirer's functional account of the symbolic animal, situating the human being in nature while recognizing the role of culture as a unique determinant of our humanity, a humanity always in the making and not some timeless metaphysical essence, offers a thicker, more complex view of the human being to these thinner, one-dimensional views that have become the norm in debates over transforming humanity.

This feeds into my third observation, for in both the bioconservative and transhumanist frameworks, the characteristics of human nature are completely unmoored from any other discussion of human capacities or characteristics, any structure of needs and wants. What we have masquerading for human nature in these frameworks is little more than a cipher. Both the bioconservative and transhumanist frameworks completely efface aspects of what it means to be human, including that human beings are gendered, are always located in specific cultural and historical contexts, and are historically and politically shaped. Neither framework helps us understand the many important issues raised by the debate over transforming humanity, such as why human beings are pursuing transformations, how we understand our sense of embodiment and whether we have

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come to be alienated from our bodies, how norms of youthfulness and beauty shape our experiences of the aging body, the relationship between individual self-conception and the cultural and historical context of which we are all a part. With their overly simple accounts of human nature, these frameworks leave us little space in which to raise and consider these significant and legitimate issues. Cassirer's account of the symbolic animal recognizes that we are cultural and historical beings and neither privileges nor denies biology or culture, individual or society, creativity or culturality, which are intertwined, fundamental aspects of the human being. From such a social and historical perspective, one cannot characterize the human being in terms of some single, isolable property which serves to define our essence or our dignity. Rather, one must have recourse to Cassirer's complex and multidimensional framework.

Fourth, in treating technology as a symbolic form, Cassirer implicitly rejects instrumental and substantive views of technology and points the way toward a critical theory of technology. The symbolic forms are not merely forms of knowledge but also constitute forms of life and technology is not merely a mass of isolated instruments and techniques, but a way of having a world. Too often, especially in transhumanist accounts, technology is approached merely as a set of tools used by this or that posthuman in their transformative process. Alternatively, bioconservative critics often treat technology as antithetical to human nature and human culture and as some kind of external force directing culture into a posthuman oblivion. Cassirer's more nuanced approach to technology as a symbolic form legislates against both of these inadequate views and suggests the need to patiently plumb the depths of the formative forces of technology. Technology is neither neutral nor merely instrumental, as it constitutes or forms a world. But nor can we think of the human being without thinking of and through technology and the other symbolic forms, for our ways of

thinking about the human being are shaped by our tools for thinking.

This fourth point is connected to the fifth point: the necessity of understanding technology as one of a number of symbolic forms. Cassirer is critical of modern technology when it constitutes itself as the sole symbolic form and the dominant form of the world. Cassirer recognizes that the human being is a tool-using animal but he does not privilege technology nor would he accept a culture that took technology as its dominant symbolic form. Cassirer is clear that human culture is in a state of dynamic equipoise, a functional unity in which we have a coexistence of contraries. There is a danger when any one symbolic form usurps the others and sets itself up as sole legislator. We see this danger at work in many transhumanist accounts where culture simply becomes an arm of technology and every aspect of human nature and human culture is seen through the lens of technique, efficiency, cost-effectiveness, and maximizing self-interest. As Krois notes in his account of technology, "Insofar as Technik is the predominant symbolic form, man and the world are then perceived primarily in terms of technical principles and those of the other symbolic forms appear subordinate or inapplicable" (p. 207). Technology is central to human life, as Cassirer makes clear in "Form and Technology." But he also makes clear that technology cannot set itself up as an absolute norm forced upon the other symbolic forms (FT p. 40). Technology, he reminds us, cannot determine the goal, though it should collaborate in carrying it out (FT p. 50). As one of a number of symbolic forms, technology has a role to play in the human being's ethical task of balancing the tensions and frictions, contrasts and conflicts between the symbolic powers of the human being (EM p. 228).

Sixth, Cassirer's framework provides a perspective from which to understand more precisely the dangers of a culture predicated on the dominance of technosciences such as

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genetics, cybernetics, and biotechnology: the danger of rationalized myth. While technoscience seemingly triumphs in our culture, Cassirer observes that the older, more primitive forms don't disappear. The mythic world especially, the world of drama and emotion, doesn't disappear. As he notes,

In the new light of science mythical perception has to fade away. But that does not mean that the data of our physiognomic experience as such are destroyed and annihilated. They have lost all objective or cosmological value, but their anthropological value persists. In our human world we cannot deny them and we cannot miss them; they maintain their place and their significance. (EM p. 77)

As we have seen, Cassirer diagnosed the emergence of rationalized myth in the 20<sup>th</sup> century and I think his concerns are justified especially by the many ways in which the debate over transforming humanity plays on our hopes and fears, our dreams and nightmares. It is not for nothing that Bess titles his overview of recent developments "Icarus 2.0," for we are in the realm of the mythic, employed now in the service of the rationalized plans of technology. Indeed it often appears that the debate over transforming humanity is played out by trading this for that mythic image: Icarus and Prometheus, Frankenstein and Brave New World, Singularity and Star Trek. Cassirer's account of the symbolic animal provides a framework in which we can understand how and why these myths function the way they do and offers the critical tools for assessing them.

Finally, Cassirer's framework helps us to understand and appreciate the complex relationship between human nature, our ethical task, and the normative questions surrounding transforming humanity. Cassirer doesn't draw direct normative implications from human nature in the manner of

the bioconservatives. Nor would he endorse the transhumanist liberal eugenics view of each individual self rationally calculating the benefits of this or that enhancement. Cassirer reminds us that you cannot derive an ethics from within the culture of technology and the problems of technology cannot be undone by means of technology alone. Cassirer forces us to situate technology within the realm of the other symbolic forms and within the context of the task of the symbolic forms in terms of the progressive self-liberation of the human being. For Cassirer, progress, far from being a scientific task, is an ethical task and a perpetual one. As he notes in *An Essay on Man*, the ethical world is never given; it is forever in the making. Cassirer identifies in human culture a fundamental polarity between innovation and stabilization. “Man,” he writes, “is torn between these two tendencies, one of which seeks to preserve old forms whereas the other strives to produce new ones” (EM p. 224). Our task is to struggle to bring these forces into some equilibrium. There is equipoise to maintain here that cannot be sought from any one of the cultural forms but must be considered an ongoing dynamic task of the human being in culture. This clearly does not provide any easy solutions to the problem of transforming humanity. But then perhaps anyone who thought there were easy solutions wasn’t struggling with the complex problem of transforming the symbolic animal.

### References

- Bess, M. (2008). Icarus 2.0. *Technology and Culture*, 49, 114 – 126.
- Cassirer, E. (1944). *An essay on man*. New Haven: Yale UP.
- Cassirer, E. (1946). *The myth of the state*. New Haven: Yale UP.
- Cassirer, E. (1955). *The philosophy of symbolic forms* (Vols. 1 – 3). (R. Manheim, Trans.). New Haven: Yale UP.

## TRANSFORMING THE SYMBOLIC ANIMAL

- Cassirer, E. (1979). *Symbol, myth, and culture*. D. P. Verene, (Ed.). New Haven: Yale UP.
- Cassirer, E. (2009). Form and technology. (J. M. Krois and W. Dunlavey, Trans.). In A. S. Hoel and I. Folkvord (Eds.), *Form and technics: Reading Ernst Cassirer from the present*. Manuscript submitted for publication.
- Hayles, N. K. 1999. *How we became posthuman*. Chicago: The U of Chicago P.
- Kass, L. (1999, September). The Moral Meaning of Genetic Technology. *Commentary Magazine*, 32 – 38.
- Krois, J. M. (1987). *Cassirer: Symbolic forms and history*. New Haven: Yale UP.
- Pfeutze, P. (1954). *Self, society, and existence*. Westport, CN: Greenwood.
- Scheler, M. (1961). *Man's place in nature*. (Hans Meyerhof, Trans.). New York: Farrar, Straus, and Giroux.
- Stelarc. (n.d.). Earlier Statements: Obsolete bodies. Retrieved from <http://www.stelarc.va.com.au/earliertexts.html>



## **Between Virtual Reality and the Real: Cyber Subjectivity and Ideology Critique**

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In 2006 Time magazine chose a surprising figure as its “Person of the Year”: You. The subtitle on the cover read: “Yes, you. You control the information age. Welcome to your world.” The question for this paper is, who is this “You”? And who is the “I” being referred to? What is online subjectivity and intersubjectivity? This analysis is carried out using Lacan’s theoretical framework as well as Zizek’s interpretation of it. Online subjectivity is analyzed in (Lacanian) terms of the Real, the Symbolic, and the Imaginary, and considers how concepts such as the Big Other, the object of desire, and others, illustrate its key structures. The paper then examines the place of this analysis within the context of ideology critique and point towards some political consequences of this emerging form of subjectivity.

Keywords: Lacan, Zizek, Turkle, subjectivity, psychoanalysis, online, ideology

### **Introduction**

In 2006 Time magazine chose a surprising figure as its “Person of the Year”: You (Grossman, 2006). The subtitle on the cover read: “Yes, you. You control the information age. Welcome to your world.” This choice reflects the notion that the Web may lead to more intercultural understanding, more citizen participation, and a more flourishing and vibrant democracy (Kellner, 2000; Bar-Tura, 2010). Time Magazine

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chose each and every one of us. Well, not exactly. The image on the cover is telling: The word “You” is situated on a computer screen, which appears to be playing a video on YouTube. One could take this to be a clever pun, where the “You” is shorthand for “YouTube.” But this interpretation would be missing the point (though it would be getting the joke). For it is not social media or new technology that Time has chosen, but rather their users. Indeed, the phenomenon of social media usage has continued to grow exponentially since 2006. At the time, Facebook, for example, had 12 million active users. By mid-2010 it recorded 500 million users. On average, this is an increase rate of approximately 2.75 million new users a week; or, almost 400,000 new users a day (Facebook, 2010).

But even to say that the users of social media are Time’s “person of the year” would be a lacking description. To go back to the image on the cover, the “You” is on the computer screen, and it is referring to the user looking at the screen, as if it was a mirror image. But it isn’t a mirror image. It is significant that there is a relationship, not an identity, between the online subject and its offline counterpart. Indeed, what Time has (perhaps unknowingly) rightly announced is a new split in subjectivity. Accordingly, the question for this paper is, who is this “You”? And who is the “I” being referred to? In other words, what is online subjectivity and intersubjectivity?

When we think of the subject online, we also immediately think of his counterpart in “reality.” Moreover, we consider his connection with other such online subjects as well. Thus, subjectivity appears as threefold: The “real” subject, the online subject, and online inter-subjectivity (the relationship between the “real” subject and his online others). To examine this new form of subjectivity, in this essay I will focus on cyber social networks, since these are the main Web-based hubs through which new forms of human relationships are formed. For the most part I will be referring to the most

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prominent social network, Facebook, since it currently holds an unprecedented, and unrivalled, dominance in this field.

Investigating the relationship between humans and computers from a psychological perspective is perhaps as old as computers themselves. In a seminal work in this field, Sherry Turkle (1984) published *The Second Self*, in which she discusses the emerging relationship between the individual and the computing machine. She identifies the computer as an “evocative object,” as an “object to think with” and to “work through with.” That is to say, for Turkle the engagement with the computer and its representational capabilities brings about new opportunities for human beings to work through issues in their lives, from social challenges to grappling with questions of identity. Seeing the computer as an “evocative object,” Turkle argues that it propels us to rethink social and personal categories (for more on the idea of evocative objects see Turkle, 2007a).

Taking Turkle’s lead, we ought to consider the various ways in which online social networks are indeed evocative in that they compel us to think and rethink social categories such as “friendship” or “sharing.” Turkle has primarily been concerned with our relationship to computers and other digital technologies as “evocative objects,” or as “objects to think with.” Thus, she has explored what we learn about ourselves through our relationship with these objects. However, in this article I aim to go beyond Turkle insofar as she has not gone far enough in accounting for the ways in which digital media has become a true part, or function, in our selves. Better still, from a Lacanian point of view, she has not fully come to terms with the ways in which these technologies play a role in structuring our decentered subjectivity, and thus has remained to a great extent within the boundaries of ego psychology.<sup>1</sup>

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<sup>1</sup> It is worth noting that Turkle is very familiar with Lacan’s thinking. Much of her field research on the sociology of Lacanian psychoanalysis is found in Turkle’s (1992) *Psychoanalytic Politics* (she focuses on his theoretical framework mostly in Chapter 2).

Turkle often comes close to breaching these boundaries, and indeed often points to the ways in which the digital experience can represent a decentered self. But she then retreats back to a more traditional psychodynamic approach, as in one case where she argues that the role of psychoanalysis vis-à-vis computer culture is to provide us with a new theory of object relations (Turkle, 2004a, p. 18).

As I will demonstrate, Jacques Lacan's theoretical framework, as well as Slavoj Žižek's interpretation of Lacan, is helpful for examining online subjectivity in a new light. Thus, I will analyze the online subject in (Lacanian) terms of the Real, the Symbolic, and the Imaginary, and will consider how concepts such as the Big Other, the object of desire, and others, illustrate its key structures. This analysis will be developed in two main sections. In the first section I will delineate the online subject through the Lacanian theoretical framework. I will also address some key concepts in online subjectivity, including the horror of the Real, the master signifier, the gaze and the voyeur, and the anxious and hysterical subject. In the second section I will examine the place of the analysis of online subjectivity within the context of ideology critique and point towards some political consequences of this emerging form of subjectivity.

However, before I delve into this investigation, one note of caution is in order. Žižek has written much on Lacanian theory through the lens of popular culture (Žižek, 1991). He has proposed that popular culture is a fruitful ground for the exposition of Lacan's framework, and often refers to popular culture (movies, novels, folk tales and jokes) as carrying analogues of an underlying psychoanalytic structure (for example, a movie plot illustrating a key feature of human subjectivity). Though Facebook is a form of popular culture, it is also a new form of subjective interaction, and so, consequently, it is not merely introduced here as a "symptom" of our culture; we turn to it not as an analogy but rather, so to

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speak, as a turn to another feature of the Thing itself?<sup>2</sup> It is examined in Lacanian psychoanalytic terms insofar as it structures a new form of subjectivity.<sup>3</sup>

### **Cyber Subjectivity within a Lacanian Framework**

#### *The Imaginary, The Real, The Symbolic*

In his discussions of the imaginary, Lacan points to the mirror stage (age 6-18 months) as holding an exemplary function (Lacan, 1988a, p. 74; 1977, pp. 1-5). Early on Lacan saw this stage as an actual stage in the infant's development, and later emphasized that it represents a basic structure of subjectivity. Put simply, during the mirror stage the infant begins to take an interest in his mirror image and, according to Lacan, learns to identify himself in the mirror. This stage is significant in that the child internalizes his externalized self.

In this context one may consider that children refer to themselves in the third person (by name) before they do so in the first person (saying "I"). This developmental process of initially constructing the subject through internalizing externalized images is representative of the way the ego is

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<sup>2</sup> The "Thing" refers to that around which an individual or a group organizes their enjoyment. Consequently, the Thing serves as a mechanism that structures identity and sense of self. For an illustration, see Žižek's example of the nation-Thing (1991, pp. 165-166).

<sup>3</sup> In this sense this discussion is more similar to Žižek's discussion of the Japanese Tamagotchi toy than his discussion of films, since the toy is not a metaphor. Rather, Žižek discusses the subject in his interaction with this toy and the meaning of such interaction for the subject (see Žižek, 1999d, pp. 107-109). In Turkle's terminology, the Tamagotchi is a "relational artifact." Such artifacts, results of the endeavor to develop "affective computing," are not mere receptacles for the projection of human emotions, but also "respond" with "emotions" of their own, thus transforming the way we relate to them "as objects" (Turkle, 2007b; 2004, p. 19).

built around illusions and images, which in turn become the basic structure for the imaginary (we may think of this as image-inary). Thus, for Lacan, because the ego is an aggregation of our mirror social images, ego psychology is a psychology of social construction (Mitchell and Black, 1995, pp. 196-198). In fact, Lacan asserts that “[t]he fundamental, central structure of our experience really belongs to the imaginary order” (Lacan, 1988b, p. 37). With this concept of the imaginary, we can think in a preliminary way of our relationship to our cyber profile as kind of a mirror position, where the computer screen functions as a mirror. In the profile some sort of cohesive identity confronts us. Our fragmented identity finds its cohesiveness in the external mirror images.

The “Real” in Lacan’s framework should immediately be distinguished from “reality.” Everyday reality is constituted by a symbolic order and as such it is fundamentally linguistic. As Turkle explains Lacan’s thinking of this symbolic order, “human beings become social through the appropriation of language and it is language that constitutes human beings as subjects” (Turkle, 1992, p. xxv). For Lacan, the Real is that which always eludes symbolization (Lacan, 1988a, p. 67). In contrast to this symbolic order, about which we will have much more to say later, the Real designates “a substantial hard kernel that precedes and resists symbolization and, simultaneously, it designates the left-over, which is posited or ‘produced’ by symbolization itself” (Zizek, 1993, p. 36). Zizek emphasizes that the Real is not the “raw” pre-symbolic real of “nature in itself,” but rather the always-haunting hard core of “psychic reality” itself. In turn, “psychical reality” should not be simply identified with our “internal world,” or with the mental domain. Rather, the Real denotes a nucleus within that domain which is heterogeneous and resistant, but which paradoxically more properly belongs to the subject, and thus is more “real” than the majority of psychical phenomena precisely because it resists symbolization (Zizek, 1999e). Another way to think about the Real is through Louis

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Althusser's conception of interpolation. According to Althusser, the subject is formed through taking on linguistic, relational and social roles (interpolation); through taking on a symbolic mandate; through the various ways in which we are sub-jected, subjected to the networks in which we operate. Similarly, for Lacan the subject is primarily characterized by its place in the symbolic world (Lacan, 1988a, p. 80). The Real, however, eludes such interpolation.

When considering this conceptual apparatus as applied to Facebook, I will suggest in what follows that we should take the "real" person (the user) to be the "hard kernel" of the (symbolized) online subject, and that we reject the notion that the online representation is a mere fantasy. We often think of the online self as enacting some repressed aspect of the user. Drawing on examples from extensive fieldwork and research, Turkle (1994, p. 161) emphasizes that many users use the virtual space as a vehicle for engaging significant issues they face in "real life." The disavowed, the repressed, finds its symbolization online. What should be stressed, however, is that the online dimension is no less integral to the subject than the offline one. Turkle herself comments that "[t]he life practice of windows is that of a decentered self that exists in many worlds and plays many roles at the same time. The experience of this parallelism [life in the world and life on the screen] encourages treating on-screen and off-screen lives with a surprising degree of equality... now RL [real life] itself can be 'just one more window'" (1995, p. 14).

Let us then examine the relationship between the symbolic and the Real in Facebook. For Lacan, the symbolic order is based on the exclusion of the Real and on the transformation of the Real into a central lack in that order. On the other hand, the unsymbolizable Real (a feature of the subjectivity of the "real," offline user) sets the limits of what we experience as (virtual) reality (Žižek, 1993, p. 38; 1999a, p. 22). The network of signifiers on Facebook has meaning only insofar as we take them to be referring to something

“which has body,” something “real.” We need the structural idea of signification, yet the user always remains ambivalent about the relationship to that which is referred to (yet cannot be symbolized online). Consider for example the prevalent rumor on Facebook that there exists a program with which you could find out who viewed your online profile. Many were eager to find out who viewed their profile, to symbolize the Real of the anonymous other. But we know that Facebook would break down, would cease to exist, if that were possible. The Real must be excluded for the symbolic network to retain its consistency. It is the tension between being public about yourself and having a private fascination about others that gives Facebook life. In other words, it is the tension between performing for the gaze of the other, and gazing at others, that fuels the Facebook experience. This double structure also exemplifies the double perversion of cyber subjectivity. In the usual sense, we may say of someone who enjoys peeking at the profiles of others that they are “perverts” (“peeping toms”). But there is also the pervert in the “proper” sense, namely, one who gains satisfaction from putting himself as the object-instrument for the enjoyment of the other (Lacan, 1977, p. 320; Žizek, 1993, p. 71). The subject enjoys peeking, but also enjoys being on the displayed side of the peephole.

*The Split Subject and the Horror of the Real*

The gap between the online self and offline self is, in Lacanian terms, an exemplary structure of what it is to be a subject. Žizek stresses Lacan’s emphasis that “‘I am’ only insofar as I am not where I think,” that is, insofar as there is a gap in the subject’s self-apperception, a void which always eludes symbolization (Žizek, 1993, p. 66).<sup>4</sup> Thus, it is the

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<sup>4</sup> Interestingly, Žizek (1993: 252, n. 27) hypothesizes that it is against the background of this notion that “thought is where I am not” (the so-called “it thinks therefore I am”) that we may situate phobia of computers, since computers demonstrate the possibility of

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cyberspace profile that gives us a glimpse into the Real. From this perspective we may understand the words of one of Turkle's interviewees who described his feeling when creating a virtual character: "When I log on to a new MUD [Multi-User Dungeon] and I create a new character and know I have to start typing my description, I always feel a sense of panic. Like I could find out something I don't want to know" (Turkle, 1997, p. 77).

Let us consider this gap in the subject through a real-life example. On September 22, 2010 Rutgers University freshman Tyler Clementi committed suicide after his homosexual encounter was made public online without his consent. Clementi's unsymbolized (offline) Real was exposed for the gaze of others. Against this background consider Zizek's assertion that "the forced actualization in social reality itself of the fantasmatic kernel of my being is the worst, most humiliating kind of violence, a violence which undermines the very base of my identity" (Zizek, 1999c, p. 97). It is possible that Clementi was still grappling with this aspect of his identity (at least socially), and thus that the sexual encounter was still to be found in that illusive gap between the Real and the symbolic of his identity. Its abrupt external symbolization was shattering.

This brings us to another important structure, namely, the horror of the Real. This refers to the horror in the face of that which eludes symbolization, yet is at the core of subjectivity. Here again we may ask: which is more "real," my online or my offline identity? As Zizek (2006) correctly points out, our offline social identity, the persona we perform in our regular social interactions, always already involves a masking, a

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thought that is external to our self-identities. Along similar lines, there is a growing phenomenon of Facebook users checking their own profile multiple times a day only to ensure that no one has posted on "their wall" (their virtual stream of consciousness) something malicious that could be misconstrued as their own thoughts.

repression of our socially inadmissible desires. Perhaps, then, what the online persona allows is precisely the opportunity to play out these repressed inclinations and impulses (assuming our “real” identity remains inaccessible to others). In these cases, the semblance of fiction enables the core truth to be exposed.

Turkle has also emphasized the ways in which cyberspace provides opportunities to explore alternative identities (2004, p. 21; 2004b; 1997, pp. 73-74). She views multi-user virtual domains (such as Second Life) as spaces that provide “an unparalleled opportunity to play with one’s identity and to ‘try out’ new ones.” In such domains, Turkle maintains, “you can play a role as close or as far away from your ‘real self’ as you choose” (1994, p. 159). What is more, Turkle (2004, p. 22; 1999, pp. 644-645) suggests that cyberspace can take on the developmental role of Erikson’s “adolescent moratorium,” which seems to have been lost in fast-paced hyper-forward-looking advanced capitalist society.<sup>5</sup> She suggests that cyberspace can provide the “consequence-free” environment that, for example, college years once provided. But what she does not point to is a significant difference between cyberspace and college, namely, that in cyberspace there is a dimension of your subjectivity, your offline identity, that remains anonymous. No one knows who you are, and you don’t know anyone else, at least potentially. As I will now illustrate, this recreates the structure of anxiety and horror regarding the Real. Perhaps most importantly, later on I will show how this structure of online subjectivity can have concrete political consequences.

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<sup>5</sup> Erikson’s concept of the psychosocial moratorium played a significant role in his understanding of identity crises and development. Broadly sketched, the moratorium was a period between adolescence and adulthood (often institutionalized and sanctioned) that provided opportunities for free experimentation with inner and outer identity possibilities (sexuality, for example). See Erikson, 1980.

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Zizek (2006) describes this epistemic asymmetry between online and offline communications, and the uncertainty it creates: “I can never be sure who they are: are they really the way they describe themselves, is there a ‘real’ person at all behind a screen persona, is the screen persona a mask for a multiplicity of people, or am I simply dealing with a digitized entity which does not stand for any ‘real’ person?” In her descriptions of MUD users, Turkle (1994, p. 158; 1997, p. 73) also recalls an encounter with a user who “turns out to be a man playing a woman who is pretending to be a man.” She even describes cases in which one may actually be encountering a programmed character (a “bot”) without knowing that there is no human user steering this character (1994, p. 166; 1997, pp. 75-76).

Indeed, is there not on Facebook (as in online dating services) the fear that there is nothing behind the profile, or something completely different than what appears? That the profile is pure fantasy (that there is no signifiable object “behind the curtain”)? This point was perfectly exemplified in the 2010 film “Catfish” which purports to be a real documentary of an online relationship that develops on Facebook. The film depicts a young New Yorker, Nev, who is courted and lured through e-mails and a series of gift packages by a family from Michigan. Nev learns all about the family members and communicates with them through Facebook. In the latter half of the film Nev drives with friends to Michigan to meet the family. The virtual relationship attempts to turn [R]eal: Nev attempts to symbolize the reality that has heretofore been repressed (the Real).

Interestingly, we consistently find descriptions of this film that refer to it in terms of horror (though it is a documentary, not a horror film at all). In a telling review of this movie, the reviewer writes: “When the three men finally go to Michigan, Catfish turns into *the best Hitchcock movie Hitchcock never directed*” (Andrews, 2010, my italics). What is more, the promotional video “trailer” for the film is also

informative in this respect.<sup>6</sup> So as not to give away the end, it brings the viewer up to the scene where the three protagonists drive up the driveway of the cyber family's rural home, while only their car's headlights illumine the barn doors in the pitch black of night. Indeed, it seems like a classic horror movie. This horror-film theme chosen for the trailer was so surprising considering the topic of the film that the filmmakers (who are its protagonists) were asked about it in an interview. They replied that they were also surprised that the film's distributors chose this marketing strategy (Feeney, 2010).

This should not come as a surprise to us. The online subject is always haunted by the specter that his counterpart may possibly be completely different than what appears on the screen. Consider Zizek's example of Rene Magritte's famous painting, "The Looking Glass." Through the glass window we see an idyllic calm ocean and sky. However, through the slightly opened window we can see what is "really" behind the window, which is simply black nothingness. Zizek (1993, p. 103) explains that "[i]n Lacanese, the painting would translate thus: the frame of the windowpane is the fantasy-frame which constitutes reality, whereas through the crack we get an insight into the "impossible" Real, the Thing-in-itself." Similarly, we can never know if "behind" the screen, the screen which appears to show us an entire virtual world, there is something completely different. That is, we do not have access to the Real. If there were "a crack in the computer screen," the screen simply wouldn't work.

The function of the screen here can also be understood phenomenologically. As Introna and Ilharco (2006) point out, it is no coincidence that the word "screen" is also used to convey selection, choosing, and excluding. It is the nature of screens to have a frame that allows us to refer to that which is "on the screen" as opposed to "off the screen": "Screening, as

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<sup>6</sup> The trailer is available here: <http://www.youtube.com/watch?v=BuE98oeL-e0>

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inclusion and exclusion, is therefore also immediately a framing process. For this screening - including and excluding - to make sense, there is the necessity of some previously agreed ground on the basis of which something can be screened” (Introna and Ilharco, 2006, p. 68). In other words, for a screen to screen, something must be excluded, left out, disavowed.

### *The Master Signifier*

Similar to the screening function of the screen, the Master Signifier grounds and gives meaning to a symbolic network, and guarantees the symbolic identity of the subjects. Once entering the symbolic order through the use of language, the subject’s identifications are mediated through this order of signification, which is characterized through the network’s Master Signifier (Lacan often used “the name of the father” is a metaphor for this). Žižek (1993, p. 268, n. 34) explains that for Lacan the Master Signifier is an empty signifier, “a signifier without signified.” For example, we can think of “The Nation” as a Master Signifier in a society that understands itself in terms of a national identity. The emptiness of this signifier is revealed when we try to point to what it is that makes this nation the nation that it is. Our answer is ultimately, “What makes this society a nation is that it understands itself as a nation.”<sup>7</sup>

The Master Signifier of cyber social networks is “Sharing.” Facebook users are prompted by the now iconic question: “What’s on your mind?”<sup>8</sup> This new symbolic mandate becomes clearer when we consider how in earlier eras, while the individual was encouraged to examine what comes to his mind, he was also encouraged to judge what is

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<sup>7</sup> This “bootstrapping” aspect of national identity is analyzed in Anderson (1983).

<sup>8</sup> Later I will address the inverse question, the one asked by the subject, “What do you want from me?”

worthy of external expression, and what should be acted upon (Foucault, 2005, pp. 217-218). Conversely, Facebook encourages the subject to “share,” and the more the better.<sup>9</sup>

It is worth noting how “Sharing” as Master Signifier also sets the Law, the taboos of the symbolic order: “Share! But there are limitations...” Access to the other can be limited. The inaccessible profile of the other is precisely a banned object of desire. It is the gaze that is denied, and as such is the source of fantasy. Žizek (1993, p. 48) explains that the *objet petit a* (the lost object of desire) is defined by Lacan “as the fantasmatic ‘stuff of the I’, as that which confers on the [...] fissure in the symbolic order, on the ontological void we call ‘subject’, the ontological consistency of ‘person’.” We can then see that the *objet petit a* takes on a double form: it is both the unattainable Real subject “behind the screen,” as well as the unattainable subject represented in the profile that is not shared.

How then does “sharing” function in the subject’s interpolation into the symbolic order? Let us think of the user and his cyber reflection, the profile (the subject in his taking on the symbolic mandate). One might hypothesize that the two are aligned.<sup>10</sup> But how does the effort toward alignment

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<sup>9</sup> Insofar as “Sharing” constitutes the symbolic order, we can diagnose this order’s specific *disorders* in Lacanian terms. For example, the Lacanian psychotic is the individual who refuses to take on a symbolic mandate. The Facebook psychotic would be an individual who has a profile, but never shares anything.

<sup>10</sup> Here again we encounter the basic structure of cyber subjectivity as that of the Lacanian gap between the “subject of enunciation” and the “enunciation of the subject.” As Žizek (1993, p. 40) explains, for Lacan, and for our cyber subject as well, “everything that I positively am, every enunciated content I can point at and say ‘that’s *me*,’ is not ‘I.’” One can never completely symbolize oneself. From a somewhat different yet relevant perspective, Turkle suggests that the possibility of having multiple online identities contributes to our understanding of the non-unitary self. She calls this the non-unitary subject the “society of mind” (citing Minsky) or “standing in the spaces between selves” (Turkle, 1999, p. 645). We find other

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take place? Our symbolic figure is influenced not only by “me,” but also by the larger symbolic order, in which I must find my place. That is to say, when the online subject takes on the symbolic mandate (“Share!”), this entails not simply figuring out how to represent himself online (“What should I share?”), but, more significantly, it is through this questioning that his cyber identity emerges.

### *The Gaze and the Voyeur*

As a sharing space, one of the central features of online social networks is the gaze at “the lives of others” (their profiles, photos, posts, and so on), a gaze which allows us to participate through the other. Indeed, there is a sense in which each Facebook profile is an auto-documentary. Similarly, Turkle (2008, pp. 129-130) describes the phenomenon of people “watching their lives scroll by” or “the Blackberry movie of one’s life.” The aforementioned film “Catfish” perhaps best captures this aspect of social networking. A review in the Huffington Post points out that the film is “a documentary not just about making a documentary, but about lives-as-documentaries, the identities we build, the selves we perform, the deceptions we make and to which we submit, in the name of information and ‘truth’” (Pasternack, 2010). It has now been shown that Facebook actively encourages voyeuristically gazing at these “documentaries” in social media: users who post photos, videos and links on their “Wall” are rewarded more than those who merely write text. The reward comes in the form of appearing more often on others’ “News Feed,” thus sharing more (Weber, 2010). From one perspective, the gaze demonstrates a key structure of subjectivity, since the subject is concerned with his profile Wall just as much as he is with the profile wall of others. Hence, the profile is the subject’s impossible attempt to see

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versions of this structural split elsewhere as well (think for example of Kant’s subject who is forever ignorant of his noumenal self).

himself as others see him. The subject who wants to gaze at himself, like the eye that wants to look at itself, creates a profile, an object external to it, through which it comes to know itself.<sup>11</sup> In this context we can think of the computer screen as the mirror in the child's mirror stage.

It is also worth considering here Žižek's (1999c, p. 93) remark with regard to the fantasmatic scene, that "the question to be asked is always: for which gaze is it staged? Which narrative is it destined to support?" For whose gaze is this or that content provided? Mine? Someone else's? The anonymous other's? "Sharing" emerges here again: people may share in various circumstances, but they are always sharing for the gaze of someone (especially, as we will see, when that someone remains anonymous).

Finally, as we examine the function of the voyeuristic gaze on Facebook, it is worth considering the obsession in the public discourse concerning Facebook and the issue of privacy. As I have pointed out, subjects use Facebook because they want to gaze and be gazed at. Yet, as the discourse makes clear, they enjoy feeling as if someone is intruding on them (Žižek, 1993, p. 253, n. 30). It is no accident that one of the most prevalent and disparaging remarks one can suffer by a fellow Facebook user is that he is a "Facebook stalker" (that he logs on to Facebook in order to stalk people without their knowing). It is insulting only because it is true, but it is true of most users.

This is perhaps one of the strongest fantasies deployed by Facebook users: the fantasy that someone, some omniscient and omnipotent "Big Other," is out there stalking them. The "Big Other" is the other pure and simple, as opposed to this or that particular user (similar to Martin Heidegger's *Das Man*, "the They"). The Big Other represents the anonymous mass that structures the regulative, normal, and normalizing social order. Lacan (1977, pp. 60-61) explains that in the analytic

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<sup>11</sup> Lacan (1988a, p. 80) saw the eye as symbolic of the subject. For him, ego psychology is like the eye trying to look at itself.

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context the Other is the absent, yet ever present “third listener.” The main point is that though there may well be some specific individual looking at your profile, it is the relation to the anonymous Other that structures the social order. This point is significant for the section focusing on ideology critique, since the social order is precisely what is under scrutiny in this critique (to “traverse the fantasy,” thus curing the hysterical subject of his anxiety, is to unmask the non-existence of the Big Other).

### *The Anxious and Hysterical Subject*

We have seen that the online subject puts himself forth as an object for the gaze and fantasies of the Other.<sup>12</sup> The anonymity of the one gazing at my profile is important insofar as it creates the (enticing) anxiety of not knowing what objet petit a I am for the desire of the other (Zizek, 1993, p. 71). Once assuming a symbolic position, the constant question of the anxious subject is “What does the Other want from me?”; “What is it in me that the Other desires?” This anxious subject we can also call hysterical. The hysteric, always riddled by the unknown demand of the Other, is compelled all the more to speak, precisely because he knows not what he ought to say. It is as if the hysteric’s constant question is “What do you want?”; “What should I say?”; and finally, “Who should I be?” (Lacan, 1977, p. 312; 1998, pp. 49-50).

The hysterical subject is exemplified in the cyber subject who posts for the gaze of the Other, always trying to figure out what this anonymous Other would enjoy reading. In an effort to meet the demands of the Other, the subject updates more and more. The problem is, however, that there is no specific addressee. That is perhaps what makes the updater all

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<sup>12</sup> The “Other” is distinguished from the “other” in that the Other is the fantasmatic individual anonymous subject who views my profile, but whom I do not know. On “Other” versus “other” see Lacan, 1977, pp. 139-141.

the more “hysterical”: he wants recognition of his intention, but communicates this intention to everyone, and thus to no one in particular. Awaiting this recognition, he has a compulsive drive to update more and more.

Turning back to the film “Catfish,” the tagline with which the movie was marketed is telling. The tagline read, “Don’t let anyone tell you what it is,” alluding to some truth that you wouldn’t want anyone to spoil for you (Pasternack, 2010). But this is precisely the situation of the hysteric – he does not know what It (the object of desire) is. He is in a hysterical search for his own identity and for what in himself constitutes the desire of the Other.

Facebook also illustrates the inverse anxious relation to the Other. Since the Other is always looking, there is constant pressure to ensure that the profile is up to date. Indeed, this form of care for the self perhaps takes on the most literal meaning of a technology of the self. The profile requires care, update, maintenance, especially as applications and categorizations morph over time. There is constant need to keep the profile “current.” It thus often happens that in “real” relationships one person will suspiciously question why the partner has not changed their “relationship status” from “single” to “in a relationship.” Another phenomenon of care for the profile is driven by the anxiety that someone will post something on your “Wall” that you do not approve of, “forcing” you to check your “Wall” multiple times a day to ensure it is under your control (cf. footnote 9).

## **Cyber Subjectivity and Ideology Critique**

### *Cyberspace and Ideology*

Many see cyber social networks as the exemplary falsification of human relationships, and consider their use of terms such as “Friend” or “Community” as fundamentally

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ideological.<sup>13</sup> However, ideology critique is not primarily a denunciation of this or that ideology. Rather, it consists in emphasizing the particular discursive-symbolic network within which the subject acts, the network that not only prescribes certain possibilities, but also provides the context and meaning for action, or lack thereof. In Lacanian terms, then, ideology critique articulates and delimits a symbolic network, beyond which lies its Real (Zizek, 1999b, pp. 58-59). Similar to analysis, the goal of ideology critique is to make explicit and then work through the relationship between the symbolic and the Real. Through such efforts, we expose the interior and exterior structures that infuse our individual and political lives with motivation, anxiety, trust and uneasiness. We delineate the context and meaning we give to what we take as true, authentic and good.<sup>14</sup>

What do we say to the person who asserts: “I am not dominated by Facebook. I simply use it to the extent I wish, and I am free to log out, and close my account as I please”? Though none of this is false per se, to claim that Facebook is ideological is not necessarily to assert that it masks some

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<sup>13</sup> For example, the review of “Catfish” in the *Financial Times* asserts that the film’s “ultimate message is surely that the internet, that superhighway for truth, may be the greatest arterial network for falsehood, and the re-imagining and re-inventing of human lives, that the world has ever created” (Andrews, 2010).

<sup>14</sup> It is interesting to track the ways in which cyber social networks evoke an uneasiness in relation to truth. For example, in the ads for the film “Catfish” the theme is: “Not based on a true story...Not inspired by true events...Just true.” The pretension that the film simply depicts “true” events has sparked an array of controversy. Thus, a review of the film writes: “The questions that circulate around the film - about its veracity and accuracy and decency - aren’t incidental to the film: they are part of its force, and they are also irrelevant. In a fact-laced story (‘not based on actual events’ says the motto) about truth, the question of whether the film is ‘true’ becomes the animating force. Concern over the truth of the film is precisely the truth of the film” (Pasternack, 2010).

repressive social domination, the overcoming of which is a necessary milestone on the path to freedom. What this claim does indicate is that insofar as the user is immersed in Facebook, he operates within a structure which frames social interactions in a certain way, specific to the inner logic of the ideological apparatus. This ideological apparatus is materialized in the program's menu options, the media used, the options offered, and the categories through which it operates. Thus, as Žižek (1999e) correctly asserts, "technology and ideology are inextricably intertwined, ideology is inscribed already in the very technological features of cyberspace." Furthermore, Žižek (1999c, p. 97) points out that "[t]he position, 'not all is ideology, beneath the ideological mask, I am also a human person', is the very form of ideology, of its 'practical efficiency'." That is to say, denial that there is ideological efficacy at work is itself an exemplary structure of ideology. Ideology is most effective when it is as transparent as the air we breathe and on which we depend.

What does it mean, then, to carry out ideology critique within a psychoanalytic framework? As Žižek (1999b, pp. 59-61) points out, in ideology critique there is always the tension between coming to terms with the Real of the subject's desire, and acknowledging the external conditions which operate in determining the subject. Thus, on the one hand we must consider the specific ways in which the symbolic order operates in determining the subject (as private and as political), and, on the other hand, the way in which the subject's own desires operate in this structure.

When thinking the former, we may consider the connection between cyber social networks and the capitalist structure. This analysis consists in ideology critique in the sense that what appears contingent is exposed as necessary, that is, as adhering to some inner logic (Žižek, 1999b, p. 58). Above all else, Facebook is a multi-billion dollar corporation that operates for profit. Its drive for expansion is in line with

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capitalist structures and as such, it manifests the discourse of the hysteric.<sup>15</sup>

We cannot delve into all of the ramifications of this point here, but one illustration may prove helpful. To demonstrate a symptom of the commercial apparatus of Facebook, suffice it to examine the implications of Facebook's reliance on advertising for profits. As a profit-driven corporation, it wants people gazing at the screen as much as possible. As mentioned above, Facebook rewards those who post photos and videos, and such posts appear more often on other users' News Feeds.<sup>16</sup> Photos and videos keep people's eyes on the screen longer, and are consequently more profitable (Bartura, 2010, pp. 11-14). It should thus come as no surprise that in the very latest version of the Facebook profile the advertising section has been expanded, and now takes up more space on the screen than ever before. What becomes apparent is that the principle that structures Facebook's processes of connecting and networking is overwhelmingly driven by advertising concerns. Facebook facilitates human connections with business interests in mind, not human relationship building.

When thinking the other pole, namely, the way in which the subject's own desires operate in this structure, Žizek (1999e) suggests that cyberspace might in fact be fertile

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<sup>15</sup> The desire of the hysteric is to never have his desire satisfied (Lacan, 1977, pp. 257, 321). Indeed, the premise of the capitalist is that the more he has, the more he can further attain. In this discourse there is no point of "enough." See: Žizek, 1993, p. 209.

<sup>16</sup> The most important way in which Facebook connects its users is through the user's "News Feed," in which the online activities of the user's "friends" appear on the user's computer screen. It is important to understand that the Feed does not show *every* activity of *every* "friend" but only those that the operating algorithm expects you will find most interesting. This may seem like a good feature since it screens data the user might find boring or redundant, even though Facebook is reluctant to disclose how the algorithm is programmed. Attempts have been made to "crack the code" (Weber, 2010).

ground for ideology critique. Acknowledging that cyberspace presents possibilities for playing out fantasmatic aspects of the subject, he asks: “Are the pessimistic cultural critics [sic] (from Jean Baudrillard to Paul Virilio) justified in their claim that cyberspace ultimately generates a kind of proto-psychotic immersion into an imaginary universe of hallucinations, unconstrained by any symbolic Law or by any impossibility of some Real?” In other words, is the online subject either a pervert (who enjoys putting himself on display for the enjoyment of the other) or a psychotic (who cannot distinguish reality from fantasy)? His answer is that virtual reality invites a critique of “real” reality insofar as the virtual world allows the subject to play out various scenarios for the same situation, thus illustrating the ideological presuppositions and dispositions that unknowingly guide our daily behavior in the “real” world. What is more, Žizek suggests that cyberspace allows us to enact our fantasies, which are inadmissible, which go unsymbolized, in the [R]eal world. He suggests that virtual reality can introduce the Real of our subjectivity. Along similar lines, Turkle also sees cyberspace as an opportunity to explore alternative identities. She examines MUDs (Multi-User Dungeons) as spaces which provide “an unparalleled opportunity to play with one’s identity and to ‘try out’ new ones.” In MUDs, Turkle maintains, “you can play a role as close or as far away from your ‘real self’ as you choose” (1994, p. 159; see also 2004a, p. 21; 2004b; 1997, pp. 73-74).

Though these somewhat optimistic views carry some weight, we must not overlook their limitations. First, we must ask ourselves, is the virtual world of cyberspace indeed free of constraint and ideology? One interesting avenue for thinking about this is the issue of free speech in cyberspace. This arose in an interesting way in the case of philosophy professor Peter Ludlow and “The Sims Online” web-based game. “The Sims Online” lies within the genre of “virtual reality” games, otherwise known as “massively multiplayer online role

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playing games” (or what we have above referred to as MUDs). Owned and operated by a company called Electronic Arts, “The Sims Online” features a virtual town called Alphaville, where many users (paying subscribers) take on fictional identities and interact with each other. Ludlow opened a virtual newspaper in this virtual town, naming it “The Alphaville Herald.” This “newspaper” reported about activities, some covert, undertaken by other subscribers. Exposing such activities was not comfortable for Electronic Arts and so they shut down Ludlow’s user account (Ludlow and Wallace, 2007).

Regardless of the details of this specific controversy, it certainly raises the question of what rights Internet users have when the platforms they use are overwhelmingly privately owned. As some have pointed out, Internet companies are not like other communications corporations (like phone companies, for example), who are legally obligated to allow all speech through their conduits. Companies such as Electronic Arts (or Facebook) are more like a private club, and have much control over its membership and its activities. Users in such companies often sign away rights of free speech when they subscribe, and thus have no constitutional protection. The complex question of the status of free speech on privately owned Internet platforms makes clear that we must be careful when we consider to what extent the cyber sphere can or in fact does function as an open and pluralistic space.

Another example of such concerns over the openness of cyberspace is the debate over “Net Neutrality.” The principle of net neutrality addresses an issue of supply and demand of Internet access. The debate centers around the question, should suppliers of access to broadband (telecom companies) be allowed to provide a tiered model of services, according to which some users would have better (faster, more reliable) access than others? For example, suppliers may wish to give preferred service to users who are clients of a certain

company. Another, even more concerning example is of companies that own certain websites (think of Google for example) who would pay telecom companies a fee in return for that telecom company providing preferred service to users who attempt to access those websites. In the case of net neutrality, the legislature must decide whether this tiered service model, which enables large corporations to exercise great control over the course of traffic on the Internet (some have termed this possibility “data discrimination”), is legal or not. In the United States the latest decision is that net neutrality must be upheld in land-line connections, but “data discrimination” is allowed in wireless connections, which are becoming much more significant as Internet access via mobile devices becomes more popular and more available (Stelter, 2010).

### *Cyberspace and Politics*

I now wish to point to some concrete political effects that may result from what has been analyzed above. I will begin by focusing on the anonymity of the other, which, I have argued, can in the context of cyber social networks be understood as the “horror of the Real.” The mystery (horror) of what is behind the screen has been shown to have concrete political effects. Many have emphasized the role cyber networks have played in subverting authoritarian regimes. What has not been emphasized enough, however, is the ways in which such means can (and have been) used to different ends as well as the fragility of such networks. Some scholars (Etling et al., 2010, p. 45) point out that “[i]n the run-up to the disputed election [in Iran, 2009], the [opposition-backed] Mousavi campaign sought to use Facebook to rally supporters. The government responded by simply blocking access to Facebook. Online communities that congregate at a single URL are easily dismantled; organizations that rely on a

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centralized nodes and hierarchical structures are trivial to break up.” In this same context Morozov (2010) adds that,

The [Iranian] government did its share to obstruct its opponents, too. Not only did it thwart Internet communications, the government (or its plentiful loyalists) also flooded Iranian Web sites with videos of dubious authenticity—one showing a group of protesters burning the portrait of Ali Khamenei—that aimed to provoke and splinter the opposition. In an environment like this—where it's impossible to distinguish whether your online interlocutors are your next-door neighbors, some hyperactive Iranians in the diaspora, or a government agent masquerading as a member of the Green Movement—who could blame ordinary Iranians for not taking the risks of flooding the streets only to find themselves arrested?

A society whose social networks are formed more and more in the virtual world, where one cannot know with whom one is communicating, will inevitably produce political alliances in which anxiety and mistrust are pervasive. Consider in this context the anonymous blogger, known as “Gay Girl in Damascus,” who rose to international fame during the recent uprisings in Syria. The blogger wrote about the oppressive Syrian regime, and provided rare first-person accounts of what was happening “on the ground.” However, this brave gay Syrian young woman turned out to be a 40-year old heterosexual male American student (Zuckerman, 2011; see Gilmore, 2011).

Let us now connect the economic structure underlying many cyberspace platforms with the question of political consciousness and participation, as this is pertinent to the way ideology operates in online media. Turkle has pointed to important consequences of software design. She (2003, pp. 20-23) remarks that since the 1980s users of computers and

their software have become less and less interested in understanding how the software works and put more emphasis on functioning effectively within the software design. In a sense, users put more emphasis on striving to play the game well than on questioning the rules of the game. Fostering this type of attitude no doubt has political impacts. As Turkle (2003, p. 24) puts it, it can compromise our “sense that understanding is accessible and action is possible.”

Though we witness many online initiatives for social change, cyberspace offers relatively passive ways of civic involvement, which nevertheless give the actor a (false) sense of accomplishment. Actors engage in political activism by forwarding a YouTube video to a friend, joining a “group” or a “cause” on Facebook, or commenting on a blog. On this phenomenon Dean (2009, pp. 39-40) writes:

Theorists and activists emphasize singular websites, blogs, and events. Such spikes in the media sphere may well seem impressive, but they conform to the dictates of broadcast media spectacle, momentary eruptions that anchor people to their screens, calling upon them to register their opinions, to contribute. They don’t provide alternative practices of collective engagement, challenge corporate ownership of the telecommunications infrastructure, or redirect financial flows toward the most disadvantaged. [...] The emphasis on networked communication strategies displaced political energy from the hard work of organizing and struggle.

Dean concludes that a cyber-centered understanding of political participation promotes little more than “the rule of the wealthy, the protection of a governmental elite who serves their interests, and the constant chatter and opining of everyone else in the circuits of communicative capitalism” (2009, p. 41). In a framework where much of the

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communication is directed to everyone and thus to no one in particular, any expectation of response is often exaggerated. In a cyber sea of circulating communications, the publicity of such forms of expression diminishes. Dean (2009, p. 31) is correctly critical of how “[o]ne believes that one’s contribution matters, that it means something to and within a context broader than oneself. Contributing to the information stream thus has a subjective registration effect detached from any actual impact or efficacy.” When one does actually interact with others online, she adds, “[o]ne might argue on a blog for hours on end, failing to convince another person of a single point and still feel efficacious and involved” (2009, p. 40). In short, the quality of communicative interaction online is often overestimated as a platform on which all can debate ideas with others.<sup>17</sup>

As we near conclusion, an important question is to what extent is cyber social networking a universalizable experience. Do users not log on for a variety of reasons, pursuing very different ends? What is important to emphasize in response to this is that what this analysis aims to outline is a structure of subjectivity, a structure that can take on a variety of modalities. Whatever drives a user to cyberspace, and whatever interactions with other users one has, there is always an absent, unsymbolized (indeed unsymbolizable) surplus that he has left behind, and which haunts him throughout. In fact, the very structure introduces a double haunting: that of the surplus Real, and that of the anonymous, desired, illusive and ever-demanding Big Other.

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<sup>17</sup> Dean (2009, pp. 27-30) has an insightful discussion of how network structures work, and consequently of the ways in which the technology behind the Internet does not provide equal opportunity for varying sites to be seen, and the voices presented by them to be heard. She explains that as in any network (cyber or “real”), “[h]ierarchies and hubs emerge out of growth and preferential attachment.”

## BAR-TURA

From an (psycho) analytical perspective, the Real is a central lack in the symbolic order. It is the exclusion upon which the symbolic order is structured. As online subjectivity becomes more central in social practice, this framework can help us focus on the lack upon which the symbolic network is built. What is being disavowed, yet evermore desired? Perhaps it is the fragmentation of social reality that seeks its image-nary rehabilitation online. If we analyze this fragmentation of the subject and its networks in the cyber-spatial experience, we can hope to come to terms with its ideological structures and political effects.

### References

- Anderson, B. (1983). *Imagined communities: Reflections on the origin and spread of nationalism*. London: Verso.
- Andrews, N. (2010, January 25). Sundance Film Festival. *Financial Times*. Retrieved December 14, 2010 from <http://www.ft.com/cms/s/2/3de39ace-09d6-11df-8b23-00144feabdc0.html#ixzz15xniKW LT>
- Bar-Tura, A. (2010). Arendt, Habermas and Facebook: Participation and discourse in cyber public spheres. *Humanities and Technology Review*, 29, 1-25.
- Dean, J. (2009). *Democracy and other neoliberal fantasies: Communicative capitalism and left politics*. Durham: Duke University Press.
- Erikson, E. H. (1980). *Identity and the life cycle*. New York: Norton.
- Etling, B., Faris, R. and Palfrey, J. (2010). Political change in the digital age: The fragility and promise of online organizing.” *SAIS Review*, 30, 2, 37-49.
- Facebook. (2010). Retrieved December 14, 2010 from <http://www.facebook.com/press/info.php?timeline>
- Feeney, M. (2010, September 13). Catfish transcript. *The Boston Globe*. Retrieved December 14, 2010 from

## CYBER SUBJECTIVITY

- [http://www.boston.com/ae/movies/blog/2010/09/catfish\\_transcr.html](http://www.boston.com/ae/movies/blog/2010/09/catfish_transcr.html)
- Foucault, M. (2005). F. Gros (Ed.), *The hermeneutics of the subject: Lectures at the College de France 1981-1982*. New York: Picador.
- Gillmor, D. (2011, June 15). In defence of anonymity, despite 'Gay girl in Damascus'. *The Guardian*. Retrieved July 19, 2011 from <http://www.guardian.co.uk/commentisfree/cifamerica/2011/jun/15/blogging-press-freedom> [ami](http://www.guardian.co.uk/commentisfree/cifamerica/2011/jun/15/blogging-press-freedom) [na](http://www.guardian.co.uk/commentisfree/cifamerica/2011/jun/15/blogging-press-freedom)
- Grossman, L. (2006, December 13) Time's person of the year: You. *Time Magazine*. Retrieved December 14, 2010 from <http://www.time.com/time/magazine/article/0,9171,1569514,00.html>
- Introna, L. D. and F. M. Ilharco. (2006). On the meaning of screens: Towards a phenomenological account of screenness. *Human Studies*, 29, 1, 57-76.
- Kellner, D. (2000). Habermas, the public sphere, and democracy: A critical intervention (pp. 259-287). In L. E. Hahn (Ed.), *Perspectives on Habermas*. Peru, IL: Open Court.
- Lacan, J. (1977). *Ecrits: A selection*. New York: Norton.
- Lacan, J. (1988a). J.-A. Miller (Ed.), *The seminar of Jacques Lacan: Book I: Freud's papers on technique 1953-1954*. London: Cambridge University Press.
- Lacan, J. (1988b). J.-A. Miller (Ed.), *The seminar of Jacques Lacan: Book II: The ego in Freud's theory and in the technique of psychoanalysis, 1954-1955*. London: Cambridge University Press.
- Lacan, J. (1998). *The seminar of Jacques Lacan: Book XI: The four fundamental concepts of psycho-analysis*. New York: Norton.
- Ludlow, P. and M. Wallace. (2007). *The Second Life Herald: The virtual tabloid that witnessed the dawn of the metaverse*. Cambridge, MA: MIT Press.

- Mitchell, S. A. and M. J. Black. (1995). Freud and beyond: A history of modern psychoanalytic thought. New York: Basic Books.
- Morozov, E. (2010, February 20). The digital dictatorship. *The Wall Street Journal*. Retrieved February 17, 2011 from: <http://online.wsj.com/article/SB10001424052748703983004575073911147404540.html>
- Pasternack, A. (2010, October 2). The 'truth' about Catfish. *The Huffington Post*. Retrieved December 14, 2010 from: [http://www.huffingtonpost.com/alexpasternack/the-truth-about-catfish-t\\_b\\_748006.html](http://www.huffingtonpost.com/alexpasternack/the-truth-about-catfish-t_b_748006.html)
- Stelter, B. (2010, December 20). F.C.C. is set to regulate net access. *The New York Times*. Retrieved February 18, 2011 from <http://www.nytimes.com/2010/12/21/business/media/21fcc.html>
- Turkle, S. (1984). The second self. Cambridge, MA: MIT Press.
- Turkle, S. (1992). Psychoanalytic politics: Jacques Lacan and Freud's French Revolution. New York: Guilford.
- Turkle, S. (1994). Constructions and reconstructions of self in virtual reality: Playing in the MUDs. *Mind, Culture, and Activity*, 1, 3, 158-167.
- Turkle, S. (1995). Life on the screen: Identity in the age of the Internet. New York: Simon & Schuster.
- Turkle, S. (1997). Multiple subjectivity and virtual community at the end of the Freudian century. *Sociological Inquiry*, 67, 1, 72-84.
- Turkle, S. (1999). Cyberspace and identity. *Contemporary Sociology*, 28, 6, 643-648.
- Turkle, S. (2003). From powerful ideas to PowerPoint. *Convergence*, 9, 2, 19-25.
- Turkle, S. (2004a). Whither psychoanalysis in computer culture. *Psychoanalytic Psychology*, 21, 1, 16-30.
- Turkle, S. (2004b). Our Split Screens. In A. Feenberg and D. Barney (Eds.), *Community in the digital age: Philosophy*

## CYBER SUBJECTIVITY

- and practice (pp. 101-117). Lanham, MD: Rowman and Littlefield.
- Turkle, S. (2007a). *Evocative objects: Things we think with*. Cambridge, MA: MIT Press.
- Turkle, S. (2007b). Authenticity in the age of digital companions. *Interaction Studies*, 8, 3, 501-517.
- Turkle, S. (2008). Always-on/always-on-you: The tethered self. In J. E. Katz (Ed.), *Handbook of mobile communication studies* (pp. 121-137). Cambridge, MA: MIT Press.
- Weber, T. E. (2010, October 18). Cracking the Facebook code. *The Daily Beast*. Retrieved December 14, 2010 from <http://www.thedailybeast.com/blogs-and-stories/2010-10-18/the-facebook-news-feed-how-it-works-the-10-biggest-secrets/>
- Zizek, S. (1991). *Looking awry*. Cambridge, MA: MIT Press.
- Zizek, S. (1993). *Tarrying with the negative: Kant, Hegel and the critique of ideology*. Durham: Duke University Press.
- Zizek, S. (1999a). The undergrowth of enjoyment: How popular culture can serve as an introduction to Lacan. In Elizabeth Wright and Edmond Wright (Eds.), *The Zizek reader* (pp. 11-36). Malden, MA: Blackwell.
- Zizek, S. (1999b). The spectre of ideology. In Elizabeth Wright and Edmond Wright (Eds.), *The Zizek reader* (pp. 53-86). Malden, MA: Blackwell.
- Zizek, S. (1999c). Fantasy as a political category. In Elizabeth Wright and Edmond Wright (Eds.), *The Zizek reader* (pp. 87-101). Malden, MA: Blackwell.
- Zizek, S. (1999d). Is it possible to traverse the fantasy in cyberspace? In Elizabeth Wright and Edmond Wright (Eds.), *The Zizek reader* (pp. 102-124). Malden, MA: Blackwell.
- Zizek, S. (1999e). The cyberspace real: Cyberspace between perversion and trauma. 1999. Retrieved December 14, 2010 from <http://www.egs.edu/faculty/slavoj-zizek/articles/the-cyberspace-real/>

## BAR-TURA

- Zizek, S. (2006, December 30). Is this digital democracy, or a new tyranny of cyberspace? The Guardian. Retrieved December 14, 2010 from: <http://www.guardian.co.uk/commentisfree/2006/dec/30/comment.media>
- Zuckerman, Ethan. (2011, June 13). Understanding #Amina. ethanzuckerman.com. Retrieved July 19, 2011 from: <http://www.ethanzuckerman.com/blog/2011/06/13/understanding-amina/>

## **Unmanned Warfare: Psychological and Ethical Dimensions**

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Though over the years our methods of care have become more sophisticated, with each new war we've been painfully reminded that we still haven't solved the problem of suffering experienced by soldiers during and after war. However, with the military now able to use computer and real-life simulations to create hyper-realistic training programs to prepare soldiers for combat, more advanced weaponry to remove soldiers from contact with the enemy, and virtual reality in counseling to help soldiers understand their wartime experiences and integrate back into society, perhaps this technological revolution paves the way for a parallel therapeutic revolution. These ways of trying to deal with this problem show us that we haven't yet abandoned the view that the soldier's suffering is caused by the effects of battle. Yet, as early as 1919, Freud attempted to challenge this view by showing that "shell shock" could be better understood and treated if we stopped clinging to the idea that the "shock" is caused by the "shell," and instead investigated the factors particular to the individual that allowed for the onset of shock in the first place. Through Freud's research we can find a psychoanalytic method with which to explore this problem. By shifting our perspective from the battlefield to the individual I argue that the technological advances being applied to the suffering surrounding warfare are obscuring more fundamental issues. Technology can at best delay suffering or at worst create the dangerous illusion that we've cured it.

Keywords: unmanned warfare, just war theory, psychoanalysis, trauma, civil-military relations

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### **Introduction: Old Answers to New Technology**

Alongside the growing use of what is commonly referred to as “drone warfare” is a growing literature of analyses and critiques of such military programs. Though this technology is relatively new, the questions raised by this literature surprisingly are not, and in fact they have not strayed very far at all from the tradition of ethical inquiries concerning the practice of war. Thus, to refer to one recent example, Ron Rosenbaum’s article in *Slate Magazine* on the need to ban the use of drones may use the eye-catching title of “Ban Drone-Porn War Crimes” (Rosenbaum, 2010), but the purported “drone-porn” is nothing more than a mere reference to the fact that video footage from the drones is used by the pilots and was made available by the Pentagon on Youtube. That there is anything actually pornographic about this footage, that there is something inherently sexual or pleasurable about the experience of watching it, is not argued for, but asserted. Rather than explore the issue of the drone pilot war experience, Rosenbaum simply refers to the pilots offhandedly while instead discussing the centuries-old just war theory problems of distinction and proportionality.

Just war theory is an ethical approach to war that began with Saint Augustine and that is seen as applicable to the contemporary practice of unmanned warfare. What I want to show is that this applicability is a symptom of a larger problem, particularly as the experiences of drone pilots were not ignored by Rosenbaum but were rather treated as well within the parameters of just war theory and therefore as already perfectly understood. My aim in this paper is to apply just war theory, and in particular the views of Michael Walzer, to the growing concern over the morality of the use of unmanned warfare. By sharing with the military the same basic understanding of the role that technological innovations can play in warfare, just war theorists can easily adapt their ethical framework to the problems raised by the military

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today. What I want to show is that a close examination of the nature of this mutual understanding can reveal problems in both just war theory's and the military's approach to not just unmanned warfare, but to warfare itself. My particular focus will be on the pitfalls of their shared overemphasis on what technology can achieve in removing the combatant from the death and destruction of the battlefield. Viewing unmanned warfare as "bloodless warfare" has allowed them to ignore what technology can mean for the combatant, who is at the same time removed from the community and security of the battlefield.

Walzer tries to show the applicability of just war theory for dealing with military technology. Already in his *Just and Unjust Wars*, Walzer argues against the apparent "possibility that the new technology of war [in this case, nuclear deterrence] simply doesn't fit and cannot be made to fit within the old limits [of the formal requirements of *jus in bello*]" (Walzer, 2006, p. 276). Thus, in his more recent *Arguing about War*, Walzer points to how "modern technology makes it possible to fight with greater discrimination now than in the past" (p. 86), while at the same time warning against "our faith in airpower...as a kind of idolatry" (p. 99), and reminding us that "the most advanced military technologies...don't, indeed, put their users at risk though they impose very high costs on their targets" (Walzer, 2004, p. 174). The purported truth of this last claim is a consequence of the essential perspective of just war theory on the relationship between aggressors and victims of aggression, which has now become the relationship between "users" and "targets." What I want to show however is that these "users" are indeed "at risk," though this risk is of a very different kind from that of "their targets," and thus a new analysis of the meaning of warfare is necessary in order to understand it.

Though the central tenet of just war theory is that war can be justified, it must not be forgotten that this justification is only due to the belief that aggression can necessitate

counter-aggression, and that what distinguishes one side from the other is the willingness of the just to accept constraints on their use of aggression. From this perspective, therefore, military technology does nothing to alter this relationship between aggressor and victim but is instead to be seen as merely a tool to either help the aggressor or to help the victim. This dichotomy is what allows Walzer to see technological advances as simultaneously able to let us “fight with greater discrimination” and as risk-free for the “user” without considering the possibility that this greater discrimination may in fact *produce* risk for the user. In other words, unmanned warfare reveals how unstable is this supposed dichotomy between aggressors and victims, as the users of aggression can indeed be found to be victims of this aggression as well, though, once again, victims in a different and misunderstood way.

### **Experiencing Unmanned Warfare**

If we look at P.W. Singer’s recent book *Wired for War*—a book intended to help the layperson to catch up to the speed and complexity of innovation of American military technology in the past, the present, and the future—we can see that just war theory is perhaps held rather widely, including within the military itself. Though this book is not a work of philosophy but could instead be described as something closer to a 450-page *Popular Mechanics* article, it still provides us with a wealth of information about how those whose lives revolve around military technology—from researchers and engineers to unmanned vehicle operators and commanding officers—have experienced and come to understand this technology.

Singer’s work helps us to investigate the meaning of the experiences of those involved in the production and use of military technology and of the meaning of the use of technology in warfare. An important theme of this book, and

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the one that most clearly demonstrates how close are the perspectives of just war theory and military doctrine, is the view of technology as the promise of “bloodless warfare.” According to former Senator John Warner, who was also formerly Secretary of the Navy and chairman of the Senate Armed Forces Committee, because “this country will never again permit the armed forces to be engaged in conflicts which inflict the level of casualties we have seen historically” the military has had to “move toward the unmanned type of military vehicle to carry out missions which are high risk in nature” (Singer, 2009, p. 60). This is what retired army officer and military analyst Ralph Peters refers to as the “uniquely American pursuit of the grail, that technology will solve all human problems, that we can have bloodless wars” (p. 291). Since it is obviously impossible to have a “bloodless war,” then it must be recognized that the concern is only for bloodlessness on our side, with the idea behind pursuing this “grail” clearly being that “unmanned” is equivalent to “bloodless,” or, to return to Walzer’s language, “risk-less.”

It certainly makes sense to view unmanned vehicles as providing a level of safety and security for the military that would have previously been thought impossible. Support for this view can also be found with David Grossman, who, in his book *On Killing: The Psychological Cost of Learning to Kill in War and Society*, argued how distance between aggressor and victim was inversely proportional to the degree of resistance to killing and thus the rate of psychiatric casualty experienced by the aggressor. In other words, it is far more likely for a member of the infantry to be diagnosed with post-traumatic stress disorder (PTSD) than a fighter pilot. In fact, when discussing what he refers to as killing at “maximum range,” or when “the killer is unable to perceive his individual victims without using some form of mechanical assistance—binoculars, radar, periscope, or remote TV camera,” Grossman reports that “in years of research and reading on the subject of killing in combat I have not found one single

instance of individuals who have refused to kill the enemy under these circumstances, nor have I found a single instance of psychiatric trauma associated with this type of killing” (Grossman, 1995, pp. 107-108).

In contrast to this, another theme that emerges in Singer’s book is that operators of unmanned vehicles, or “cubicle warriors,” do indeed experience as much, if not perhaps more, suffering than their more traditional “warrior” counterparts. As Singer writes,

[Colonel Michael] Downs thinks that unmanned war, “while you can’t compare it to the experience on the ground,” also comes with a great deal of psychological stress and emotional connections, perhaps more than people might think that a so-called cubicle warrior would experience. [...] Indeed, a survey of air force drone crews found that, contrary to expectation that those fighting from a distance should find it easier, the remote crews actually had “significantly increased fatigue, emotional exhaustion, and burnout.” They were even found to be suffering from the stress and fatigue of combat at the same, if not higher, levels than many units physically in the war zone. (Singer, 2009, pp. 346-347; see also Retica, 2008)

This suggests therefore that something has been missed in previous evaluations of what technology is capable of and what it means to use technology in warfare. Following thinking similar to Grossman’s, the military has been able to implement technology capable of placing the killer at a distance that was truly “maximum” and yet evidence suggests that those using this technology nevertheless experience trauma. This means that either the disavowal of drone pilot trauma must be wrong or the role that technology plays in the relationship between distance and trauma has not been properly understood.

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A clue as to what might be missing here can be found if we return to Grossman and his introduction to the discussion of the correlation between distance and trauma. He ends his introduction with the following remark, “In the same way that the distance relationship has been identified, so too have many observers identified the factor of emotional or empathic distance. But no one has yet attempted to dissect this factor in order to determine its components and the part they play in the killing process” (Grossman, 1995, p. 98). To better understand how distance relates to trauma and what it means, we should follow Grossman’s line of thought here about the importance of what he calls “the factor of emotional or empathic distance.” To do so however, we must also recognize that Grossman is wrong that “no one has yet attempted to dissect this factor,” for in September of 1918, the Fifth International Psycho-Analytical Congress was convened in Budapest to discuss this very issue.<sup>1</sup>

### **How to Interpret (Not) Being There**

During World War I Freud and his followers recognized that the reason neurologists were unable to properly treat their patients was due to their reliance on a physicalist aetiology based on the idea that “shell shock” could only be due to the “shock” of being near an exploding “shell.” By instead treating “shell shock” as a “war neurosis,” they were both better able to treat patients and to understand why the incidence of trauma did not necessarily correlate to the distance from the shell. What was important about their discovery and their success was that by “war neurosis” they did not mean a neurosis peculiar to war, but rather neurosis that occurred during war and that actually could be understood in the same way as neuroses that occurred during peace. In fact, while Sándor Ferenczi, Karl Abraham, Ernst

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<sup>1</sup> The record of this Congress was later published in Jones, 1921.

Simmel, and Ernest Jones were focused on arguing that the precipitating factors of the onset of trauma could be seen as sexual and thus in keeping with the Freudian model of neurosis, Freud himself saw in the case studies his followers presented from their war-time work that the war neuroses revealed the need for the entire model of neurosis to be rethought.

What is important for our purposes here is how in light of his followers' discoveries Freud revised his view of the "Oedipus complex" and "castration anxiety." Generally speaking, Freud changed his perspective from believing that one's anxiety over being punished for an unacceptable desire was the result of the need to repress that desire because it represented an internal danger to instead believing that this anxiety was actually the cause of the repression because of an external danger. The knowledge that acting on one's desire would lead to an external danger of punishment produced anxiety that could only be relieved through removing the desire and thereby the threat it caused.

Thus the child does not repress his or her sexual urges because the urge itself is seen as dangerous and as therefore unwanted, but because the consequences of the urge represent a danger, with that danger being encapsulated in the threat of castration, or more generally the loss of what provides the child pleasure. An adult can likewise experience anxiety over similar threats from experiencing pleasure in socially unacceptable ways due to what Freud refers to as "contemporary modifications" of the "old situations of danger" (Freud, 1989a, p. 779). Though the example Freud offers for such a modification is "syphilidophobia," I would instead suggest that we can think of being discharged from the military as presenting a similar anxiety-inducing threat, and thus what one is afraid of losing in this case is not an organic source of pleasure but rather a more recently discovered source of pleasure, one's weapon. The important idea here then is that the "resistance to killing" that Grossman discussed

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as natural and as corresponding to trauma through physical proximity to the enemy would be seen by Freud as instead a resistance to the consequences of killing and of enjoying it in an unacceptable manner, and thus as corresponding to trauma through proximity not only to the enemy, but also to one's commanding officer or other possible sources of punishment. Consequently, this proximity need not be merely physical, nor necessarily "emotional or empathic," but could simply be an imagined proximity that we could think of as operating in a way similar to paranoia and its ability to manifest whether one's feared objects are physically present or not.

Further evidence in support of this strategy can be found in the book *Trained to Kill*, where Thomas Nadelson, a veteran and military psychiatrist, tried to help the public understand what war (specifically the Vietnam War) has done to veterans and thus help veterans to be better understood by the public they left behind and were trying to rejoin. A major recurring theme throughout this work is that of the difficulty that a significant number of veterans had in dealing with the pleasure that they experienced during war.<sup>2</sup> While for some this became an addiction that drove them to seek out new ways to experience that pleasure once more—such as going back into the military, starting fights, or using drugs—for others this became a source of immense guilt. For Nadelson therefore, like Freud, war cannot be properly understood without an appreciation of the roles that pleasure and imagined public perception play.

### **Applying Freud to Unmanned Warfare**

An advantage of this new approach to trauma and this more fluid concept of distance is that it should better conform to the multiplicity of distances that we find in the use of

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<sup>2</sup> Though Nadelson's evidence is primarily anecdotal, further empirical evidence that supports these claims can be found in MacNair, 2002.

military technology and should thus help us to better understand how this use can lead to trauma. Freud himself points us in this direction, as already in *Civilization and Its Discontents* Freud analyzes technology primarily in the role it plays in the relationship between the limitations of our bodies and the vastness of the world. Most importantly, Freud focuses on the ability of technology to allow us to “become a kind of prosthetic God” (Freud, 1989b, p. 44), capable of seeing, hearing, and moving “at distances which would be respected as unattainable even in a fairy tale” (p. 43), and yet we find that nevertheless “present-day man does not feel happy in his Godlike character” (p. 45). The reason for this seems to be that even though we can overcome the forces of nature we cannot overcome the forces of society, and thus for every advance in the “power of the individual” we find it necessary to reaffirm the “power of a community” against what is “condemned as ‘brute force’” (p. 49). What Freud does not discuss however, but what is of prime importance here, is what it means when the individual is no longer asked to “sublimate” (p. 51) this “brute force” through more culturally-acceptable means, but is instead asked to unleash this “brute force” *for* the community, even though it is still recognized as contrary to “civilization.”

If we examine one of the dominant themes in Singer’s book, the relationship between military technology and video games, we can begin to see how this relationship between technology and distance, and the conflicts it can produce between the individual and the community, operate in the military today. While it is clear to anyone who follows video games that they are trying to approximate the reality of combat as far as it is possible for such a medium—with this attempt having reached new heights recently with the game “Medal of Honor” having been designed with the help of two former members of the U.S. Special Operations Command—what is perhaps less well-known is the attempt by the military to approximate the reality of gaming. One way this is taking

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place is that companies that design unmanned vehicles for the military are trying to model the controllers for these vehicles on controllers for video game consoles, or in some cases actually adapting these very controllers for military purposes. Singer writes,

Military researchers are now trying to solve the interface problem by “playing to the soldiers’ preconceptions.” And with young males today, that means video games. Greg Heines, who runs the marines’ Dragon Runner (a small ground robot) project, explains, “We modeled the controller after the PlayStation because that’s what these 18-, 19-year-old Marines have been playing with pretty much all of their lives.” By using video game controllers, the military can piggyback on the billions of dollars that game companies have already spent designing controllers and training up an entire generation in their use. (Singer 2009, p. 68)

This adaptation of PlayStation controllers, or for the company Foster-Miller the adaptation of Nintendo GameBoys (30), is thus thought of as a simple pragmatic way to reduce the training time necessary for unmanned vehicle operators and at the same time as a way to help the operators to feel more comfortable with these vehicles through the use of technology they’re already familiar with and of course already like to use.

However, this intended familiarity with technology may have unintended consequences for these operators. One such consequence is that using video game controllers, even in an environment far removed from your living room and from purposes far different than accumulating more points than your friends, may evoke the same feeling one has when playing a video game. Thus “as one described his experience in the Iraq war, fought from a cubicle in Qatar, ‘It’s like a

video game. It can get a little bloodthirsty. But it's fucking cool" (Singer 2009, p. 332). To accuse this unmanned vehicle operator of actually believing he's playing a video game is to essentially infantilize him, to treat him as simply being too immature to realize that "bloodthirsty" behavior should not be thought of as "cool." And yet Singer (2009) and many in the military clearly view this as the problem:

Describes one army major general, "The native creativity, innovativeness and initiative exhibited by these young men and women belie their woeful lack of psycho-social preparation." Regardless of all his years spent video gaming, the younger someone is, the less life experience he will have, and the less time he will have spent in training and education specifically designed for the unique and often extreme dilemmas of war. [...] "How do you manage to train people with three to four years of experience to make decisions that normally would be made by someone with ten to fifteen years of experience?" asked one marine officer. (p. 367)

Age is certainly an issue that is important to appreciate, but we must be careful not to overestimate the role it plays, particularly as it can flatten our understanding of experience in much the same way that relying solely on physical distance can.

It should not be ignored that while this cubicle warrior in Qatar found his experience to be "like a video game" and "cool," he also found it to be "bloodthirsty." This suggests that he may have on some level recognized that there was something wrong with finding warfare to be enjoyable, and thus rather than seeing the problem here as his having had a "woeful lack of psycho-social preparation," in accordance with Freud's findings, the problem instead may be his having in fact had an overabundance of such preparation. While a

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traditional warrior, on the battlefield, surrounded by other warriors, free from the constraints of civilization, can safely take pleasure in battle, the cubicle warrior is near home, surrounded by family and friends, fully immersed in the constraints of civilization while at the same time performing actions essentially contrary to civilization. Thus as “described one Predator pilot, ‘Most of the time, I get to fight the war, and go home and see the wife and kids at night.’ Another talked about flying missions in Afghanistan, and then getting home in time to watch reruns of the sitcom *Friends*” (Singer, 2009, p. 330). Similarly, Colonel Downs, a “married father of three children,” explained to Singer that “when you are deployed, the mission is your only job...when you are at home you still have the mission, but all the extras, plus the family.” When asked by Singer “if it would ever be possible for warriors fighting unmanned wars from afar to leave their work back at the office, just like other professionals do,” Colonel Downs “paused for a half minute in silent reflection...then responded, ‘You don’t really switch it off’” (p. 347).

The problems presented by this proximity of the cubicle warrior to home may make it seem like once again distance is the issue, and thus that as we have removed the warrior from the battlefield now we need to simply remove the cubicle warrior from the home front as well. This was indeed the solution proposed by Colonel Downs and others in the military, who thought that creating a “communications bubble” (i.e., banning personal calls) and keeping the “unit rotating onto assignment...sequestered at a hotel or barracks on base” would be able to “help their forces operate at maximum efficiency and keep the two worlds separated” (Singer 2009, p. 347). However, this strategy can at best only postpone the inevitable bringing together of these worlds again, while at worst it can create the illusion that one can truly remain away from home, even though in truth, all warriors, cubicle or otherwise, must ultimately return home.

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And as we have already seen from our exploration of Freud, this return need not be in the form of actually going home, but need only take place through experiences that evoke representations of one's home, whether in the form of pictures of family, letters from friends, remembering personal commitments, or being aware of social obligations.

The problem that "home" presents in warfare can even be seen operating beyond the domain of warriors or cubicle warriors, for the researchers and engineers who create the technology behind unmanned warfare can be seen as being confronted with a similar tension when forced to think about what this technology is ultimately being used for and what this means. Singer (2009) writes,

Funding by the military is the norm, but it is also, tells [roboticist Illah] Nourbakhsh, a "very touchy subject" that few like to talk about. When asked about his thoughts on the implications of arming robots, for example, Brian Miller, our NASCAR engineer turned roboticist, simply responds, "I stay out of politics." Likewise, Sebastian Thrun pointedly changes the subject when the topic of the political impact of his research comes up. "I am ignoring all of this to build this vehicle." [...] Akin to the NRA mantra that guns don't kill people, they describe that their research can be used for good or ill and thus the responsibility for anything that happens outside their labs lies beyond them. (pp. 174-175)

To understand how these roboticists can likewise experience the tension between battlefield and home front without ever engaging in battle or leaving home, we should perhaps see the problem of "home" as instead part of the larger problem of responsibility. For what "home" really represents is the feeling of being forced to take responsibility, or to put it in Freudian terms to feel punished, for actions that

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are generally thought of as wrong even though in the context of “battle” they are justified and understood to be right.

### **Conclusion: The Relationship Between Responsibility and Suffering**

In order to better understand the problem of responsibility in warfare we should return to Walzer and just war theory to see how it operates. In the final section of Walzer’s *Just and Unjust Wars*, “The Question of Responsibility,” we find that Walzer wants to claim both that military training is an “endless drill aimed at breaking down [the soldier’s] individual thoughtfulness, resistance, hostility, and waywardness,” and that there is “some ultimate humanity that cannot be broken down, the disappearance of which we will not accept” (Walzer, 2006, p. 311). Thus when he quotes a French soldier in Algeria who refused to fight—“That is what is most difficult, being cut off from the fraternity, being locked up in a monologue, being incomprehensible”—Walzer accepts that to refuse is to be “cut off” but rejects that this would be “incomprehensible,” arguing that this is “perhaps too strong a word, for a man appeals at such a time to common moral standards” (p. 316).

The Algerian soldier has therefore had his individuality broken down in becoming a soldier, and has, in his refusal, separated himself off from his comrades who have also lost their individuality. However, according to Walzer, the soldier has yet maintained that “ultimate humanity” that prevents his actions from becoming “incomprehensible.” As with the confession of the Algerian soldier, Walzer (2006) takes the confessions and testimony of soldiers that both did and did not refuse to participate in the massacre at My Lai as an indication that beyond the “fraternity” of the military there is still that “ultimate humanity” that soldiers can use to disobey orders and we can use to condemn those soldiers that obey such orders. Walzer therefore sees the “examples of refusal,

delay, doubt, and anguish at My Lai” as “internal confirmations of our external judgments” (p. 311), that if a soldier is “capable of hesitating” then the soldier can and must hesitate, for “ordinary *moral* sense and understanding rules out killings like those at My Lai” (p. 313). And yet, Walzer recognizes that for the soldier both “fraternity” and “humanity” are operative, and thus qualifies his judgment by admitting that “moral life is rooted in a kind of association that military discipline precludes or temporarily cuts off, and that fact, too, must be taken into account in the judgments we make” (p. 316).

This friction between recognizing that “military discipline” can separate the soldier from what Walzer refers to as our “common morality” and wanting to still hold soldiers accountable to common morality can best be seen in Walzer’s discussion of the problem of “dirty hands.” After detailing how Winston Churchill and others “dissociated” themselves from those pilots who were ordered to bomb Germany during World War II and noting that such “policy seems cruel,” Walzer (2006) writes:

Stated in general terms, [the policy] amounts to this: that a nation fighting a just war, when it is desperate and survival itself is at risk, must use unscrupulous or morally ignorant soldiers; and as soon as their usefulness is past, it must disown them. I would rather say something else: that decent men and women, hard-pressed in war, must sometimes do terrible things, and then they themselves have to look for some way to reaffirm the values they have overthrown. But the first statement is probably the more realistic one. For it is very rare, as Machiavelli wrote in his *Discourses*, “that a good man should be found willing to employ wicked means,” even when such means are morally required. And then we must look for people who are not good, and use them, and dishonor them. (pp. 324-325)

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Not only does Walzer accuse these soldiers of doing what we have asked of them, but is suggesting that we who would *only* ask are morally superior than they who would *obey* for clearly we, like the “good man,” would not “be found willing” and would instead put our “values” above all else. Walzer (2006) can therefore make the similar claim that when soldiers are ordered to commit murder because the nation is at risk, “they are murderers, though in a good cause” and that “they have killed unjustly, let us say, for the sake of justice itself, but justice itself requires that unjust killing be condemned” (p. 323).

The point here however isn’t to criticize Walzer’s conclusion that actions can be simultaneously justifiable and condemnable because there is possibly a better conclusion to be reached, but rather to ask what such a conclusion—reached by someone who genuinely wants justice—means for those in the military who have to *live* this conclusion. Though we have seen how roboticists try to live this tension by either dodging it or ignoring it, for those who do not have such a luxury because their connection to the military is far more evident, how they live this tension is instead less evident. Evidence of soldiers living this tension, however, can be found if we look at another large theme in Singer’s book—what might be referred to as human/technology symbiosis. This symbiotic relationship between user and used occurs both intentionally—for example in the Pentagon’s project to use “haptic” (or touch-based) technology to “make a complete fusional relationship between the plane and the pilot” (Singer, 2009, p. 70)—and unintentionally—for example when “one unit in the 737<sup>th</sup> Ordnance Company...called their EOD [Explosive Ordnance Disposal] bot Sgt. Talon; Sgt. Talon, in fact, got promoted to Staff Sergeant and received three Purple Hearts” (p. 338).

It is easy to see how such a bond between unmanned vehicles and their operators can be both a practical benefit for

the military, along the lines of what we saw with the military's adaptation of video game controllers, and as a personal benefit for the soldier, as a source of amusement or comfort in the midst of the stress of warfare. However, these bonds are perhaps not only a way for soldiers to become more efficient and relaxed around technology but are also a way for soldiers to replace those bonds to either "common morality" (Walzer) or to "civilization" (Freud) that they've lost. This understanding of the symbiotic bond can then help us to understand why for example "when one robot was knocked out of action in Iraq, an EOD soldier ran fifty meters, all while being shot at by an enemy machine gun, to 'rescue it'" (Singer 2009, p. 339).

Whereas traditionally soldiers could find support for lost communal bonds through forging new bonds to their "brothers in arms," in technological warfare those bonds lost historically are still lost, but now bonds to one's warrior brethren are lost too. This can be seen in another theme in Singer's book, that of the divide between warriors and cubicle warriors. For example, one soldier told Singer that when there was a disagreement between the soldiers on the ground and the operator controlling the drone overhead, "he didn't see it as a fellow warrior making the call, but 'some guy sitting in Vegas rushing to take his kids out to a soccer game or to hit the slots'" (2009, p. 337). Similarly a special operations officer returning from Iraq told Singer, "a warrior has to assume physical risk," and therefore while the Predator pilot is just "some guy sitting at Nellis and he's taking his kid to soccer," someone like "AMZ [Abu Musab al-Zarqawi, the leader of al-Qaeda in Iraq, whom the operative had helped hunt down] was right there hanging his balls out on the battlefield in terms of personal risk, leading his men in combat" (pp. 330-331).

Now we can better understand why an unmanned vehicle operator would not only give their vehicles nicknames, titles, and medals, but even risk their lives to save them, as the

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operators can be seen as treating the robots how they want to be treated rather than how they feel treated, by their family, their friends, and even their comrades in arms. Until we can properly take these relationships and these experiences into consideration, a just war theory of military technology, much like traditional just war theory generally, will only help us to create rules of engagement or laws of warfare that protect noncombatants while continuing to ignore that the combatants who must act on these rules and obey these laws need protection too and of a kind that we do not yet fully understand or even recognize. As Clausewitz warned in his *On War*, to try to remove from war “all passion” is to treat war as merely “a sort of algebra of action” (Clausewitz, 1943, p. 4). In other words, in our attempts to create “bloodless warfare,” perhaps instead all we’ve truly created is “bondless warfare.”

### References

- von Clausewitz, K. (1943). *On war*. (O.J. Matthijs Jolles, Trans.). New York: Random House, Inc.
- Freud, S. (1989a). Lecture XXXII: Anxiety and instinctual life. In P. Gay (Ed.), *The Freud reader* (pp. 773-783). New York: W. W. Norton & Co.
- (1989b). *Civilization and its discontents*. (J. Strachey, Trans.). New York: W. W. Norton & Co.
- Grossman, D. (1995). *On killing*. Boston: Little, Brown and Company.
- Jones, E. (Ed.). (1921). *Psycho-Analysis and the war neuroses*. London: The International Psycho-Analytical Press.
- MacNair, R. M., (2002). *Perpetration-Induced traumatic stress*. New York: Authors Choice Press.
- Nadelson, T. (2005). *Trained to kill*. Baltimore: The Johns Hopkins University Press.
- Rosenbaum, R. (2010). Ban drone-porn war crimes. *Slate*

## GERTZ

- Magazine*. Retrieved June 30, 2011 from <http://www.slate.com/id/2265655/pagenum/all/>
- Retica, A. (2008). Drone-Pilot burnout. *The New York Times Magazine*. Retrieved August 3, 2011 from [http://www.nytimes.com/interactive/2008/12/14/magazine/2008\\_IDEAS.html#d-ideas-2](http://www.nytimes.com/interactive/2008/12/14/magazine/2008_IDEAS.html#d-ideas-2)
- Singer, P. W. (2009). *Wired for war*. New York: The Penguin Press.
- Walzer, M. (2004). *Arguing about war*. New Haven: Yale University Press.
- . (2006). *Just and unjust wars*. New York: Basic Books.

## **Wall-Window-Screen: How the Cell Phone Mediates a Worldview for Us<sup>1</sup>**

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The article proposes to model the phenomenon of the cell phone as a wall-window. This model aims at explicating some of the perceptions and experiences associated with cellular technology. The wall-window model means that the cell phone simultaneously separates the user from the physical surroundings (the wall), and connects the user to a remote space (the window). The remote space may be where the interlocutor resides or where information is stored (e.g. the Internet). Most cell phone usage patterns are modeled as a single dimension according to the level of distraction or attention of the user. In order to accommodate nuanced situations such as augmented reality, I suggest a two-dimensional layout: the wall-window. The wall represents the attention to the immediate physical environment, while the window represents the attention to a remote space. The wall-window model further evolves once a screen is woven into this layout. This addition is easily understood due to the screen's etymology, which is associated with the concepts of shield or barrier. From a technical perspective, the screen has become an integral part of the cell phone. Furthermore, a screen itself is both a

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wall and a window. Lastly, once a cell phone is supplemented with a screen, it is easier to refer to it as media. And again, media fits into the wall-window model.

Keywords: cell phone, screen, augmented reality, postphenomenology

### **Introduction**

In my family the cell phone is referred to as a “life support system.” We feel, like many others, that this technology becomes part of our lives while transforming them, and it is difficult for us to imagine our everydayness without it. This transformation has been the subject of numerous sociological studies. In this paper I explore a different perspective on the cell phone phenomenon, the one known as postphenomenology. Postphenomenology is an offshoot of phenomenology. It undertakes the position that technology mediates a worldview for us. By transforming our experience of the world, we in turn become transformed in this process (Ihde, 1990; Verbeek, 2005; Rosenberger, 2008; Ihde 2009). Inspired by Maurice Merleau-Ponty, postphenomenology substitutes embodiment for subjectivity, and enriches the *corps vecu* (the lived body) with the Foucault-ian postmodern socially-disciplined body. This postmodern addendum contributed the *post* prefix in postphenomenology (Ihde, 2003). In this paper I employ the phenomenological method of identifying the historical and cultural variations of a technological phenomenon, in this case, the cell phone, and from them extracting invariants, or essences, which I use here interchangeably.

Essence is a term which . . . sometimes means a general character: that which a number of things have in common. Sometimes it means a universal, in a sense that a certain number of things belong to it, while others do not. And sometimes it means a condition

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without which a thing would not be what it is. (Ihde, 1986B, p. 39)

For Ihde there is a multiplicity of essences that serve as invariants. The invariants are the common denominators revealed through extraction from the historical variations (Ihde, 1986A, p. 122). Invariants come in the plural, since they describe the various aspects of the phenomenon under investigation. From a technological point of view, there is more than one way that technology mediates a worldview for us.

In this paper I develop the invariant of wall-window to describe one of the essences of the cell phone. Since invariants can be extracted out of variants, an analysis should be conducted of the cell phone's development. It is a genealogical analysis, showing how this technology has been perceived differently in various periods of time. The first historical variation centers on voice. The screen of these cell phones required only one line – to present the phone number of an incoming call. The second historical variation concerns text: not only Short Message Service (SMS), but also calendar entries, names in the address book, or short notes. The third historical variation is characterized by multimedia applications, and requires a large screen, such as iPhone. Finally, the fourth historical variation, I claim, relates to a sensory understanding—that is, the cell phone's ability to sense the environment. It knows where it is via the embedded Global Positioning System (GPS), and it knows how fast it is moving. It also identifies objects via the built-in camera, thereby helping us to translate words, decipher barcodes and identify faces. These functions allow the cell phone to present an augmented reality, as in the case of an application intended for tourists in San Francisco that depicts images of buildings taken by the camera with an overlay showing how they were a hundred years ago.

All four historical variations share a certain set of relations to the world, an arsenal of common interfaces that cell phones of all ages provide us with. One of the invariants that can explain how we interact with the cell phone across these four historical variations is what I call the wall-window model. Although a wall-window may sound at first like an oxymoron, modern architecture supplies us with real examples of the wall-window. Many buildings nowadays feature screen-walls – transparent floor-to-ceiling walls preventing heat and noise from entering, while letting in daylight and images of the outside world (see Friedberg, 2006, pp. 16-17).

In this paper, I show how the wall-window is an invariant of the cell phone. It is a common denominator of the historical variations of the cell phone. Yet, there are many others which this paper does not address. This invariant of wall-window can be applied for all screens. It is, I argue, not only an invariant of the cell phone but also of media and new media (i.e. media where computers are involved). I will then show that the cell phone and new media conflate and create a “new new” media (where users are involved in the production and selection of media). The technologies of cell phones, screens and (traditional as well as new) media all serve to disassociate (to various extents) humans from their physical environments while linking them as users to another space – be it social, distant or virtual.

### **Wall-Window**

Rich Ling opens his book *New Tech, New Ties: How Mobile Communication Is Reshaping Social Cohesion* (2008) with a story of a plumber who enters Ling’s home to fix a leaking faucet. The plumber is talking on the cell phone, ignoring Ling who is the owner of that home, and starts working without saying anything to Ling. For Ling this anecdote represents the cell phone’s ability to separate the

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plumber's immediate environment (a home with a leaking faucet) and the space of his personal connections (the plumber's friend, colleague or wife). The cell phone enables the plumber to make such a separation and to erect an imaginary yet effective "wall" between him and the surroundings. With the cell phone his attention is split between the here-and-now space of Ling's home and a not-here/not-now space of personal connections. This space of not-here/not-now is accessible via the cell phone acting as a "window." The wall-window model exposes how the cell phone simultaneously separates the user from the physical surroundings (the wall) *and* connects the user to a remote space (via the window) where the interlocutor resides. Sometimes earphones that block the auditory inputs from the surroundings concretize the wall. Sometimes the window manifests its visual aspects when we focus on the cell phone's screen as a visual framing, displaying selected parts of the remote space (see Introna and Ilharco, 2004). Unlike computers and televisions, the cell phone can provide the interlocutor (residing in the other space) with a window to the user's current physical space, via the cell phone's built-in camera. Certain actions (such as activating the camera) turn the cell phone into a two-way window, similar to a window in a house, from which people from the outside can look inside into a specific room.

The wall-window model is not reserved for unique situations or extreme characters like Ling's plumber who is so busy with his cell phone as he enters his client's home and starts working without even saying hello. The model is relevant for most people in everyday situations, such as commuting on a train, where the cell phone keeps us within a virtual (private) territory while helping us avoid feelings of loneliness or boredom. Being "transported" to a remote space may even turn hazardous, as the case of driving while talking on the cell phone (Rosenberger, forthcoming).

The model also reveals how the cell phone can be used to undermine power relations, as in the case of students in class or workers at call centers sending text messages. Harvey May and Greg Hearn (2005) argue that students and workers are no longer fully subjected to their professor or boss, as they manage to shift part of their attention to another space. The cell phone as wall-window empowers them as it “weakens the control of formal institutions over their members' behavior” (p. 202).

It should be noted that not every use of the cell phone results in a thick isolating wall. Sadie Plant (2003) characterizes three possible responses to a phone call received in public: the first is flight, in which the user escapes from the surroundings and looks for a quiet spot; the second is suspension, in which the user physically remains where she or he is, but stops paying attention to the surroundings, including a suspension of the activity conducted prior to the call; and lastly persistence, in which the user remains an active participant in and with the surroundings while maintaining the phone call in parallel. The first two responses create walls of various “thicknesses” — that is, isolation from the public. Such isolation is not absolute. Ling’s research suggests that even in these cases the user is still aware of what is going on around him or herself (2004, pp. 135, 137). The third response, “persistence,” is a true effort of the cell phone user to remain part of and participant in the environment. It is an effort because each space requires attention at the expense of the other, resulting in distraction. Ingrid Richardson (2005) explores the Latin origins of the word distraction, *distrahere*, which means pulling in different directions. This etymological analysis confers a positive context to distraction, as the attention is not taken or gone but divided between two (or more) spaces: the here-and-now, and the remote (in space or time). Yet, she notes, we are capable of distinguishing between them, so the spaces do not get mixed up. Such interpretation of distraction presupposes a one-dimensional

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concept of attention, so the more attention is given to the remote space the less attention is given to the here-and-now, and vice versa.

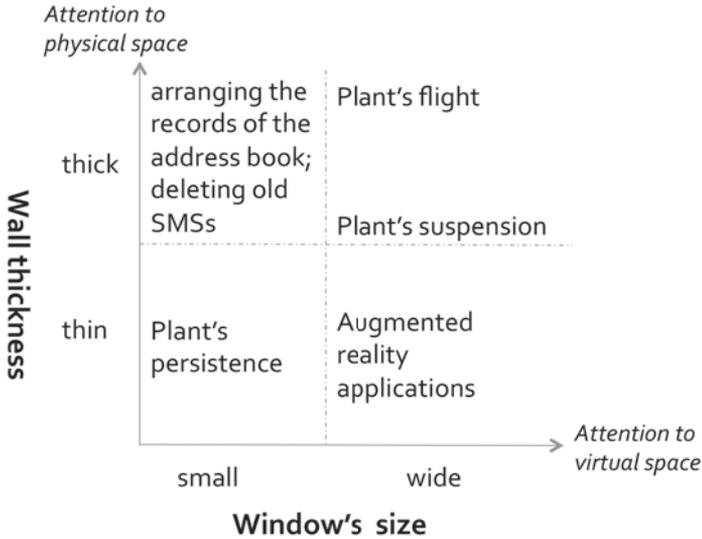


Figure 1: Wall-Window Dimensions

In contrast, the wall-window model is two-dimensional (see figure 1), so that the wall axis represents the attention to the immediate physical environment, while the window axis represents the attention to the remote or virtual space. This double layout accommodates distraction as the size of the window and the thickness of the wall. The smaller the window, the less attention is given to the virtual space; the thinner the wall, the more attention remains in the physical space. As a result, the wall-window model can depict situations where the attention to the immediate is distracted, but not to another space, as in the case of a user arranging the records of the address book or deleting old text messages. These maintenance tasks of the cell phone metaphorically build a wall between the user and the here-and-now, while the window to another space is closed. The model can also

accommodate augmented reality (as represented in my fourth historical variation) that enhances the here-and-now with more information. Augmented reality is usually conceived as an overlay to reality which contains some additional data (e.g., Manovich, 2006). It can be represented on the wall-window axes as a thin transparent wall because the contact with the here-and-now remains tight and active, and also as a window of varying size depending on the amount and type of information presented. The two-dimensional model can also illuminate Plant's third option of persistence (where the user continues to perform the here-and-now activities while talking on the cell phone), modeled as a thin wall with a relatively small window, because the user's attention is equally split between the two spaces. The wall-window model can accommodate situations where people provide attention to two spaces simultaneously, ranging from pilots splitting their attention between the visual stimuli (of the outside world and the instrument panel) and auditory inputs (e.g. air traffic control communications) to teenagers doing homework while the TV is on (see Hayles, 2007; for an opposing approach see Stiegler, 2010).

We should remain aware of the possibility that more axes exist. As Gilles Deleuze and Felix Guattari argue, there can be a thousand plateaus, or axes, to model and describe reality (1987; cf. Friedman 2001). In this paper I concentrate on two axes, the wall and the window, although there are more.

The wall and the window axes are not given but produced by the user and the technology. While the window is "provided" by the cell phone technology, the wall is "constructed" by the user. It is achieved through "a face-and-body that says 'I'm on the phone'" (Richardson, 2010). This body language places a wall between the user and the world, and this wall can be fortified with the assistance of objects like the handset or earphones. Such behavior gave the cell phone its reputation as an "antisocial" instrument.

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The wall may be perceived differently by the people around the user, who may feel “colonization,” or “invasion” of public space by private communications (Geser, 2004). While the user feels “at home” in the public space when making a private call “behind the wall,” the other inhabitants of that space do not share this feeling. On the contrary, for them the wall may not exist at all. Sometimes it is appropriate for people around the user to exercise “civil inattention” (Haddon, 2004), thereby contributing “a stone in the wall.” Yet, from a social point of view, the construction of the wall by the people around the user has more than one meaning, because the body language is not unequivocal. When a user looks for a quiet spot to make a phone call in public, is it considered a display of “courtesy, etiquette and manners” (Ling, 2002), as part of “strategies to minimize disruption to public spaces” (Haddon, 2004), or is it interpreted as a selfish anti-social act intended to gain privacy? My point here is that the wall can be viewed in various forms by the user constructing the wall and by the others outside the wall.

The body language of being-on-the-phone is not limited to voice communication. Richardson (2010) refers to a variety of portable devices, including game console, walkman and iPod. She notes such devices are characterized by “face work” which signals to the surroundings a sense of being-busy. Likewise, the cell phone can be used to avoid feelings of loneliness and boredom, not only when used for voice communication, as represented by the first historical variation, but also when used for gaming and listening to music (second and third historical variation), or adding information (fourth historical variation), thereby turning the world into a more meaningful environment. This extension from voice to gaming, music and augmented reality means that the window invariant does not require a person on the other end; the window can be open to a virtual space of applications, such as games, music, or eBooks, or any hybrid thereof, such as emails, or Facebook mobile applications.

### Screen-Wall-Window

Unlike landline telephones, cell phones had a screen from a relatively early stage. As cell phones developed, the screen became a central element. In this section, I examine how the addition of a screen to the cell phone affects the wall-window model. What is a screen? According to Lucas Introna and Fernando Ilharco, the etymology of the word can be traced back to the Middle Ages when it meant a shield or a barrier of some kind (2004, p. 226) in striking resemblance to a wall. Today the word screen has taken on an additional meaning of filtering and even distortion (Friedberg, 2006, p. 17). These separation qualities are shared by the wall, since both the cell-phone-as-a-wall and the screen separate the user from the surroundings. And yet, the screen shows information through a frame, thereby sharing qualities with a window. Within a cell phone, the screen's wall-window traits are more accentuated, because the cell phone itself is a wall-window.

Furthermore, the screen has become an important part of the cell phone. If you think of a cell phone as a telephone with mobility, it is not very clear why a screen is required. The auditory capabilities do not require visual aids. It is "nice to have," but not a "must." Yet the cell phone's screen evolved throughout the four historical variations. Already in the first variation, the simple, single-line LED screen displayed the phone numbers of incoming calls and some form of text (mostly notifications like "new," "total" or "no messages"). In the second historical variation the screen evolved into an alphanumeric display that showed several lines of text in black and white. The third historical variation was characterized by a colorful screen as large as the palm of the hand, presenting multimedia contents. As an owner of an early-model iPhone, I can attest that the voice quality was not as superb as the visual quality of the screen. It was the victory

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of the visual over the auditory. The fourth historical variation requires a high-quality screen on which the augmented reality can be displayed.

In parallel with the growing importance of the screen within the cell phone technology, screen size has constantly increased. This increase happened in line with the growth of contemporary televisions and flat-screen displays (Friedberg, 2006, p. 138), and the increasing role of the screen, as reflected in Lev Manovich's term "the society of the screen" (Manovich, 2001, p. 94). The following table shows how cell phone screen resolution and size (in pixels) have grown for Nokia's handsets over fourteen years:

Screen size	84 x 48	96 x 65	96 x 68	128 x 128	128 x 160	208 x 208	240 x 320	320 x 240	352 x 416	360 x 640	640 x 200	640 x 360						
1997	4											1						
1998	9											1						
1999	7											1						
2000	5											4	1					
2001	11											3	1					
2002	14											13	3	2				
2003	2											19	14	2				
2004	9											15	6	1	1			
2005	10											9	10	3	3	1	1	
2006	4											2	11	1	6	16	3	1
2007	3											1	8	10	12			
2008	1											6	17	6	1			
2009	1											4	16	7	3	1		
2010	1											4	6	2	2	5		

Table 1: Nokia's Popular Screen Resolution and Size (In Pixels) 1997-2010 (2010: partial data; table constructed by the author based on information from Bernatchez (2010) and Manuals Online).

The table depicts cell phone screen sizes (in pixels) by the year of each handset's release. It shows how the screen size and resolution grew from 84 by 48 pixels in 1997 to 640 by 360 pixels and more in 2010. The one exception is the Nokia 9000 series (also known as the "Communicator") that included a relatively large screen of 640 by 200 pixels as early as 1997. By comparison, iPhone's screen size is 320 by 480 pixels (for the first iPhones as of 2007). Although similar in screen size, the Communicator weighed almost 400 grams, while the iPhone weighs less than 140 grams. The Communicator can be regarded as the harbinger of the arrival of larger screens to cell phones. In 1998, a year after the Communicator's launch, industry analyst firm Gartner forecasted "users will demand larger screens to display several lines of data. Current terminals . . . will no longer be acceptable except for users that want a voice-only phone" (Leet 1998, p. 8). Today's screens display not only several lines of data, but also maps, pictures and video. Screens continue to grow in size, culminating today in Apple's iPad, dubbed a "fat iPhone without the phone" (Myslewski, 2010). The iPad looks like an iPhone with a much larger screen, extended beyond the palm of the hand and enlarged to 1024 by 768 pixels (or from 3.5 inches to 9.7). With its 3G support, it blurs the lines between personal computers and cell phones. Yet, the iPad is not a cell phone, and is not intended to replace it. In a way it marks the limits of the cell phone's screen, and draws our attention to the horizon of possibilities for using cell phones as portable computers.

In this context, it becomes evident why the screen of the cell phone has evolved from a single LED line to the size of the palm of the hand. As the screen grows in size and improves in quality (more colors, better resolution), both traits of the wall and the window are radicalized. The potential isolation from the surrounding environment increases, with more sophisticated handsets and earphones, while the plethora of multimedia applications is opening a wider and richer

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window. Yet most scholars have referred to the screen as either a wall (e.g. Geser, 2004) or a window (e.g. May and Hearn, 2005).

The window is the popular metaphor for the screen (e.g., Manovich, 2001, pp. 94-115; Richardson, 2010; cf. Friedberg, 2006, pp. 15-18) where the window serves as no more than a word that transforms the meaning of screen. In this context the screen “becomes, like the window, a transformative aperture in architectural space, altering the materiality of our built environment and opening surfaces up to a new kind of conceptual and metaphoric ‘ventilation’” (Richardson, 2010). The metaphor of the window is suitable because both window and screen allow us to view the world through a rectangular frame (2010). The limits of the metaphor become clear when we consider the direction of information flow. Most architectural windows allow flows in and out. However, the cell phone screen, in most cases, is a one-way membrane that allows information to flow to the user. The (relatively rare) exception is the use of the cell phone camera (including video conferencing), where the user’s image and background surroundings are transmitted to the interlocutor’s space. This exception is Paul Virilio’s rule, according to which the screen has a potential to become a reverse window, through which we can be watched by others (1994, p. 64).

Anne Friedberg suggests an alternative to the metaphor relations of the screen and window, by construing the screen as a virtual window (2006, pp. 7-12). In her framework, virtuality is a complementary aspect of the real. It is a representation of different materiality and reality, “a second-order materiality” (p. 11). It is a reality located in a different space. Friedberg warns us not to confuse digital and virtual and quotes Brian Massumi who says: “Nothing is more destructive for the thinking of the virtual than equating it with the digital” (2006, p. 10). This understanding of virtuality enables Friedberg to argue that the screen has become a substitute for the architectural window, because the ability of

the screen to open for us another space is not a mere metaphor, but complements our here-and-now reality. The cell phone operates as a virtual window because it opens the user to another space which is not material, but is quasi-real. Although Friedberg emphasizes the visual aspect of the screen, the cell phone also includes auditory elements that are interwoven with the visual such as a phone call. This is an expansion of Friedberg's virtual window.

But the virtual window for Friedberg serves to express also opacity, which I describe here as the wall model. As a virtual window, the screen "is reliant not on its transparency but on its opacity" (2006, p. 138). Such opacity is the seed for the "wall" qualities of the screen.

As a wall the screen is not a metaphor, nor virtuality, but an actuality. This is, for example, Virilio's approach: "In a certain sense, the screen became the last wall. No wall out of stone, but of screens showing images. The actual boundary is the screen" (1993, p. 181). Virilio emphasizes the role of the screen in contemporary everydayness, and its function as a tangible wall. It may be a special kind of a wall, but it is still a wall, not a mere metaphor. John Armitage explains that the screen for Virilio is the "last wall" because "the geographical difference between 'here' and 'there' is obliterated" (2000). While the total obliteration of the gap between the here-and-now and the remote space may be in dispute, there is a consensus that this gap is narrowing and that the cell phone and its screen are contributing to this reduction.

The screen becomes a wall not only through its physical attributes, but also through the social context of its use. A phenomenological observation of the screen reveals, according to Introna and Ilharco (2004), the ways in which a screen socially becomes a wall against the environment. The wall comes out as soon as we push the On button. Introna and Ilharco describe TV and computer screens that require the users to "sit down, quit – physically or cognitively – other activities we may have been performing, and watch the

## WALL-WINDOW-SCREEN

screen” (p. 225). This, I think, does not apply any longer to contemporary TV and computer experience. Many of us have these screens operating in the background, and not always in the foreground. Yet, the cell phone screen does attract our attention even when we walk down the street (Richardson, 2010). It manages to do so because the screen “is the place, location, setting, scene, intentional experience of consciousness in which what is relevant or supposedly relevant for us at that particular time is happening” (Introna and Ilharco, 2004, p. 225).

The wall is built of two ingredients: the user’s behavior, experience and habits, and the technological artifact, be it the cell phone and/or the screen. The wall-screen’s physical attributes and the space it occupies are less important than the messages displayed on the screen and how fast the message is displayed on it. In this sense “real time has now superseded real space” (Armitage, 2000).

The analogy between a cell phone’s screen and a wall is contested by Richardson. She contends (2005) that there is no separation of the user from the here-and-now because the cell phone “is always-already surrounded by other objects and activities within the spatial topography of the built environment.” In a single axis landscape the “being surrounded” blocks the possibility of a split between the surrounding and the remote space. The double axis model enables the co-existence of Richardson’s conceptualization of “being surrounded” and the ability of the cell phone (and its screen) to transfer parts of our attention to another space. Our engagement with the surroundings is not a constant but more of a vector of “thickness” of the wall. When it is “thin,” we experience the environment as inseparable as described by Richardson; when it is “thick,” we tend to ignore the surrounding objects and activities.

Richardson further contends that the cell phone does not require long spans of attention, because “our ‘turning towards’ [the cell phone’s screen] is usually momentary

(checking for a text or missed call) or at most can be measured in minutes” (2010). This is true for a user immersed in the surroundings. But the wall-window is not a concrete wall, as it has a social context that gives it flexibility. That is why the wall can last any span of time: a texting student can “return” to class within a few seconds, while a voice conversation or a game can take our attention for more than an hour.

### **Mobile Media**

Is the split of attention unique to cell phones? Are there other technologies that provide this separation of attention between two spaces? Let us look at “naïvely-realistic” technologies like the hammer. Ihde coins the term “naïve realism” to denote the “ordinary experience . . . where things are taken to be what they are seen to be” (1998, p. 178). A hammer is naïvely realistic because holding it implies a functionality that is related to the here-and-now. It mediates the world for us by connecting us to the immediate environment of the workshop. Put differently, we feel “within the world” when doing nailing work in the workshop with a hammer, compared to visitors who enter with bare hands. Like the visitors of the workshop, we feel out-of-context if we walk down the street holding a hammer. At best, it may suggest we are on our way to nail something. The hammer (as a tool for nailing) has strong ties to the space of the workshop, and cannot carry such ties outside. Alternatively, the cell phone disconnects us from the here-and-now, no matter where we are, thereby creating a “wall.” At the same time, it provides a window to an environment that is distant in time and/or place, or virtual altogether. Like Galileo who brought “new perceptions mediated through the telescope” (Ihde, 2002, p. 54), so the cell phone brings to our attention new auditory and visual perceptions.

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But isn't such dislocation of attention characteristic of all media technologies—from the printed book, through radio and television, to video games? When we are immersed in the plot of a novel most of us are less attentive to the happenings around us; when my children watch television, they don't hear me, let alone listen to me; and when people play on the Internet or with console games (like the Xbox, Wii or PlayStation) they tend to ignore any interference (see Geser, 2004, pp. 8-9). With such broad understanding of media, there are additional technologies that can be viewed as taking attention to another space – as the example of the telescope shows, or the microscope in the lab (Forss, 2011).

I developed the wall-window invariant to represent the ways in which the cell phone modifies our everyday experience. A second look suggests it may apply to additional technologies, known as media technologies. Another look reveals that may apply even to human interaction. For example, the teacher in the classroom teaching history provides a wall-window for the students. A conversation between friends in a coffee shop produces a wall-window. Even the carpenter using a hammer may be caught in a daydream, transporting him to a virtual space. These are different forms of wall-windows. The dislocation of attention can happen when our imagination works, or when we talk with other people. While imagination and fantasies come and go, sometimes unintentionally, media technologies ensure this “magic” always happens, whether we are alone or in the company of others. All we need to do is operate these technologies correctly, i.e. open a book, turn on the television set, or enter a web site.

Many scholars have referred to the cell phone as media (e.g. Ferraris, 2005; May and Hearn, 2005; Goggin, 2006; Goggin and Hjorth 2009). As media, it is a tool for mass communications in new forms. The resulting mobile media includes a variety of formats: SMS, news, voting in reality shows on TV, and mobile music (Goggin and Hjorth, 2009).

The list remains open. Such a broad definition of mobile media shifts the cell phone from its mere use for communication to its use for a wider variety of functions. While Roger Silverstone and Knut H. Sorensen argue that the addition of the letter “e” as a prefix to words represents the move from information to communication (Silverstone and Sorensen, 2005), I would like to suggest that the pendulum may be moving back to information with the prefix “i” (as in the case of iPhone). Moreover, the “i” prefix has an additional meaning of the first person, usually associated with self-centered activities such as games, navigation, and music.

The cell phone is not just “media” of mass communications (i.e. printing press, radio and television), it is “new media,” of digitized communications and contents, or even better—new “new media.” As such, the cell phone brings new qualities to traditional and new media as it enables communications everywhere and in novel forms and formats. New new media’s ubiquity results in new contents (Featherstone, 2009) that originate from new sources ranging from short text updating on events as they occur (Goggin and Hjorth, 2009) to pictures and videos taken via the cell phone’s built-in camera. In addition, the contents (old and new alike) are consumed differently, shifting structures and categories (Featherstone, 2009), as evidenced by television programs allowing the viewers to text-in their votes, or by new forms of music consumption, to name only two examples (Goggin and Hjorth, 2009).

New media gained its new-ness because of the deep involvement of computers (Manovich, 2001, p. 46). Manovich claims, “the logic of a computer can be expected to significantly influence the traditional cultural logic of media; that is, we may expect that the computer layer will affect the cultural layer” (Manovich, 2001, p. 46). From this perspective, a new trajectory may be revealed (see Figure 2) from reality (of traditional media), through virtual reality (enabled by new media’s computerization), to augmented

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reality (which is the result of mobile media, as I claim for the fourth historical variation). It is a reality that interacts with the user, and where the user's action may have performative results in the real world.

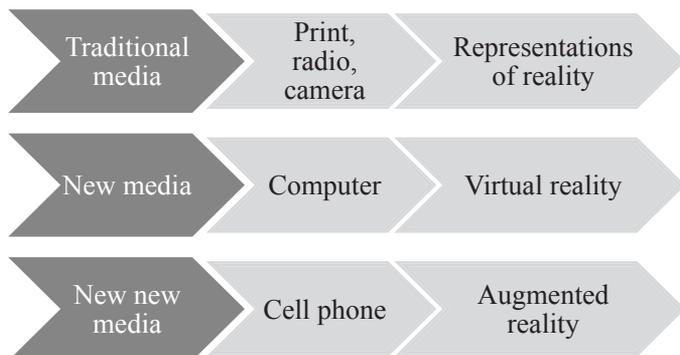


Figure 2 Media, New Media, "New New" Media

The common denominator of media technologies – whether traditional, new or “new new” – is their capacity to dislocate our attention to other places (remote in place, time or imaginary), while our physical body remains in full engagement with the surroundings. All media technologies correspond to the wall-window invariant.

The wall-window model expounds how the cell phone and media technologies “redirect” some senses, thereby mediating a different world for us. This experience corresponds to Ihde calls “quasi-illusion” that is “subduing the other sensory dimensions” (Ihde, 2002, p. 38). I suggest here that quasi-illusion is not limited to state-of-the-art virtual reality or complex scientific machinery, as originally intended by Ihde, but can be extended to everyday situations, where media is involved. The cell phone and media technologies ensure the emergence of the wall and the window. With the screen embedded into the cell phone, the displacement can be not only auditory but also visual, impacting our very embodiment.

## Embodiment

Inspired by Merleau-Ponty's phenomenology, postphenomenology views the human use of technology not as a relation between a detached Cartesian ego and an object, but rather as the integration of the tool into the lived body (Ihde, 2003, p. 11). In this section I suggest to think of the split of attention in terms of split of embodiment.

Postphenomenology proposes several models for the relations between people, technologies and the world. The embodiment relation stands for the incorporation of technologies into our perception in a sense that "we experience [them] as taken into our very bodily experience" (Ihde, 2009, p. 42). A common example would be the eyeglasses that transform the wearer's experience of the surrounding world, while being perceived as part of the wearer's body. Postphenomenological embodiment has two constituents: a Body One that "is the existential body of living, here-located bodily experience, the sense of body elicited by Husserl as Leib, but much better descriptively developed by Merleau-Ponty as the 'corps vécu'" (Ihde, 2002, p. 69); and a Body Two – requiring a Body One as a precondition – that is "the cultural or socially constructed body . . . the body of the condemned in Foucault, the body upon which is written or signified the various possible meanings of politics, culture, the socius" (p. 70). While Body One represents the experiencing body that inhabits the present, Body Two, as Michel Foucault points out, represents the cultural body (Foucault, 1977). Body Two complements Body One by referring to the cultural, social and political aspects. It is Body Two that enables us to have an additional remote "gestalt." Perceiving a hammer only as a tool-for-nailing relies on Body One while neglecting Body Two. Such an approach may blind us from seeing other cultural usages for a hammer, such as a paper weight or a weapon, depends on the cultural and sociological context. The structure of Body One

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and Body Two conceptualizes our relations with technologies through the duality of the living-sensing experience and the cultural experience (Ihde, 2011).

The duality of Body One and Body Two shares some similarities with the two spaces of attention modeled by the wall-window invariant. First is the non-reductive split that produces a sum larger than its parts. People talking on the cell phone can still participate in the conversation going on in their physical vicinity, as demonstrated by Plant's persistence, where the user remains attentive to both spaces. It is not an "either-or" relation, but an "and-and" that covers the physical and the remote spaces. Second is the distinction between the here-and-now of the bodily experience and the other space, be it social (in the case of talking on the cell phone with another person) or cultural (as in the case of browsing the Internet through the handset). Third, the physically manifested wall, with the help of artifacts such as the handset and earphones, is tightly related to the "natural" or "bodily" aspect of Body One. It is reflected in Virilio's rejection of the "metaphorization" of the screen-as-wall. This aspect of the wall is complemented by a window that is metaphorical or virtual, and tends towards the cultural-social dimensions of Body Two. In line with Friedberg's notion of virtuality as "a second order of reality," the other space is not physically "attendable," but exists in a cultural or social dimension.

Postphenomenologically, the split of attention between the here-and-now and the remote space may be conceptualized as a split in our embodiment, so that part of the perceptions and experiences remain attached to the space where my physical body is, and another part is "transferred" to the remote space. Yet, it is difficult to draw a clear line between the bodily perceptions that remain in the physical space and those that are transported (by the technology) to the remote space. Likewise the cultural-social aspects cannot be cut into two. This difficulty is partly due to the fact that the two parts (of attention as well as of embodiment) are

interrelated and non-reductive. Combined, they represent *additional* experiences and perceptions that could not have existed without technology such as the cell phone.

### Summary

The notions of Body One and Body Two help us to configure a split of attention that is richer than a simple divide between visual and auditory stimulus. It can explain how we can read a text message while walking down the street: Body One has a sensory understanding of our immediate surroundings, while Body Two can read a text message, hear music, or connect to a remote space. The model sketched above has four components: wall, window, screen, and media (see figure 3).

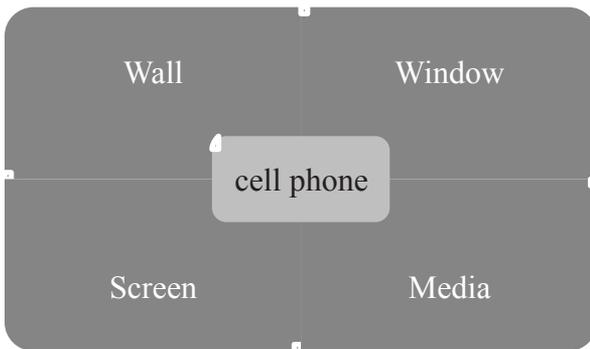


Figure 3: Cell Phone's Quad Model

The relations between the components illuminate certain aspects of the cell phone. Wall and window are attributes which are linked as complementary relations to the here-and-now and remote spaces; the technological components of screen and media are so widely discussed (e.g., Friedberg, 2006; Manovich, 2001) that their relations have become trivial. The screen was “blamed” for separating the viewers from their immediate environment (e.g., Introna and Ilharco, 2004). Media is often perceived as a window (e.g., Friedberg,

2006). The cross-links between window and screen or media and wall were also mentioned here. And yet the emergence of the cell phone in the middle is surprising. We usually think of our cell phone as a technology or a social phenomenon (e.g. Ling, 2004, 2008; Katz, 2006; Haddon, 2004), but rarely think of it as media, a screen, a virtual wall or a window. The quad model gives us a new perspective for embodiment and attention in terms of wall-window: it helps us understand why the screen of the cell phone grew from a single LED line to the size of the palm of the hand; why some people do not refer to their cell phone as a device for talking, but more as a tool to consume music or other media; and the feeling of confidence we have when walking in a dark street (wall) with the cell phone open (window), making friendly noises (media) and illuminating our way (screen).

Eventually, through the description of the cell phone technology, I came to questions concerning the understanding of general human activity. The wall-window invariant allows us to consider different forms of human interaction. The analysis teaches us that the wall-window invariant can exist not only in a technological setting, but it raises the question of how technology can produce a wall-window. What are the necessary conditions by which a wall-window setting is produced? But this is question for another paper.

### References

- Armitage, J. (2000). Beyond postmodernism? Paul Virilio's hypermodern cultural theory. (A. Kroker, and M. Kroker, Eds.) *CTheory*. Retrieved July 3, 2011 from [www.ctheory.net/articles.aspx?id=133](http://www.ctheory.net/articles.aspx?id=133).
- Bernatchez, E. (2010). *All the nokia cell phones*, About.com Cell Phones, Retrieved August 13, 2011 from <http://cellphones.about.com/od/nokia/a/nokia.htm>

- Deleuze, G., and Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. (B. Massumi, Trans.) Minneapolis, London: University of Minnesota Press.
- Featherstone, M. (2009). Ubiquitous media: An introduction. *Theory, Culture and Society*, 26 (2-3), 1-22.
- Ferraris, M. (2005). Where are you? Mobile ontology. *Seeing, Understanding, Learning in the Mobile Age*. Retrieved July 3, 2011 from <http://www.fil.hu/mobil/2005/Ferraris.pdf>.
- Foucault, M. (1977). *Discipline and punish: the birth of the prison*. New York: Vintage Books.
- Friedberg, A. (2004). Virilio's screen: The work of metaphor in the age of technological convergence. *Journal of Visual Culture*, 3 (2), 183-193.
- Friedberg, A. (2006). *The virtual window: From Alberti to Microsoft*. Cambridge, MA and London, England: The MIT Press.
- Friedman, L. (2001). *Thousand Plateaus: An anti Nietzschean act*. *Theory and Criticism*, 19 (2001), 231-239 (in Hebrew).
- Forss, A. (2011). Cells and the (imaginary) patient: The multistable practitioner–technology–cell interface in the cytology laboratory. *Medicine, Health Care and Philosophy*, 1-14. doi: 10.1007/s11019-011-9325-0
- Geser, H. (2004). Towards a sociological theory of the mobile phone. In *Sociology in Switzerland: Sociology of the Mobile Phone*. Zuerich: Online Publications (Release 3.0). Retrieved July 3, 2011 from [http://socio.ch/mobile/t\\_geser1.htm](http://socio.ch/mobile/t_geser1.htm)
- Goggin, G. (2006). *Cell phone culture: Mobile technology in everyday life*. New York and London: Routledge.
- Goggin, G., and Hjorth, L. (2009). The question of mobile media. In G. Goggin, and L. Hjorth, *Mobile technologies: From telecommunications to media* (pp. 3-8). New York and London: Routledge.

## WALL-WINDOW-SCREEN

- Haddon, L. (2004). Cultural differences in communication: Examining patterns of daily life. *Mobile Communication and Social Change*. Seoul (Korea).
- Hayles, N. K. (2007). Hyper and deep attention: The generational divide in cognitive modes. *Profession*, 13, 187-199.
- Ihde, D. (1986A). *Consequences of Phenomenology*. Albany, NY: State University of New York Press.
- Ihde, D. (1986B). *Experiential Phenomenology*. Albany, NY: State University of New York Press.
- Ihde, D. (1990). *Technology and the lifeworld: From garden to Earth*. Bloomington and Indianapolis: Indiana University Press.
- Ihde, D. (1998). *Expanding hermeneutics: Visualism in science*. Evanston, IL: Northwestern University Press.
- Ihde, D. (2002). *Bodies in technology*. Minneapolis and London (UK): University of Minnesota Press.
- Ihde, D. (2003). *Postphenomenology - again?* Aarhus: The Centre for STS Studies.
- Ihde, D. (2009). *Postphenomenology and technoscience: The Peking University lectures*. Albany: State University of New York Press.
- Ihde, D. (2011). Stretching the in-between: Embodiment and beyond. *Foundations of Science*, 16, 109-118.
- Introna, L. D., and Ilharco, F. M. (2004). Ontological screening of contemporary life. *European Journal of Information Systems*, 13, 221-234.
- Katz, J. (2006). *Magic in the air: Mobile communication and the transformation of social life*. New Brunswick (USA) and London (UK): Transaction Publishers.
- Leet, P. (1998, October 28). The mobile phone: What will become of it? *Gartner/Dataquest MOBD-EU-DP-9810*.
- Ling, R. (2002). The social juxtaposition of mobile telephone conversations and public spaces. Paper presented at conference on the social consequences of mobile telephones, Chunchon, Korea, July 2002. Retrieved on

- August 14, 2011 from [http://www.richardling.com/papers/2002\\_juxtaposition\\_public\\_spaces.pdf](http://www.richardling.com/papers/2002_juxtaposition_public_spaces.pdf)
- Ling, R. (2004). *The mobile connection: The cell phone's impact on society*. Morgan Kaufman.
- Ling, R. (2008). *New tech, new ties: How mobile communication is reshaping social cohesion*. Cambridge (MA) and London, England: The MIT Press.
- Manovich, L. (2001). *The language of new media*. Cambridge, MA; London, England: The MIT Press.
- Manovich, L. (2006). The poetics of augmented space: Learning from Prada. *Visual Communication* , 5 (2), 219-240.
- Manuals Online: The User Manual Site (2011). *Nokia cell phone manuals*. Retrieved July 3, 2011 from [http://cellphone.manualsonline.com/manuals/mfg/nokia/nokia\\_cell\\_phone\\_product\\_list.html](http://cellphone.manualsonline.com/manuals/mfg/nokia/nokia_cell_phone_product_list.html)
- May, H., and Hearn, G. (2005). The mobile phone as media. *International Journal of Cultural Studies* , 8 (2), 195-211.
- Myslewski, R. (2010). Apple's iPad - fat iPhone without the phone: The tablet that can't multitask. *The Register*. Retrieved July 3, 2011 from [http://www.theregister.co.uk/2010/01/27/ipad\\_comment/](http://www.theregister.co.uk/2010/01/27/ipad_comment/).
- Plant, S. (2003). *On the mobile: The effects of mobile telephones on social and individual life*. Motorola.
- Richardson, I. (2005). Mobile technosoma: Some phenomenological reflections on itinerant media devices. *Fibreculture*, Retrieved July 3, 2011 from <http://journal.fibreculture.org/issue6/>.
- Richardson, I. (2010). Faces, interfaces, screens: Relational ontologies of framing, attention and distraction. *Transformation* , 18 (*The Face and Technology*), Retrieved July 3, 2011 from [http://www.transformationsjournal.org/journal/issue\\_18/article\\_05.shtml](http://www.transformationsjournal.org/journal/issue_18/article_05.shtml).

- Rosenberger, R. (2008). Perceiving other planets: Bodily experience, interpretation, and the Mars orbiter camera. *Hum Stud*, 31, 63–75.
- Rosenberger, R. (forthcoming). Embodied technology and the dangers of using the phone while driving. *Phenomenology and the Cognitive Sciences*.
- Silverstone, R., and Sorensen, K. H. (2005). Towards the 'Communication Society'. In *Media, technology and everyday life in Europe: From information to communication*. Hants (England) and Burlington (USA): Ashgate.
- Stiegler, B. (2010). *Taking care of youth and generations*. Stanford: Stanford University Press.
- Verbeek, P.-P. (2005). *What things do: Philosophical reflections on technology, agency and design*. The Pennsylvania State University Press.
- Virilio, P. (1993). Architecture in the age of its virtual disappearance: An interview with Paul Virilio by Andreas Ruby. In J. Beckmann, *The virtual dimension: Architecture, representation, and crash culture* (pp. 179-188). New York: Princeton Architectural Press.
- Virilio, P. (1994). *The vision machine*. Bloomington and Indianapolis: Indiana University Press.



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*Hunger by Design: The Great Ukrainian Famine and Its Soviet Context*

Edited by Halyna Hryn

Cambridge, MA: Ukrainian Research Institute of Harvard University, 2009. 168 pages. ISBN: 1932650059 (paper). \$24.95.

Reviewed by Ronald Carter, Bowie, Maryland.

During the early 1930s the USSR achieved tremendous technological innovation while millions died in the process. These were the years of the First Five Year Plan when Joseph Stalin ruthlessly forced the USSR through rapid industrialization. One of the many devastating consequences of the Soviet Union's pursuit of industrialization at the expense of privatized agriculture is an event known as Holodomor ("Murder by Hunger"), or simply the Famine of 1931-1933. Most estimates of peasant deaths during this famine range from four to seven million. Despite not being well known to the general public, Holodomor has received a cornucopia of attention from scholars across the globe in recent years. One book in particular that provides an in-depth look at Holodomor is *Hunger by Design: The Great Ukrainian Famine and Its Soviet Context*, which is edited by Halyna Hryn. *Hunger by Design* contains papers presented by various scholars on the topic of Holodomor. Out of the six papers presented in *Hunger by Design*, four of them will be covered in this review. All of the papers included in this review were chosen because they are vital to concluding

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whether or not Holodomor was intentional or the consequence of failed agricultural policies. The two papers that were excluded from this review are “Sources and Resources on the Famine in Ukraine’s State Archival System” and “The Collectivization Famine in Kazakhstan” by Hennadii Boriak and Niccolo Pianciola, respectively. Both were left out because anything pertinent that could be taken from either of them in regard to the cause of Holodomor would have been redundant. In this review Holodomor provides the occasion to discuss the high human cost of the USSR’s technological transformation.

The First Five Year Plan (1928-1932) contained a list of economic goals designed to help the Soviet Union to industrialize at a rapid pace. Joseph Stalin, who was leader of the Soviet Union at the time, was behind the frantic attempt to industrialize. Stalin believed that if the Soviet Union did not catch up to the western world in terms of production, it would eventually be destroyed by the western states. Stalin’s ambitions of overtaking the capitalists and becoming a major power on the international stage would have dire consequences particularly for the Ukrainian peasants. The First Five Year Plan placed emphasis on heavy industry in hopes of laying the groundwork for future industrial growth. Collectivization of agriculture was one of many steps in Stalin’s Five Year Plan and was implemented as a means of forcing people from the countryside and into the cities while those who remained in the countryside would be compelled to produce food for the urban workers. The ultimate goal of the Five Year Plan was to strengthen the Soviet Union’s economy thus making it both militarily and industrially self-sufficient. State grain procurements rose from 14 percent of the gross yield of grain in the 1920s to 33 percent of the gross yield of grain for the 1931 harvest. Almost all of the dramatic improvement in agricultural production went to the state. The Kulaks, who were affluent peasants in Ukraine, opposed the government’s efforts to deny them the opportunity to make

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profit from their hard work on their own land. In an effort to resist the Five Year Plan, many Kulaks decided to destroy tools and kill livestock. Many disgruntled Kulaks would rather just destroy their own personal property than allow it to become common property owned by the state. The Kulak rebellion, combined with a bad harvest due to inclement weather and rigidly enforced economic policies, led to Holodomor. It should be understood that the Kulak rebellion was precipitated by sanctions being levied upon them by the Stalinist regime. Under the Five Year Plan, the burden of modernizing the Soviet Union technologically was placed on the peasants. They were expected to advance the Soviet Union a hundred years in only ten years' time. Ultimately, the USSR's rapid industrialization that rigidly followed plans hammered out by bureaucrats incurred the sacrifice of personal property, individual freedom, and even the lives of millions of persons, especially in the Ukraine.

“The Soviet 1931-1933 Famines and the Ukrainian Holodomor: Is a New Interpretation Possible, and What Would Its Consequences Be?,” which was presented by Andrea Graziosi, professor of Contemporary History at the University of Naples Federico II, examines Holodomor and its consequences on Ukrainian society. Graziosi begins the paper by asserting that nearly seven times as many people died in the Soviet Union from famine (1931-1933) than from the Great Purge (1937-1938). This is an important claim because an estimated one million people were executed during the Great Purge. Graziosi credits Robert Conquest's *Harvest of Sorrow* with shining light on this event that previously had received less attention than the Great Purge and other features of Stalinism prior to the publication of Conquest's book in 1986. The purpose of Graziosi's paper is to provide a new interpretation of the Soviet famine of 1931-1933. This new interpretation is the notion that Holodomor was deliberate and therefore an act of genocide against those designated by the government as refractory to the goals of the Five Year Plan.

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According to Graziosi, 3.5 to 3.8 of the estimated seven million people who died during the famine of 1931-1933 were located in the Ukraine. Other places where the famine struck include Kazakhstan, Northern Caucasus, and in the Volga region. Graziosi's comparisons of Holodomor to other tragedies such as the Great Purge help to illuminate the staggering costs to humanity as the state achieved certain technological goals.

"Victory over the Peasantry," which was submitted by Sergei Maksudov, an associate of the Davis Center for Russian and Eurasian Studies at Harvard University, focuses on collectivization and its impact in the Ukraine. Maksudov begins his paper by compiling a list of some of the most egregious laws that the Ukrainian peasants had to endure. The homes of independent farmers could be searched at will and any grain found could be declared stolen. If a district was blacklisted for any reason, the peasants living there would have their commerce restricted and their goods seized. If peasants failed to meet their grain quotas, meat procurements could be placed upon them and, as a result, many peasants were virtually left without any way to feed themselves. Maksudov asserts that through collectivization, Stalin was able to achieve his goal of attaining a high market surplus. Stalin believed that a surplus of raw material and agricultural exports would help expedite the industrialization of the Soviet Union. Maksudov's paper is particularly enlightening because it poses the question of whether or not the impossible grain quotas were placed on the peasants in the Ukraine for genocidal reasons.

"The 1932-1933 Crisis and Its Aftermath beyond the Epicenters of Famine: The Urals Region," which was written by Gijs Kessler, a research fellow of the International Institute of Social History, Amsterdam, focuses on the lingering aftereffects of the famine in the Ural region. Prior to Kessler's paper, the majority of research in the area focused on the places at the epicenter of the famine such as Ukraine,

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Kazakhstan, and the Steppe Regions of the Don and Kuban. The main point that Kessler attempts to explain in the paper is that the famine and collectivization were intimately tied to one another. Near the end of the 1920s, Stalin's economic plans sought to extract the maximum amount of grain and other produce from the agricultural sector, without reinvestment, in order to increase productivity, especially industrialization. According to Kessler, the agricultural policies initiated in the Ural region by Stalin at the end of the 1920s were enough to create famine and starvation after just three years of their implementation.

"Holodomor and Memory" was written by George G. Grabowicz, professor of Ukrainian Literature at Harvard University, and focuses primarily on whether or not Holodomor should be considered a genocidal act by the Stalinist regime. Grabowicz begins the paper by comparing Holodomor to other great tragic events such as the Armenian genocide. This is Grabowicz's attempt to express just how devastating Holodomor was by comparing it to a more well-known event and then concluding that it was much worse. According to Grabowicz, another fact that makes Holodomor unique is that it was imposed on the Ukrainians by their political leaders. Grabowicz illustrates this by stating that "the Armenians as a nation were never obliged to express praise and love for their killers." In contrast, the Ukrainian people were expected to praise and love the Soviets despite what had been done to them. Grabowicz asserts that it is because of this brainwashing, for lack of a better term, that Holodomor is still denied by a large number of the Ukrainian polity. The importance of this chapter cannot be understated. The paper's value lies in Grabowicz's effective description of the mental and spiritual anguish that was imposed on the Ukrainian people as they bore the burden of the USSR's technological development.

There are two main theories as to what caused Holodomor. One theory is that Holodomor occurred as a

result of a deliberate attack by Stalin on the Ukrainian people which would put it under the category of genocide. The second theory is that the changes implemented by those under Stalin's command had a negative effect on the economy. One of the major changes that is thought to have had an adverse impact on the Ukrainian economy is known as collectivization ("collective farming"). Collectivization called for all private property to be turned into communal property. Ukrainian farmers who refused to work on the collective farms were punished by being sent to labor camps and/or had their land forcibly taken and thus their food supply was also confiscated. Extremely high grain quotas, which the peasants could not reach, were placed on the collective farms. Since the peasants could not meet the impossible quotas, they often were left with no food for themselves. Any peasant who did not make his/her quota was not allowed to keep any food for personal consumption. As a result, this meant that the majority of the peasants began to starve. In order to determine which of the two theories is correct, the term genocide must first be defined. Genocide is defined as the deliberate and systematic extermination of a national, racial, political or cultural group. There seems to be a consensus among the authors in *Hunger by Design* that Holodomor was in fact a genocide perpetrated by the Stalinist regime against the Ukrainian people. This fact becomes apparent when Graziosi responds to the question "Was the Holodomor a Genocide?" by stating that the answer "cannot be but positive." According to Kessler, Stalin's original intention was to extract the maximum amount of grain and other produce from the agricultural sector without investment to increase the state's economic productivity. If Stalin had been unaware of the people's suffering and dying in the Ukraine, then one could argue that the deaths were caused by failed policies rather than deliberate elimination. However, Stalin was in fact fully aware of what the pursuance of his agricultural policies meant for peasants in the affected

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areas, which means it is logical for his actions to be considered genocidal.

*Hunger by Design* is a re-telling of the history of Holodomor. The authors, armed with new, previously unavailable sources, provide the reader with new information as well as reinforce the interpretation of genocide for Holodomor. This new wave of information is a direct result of the collapse of the Soviet Union and the subsequent opening of its once secret archives in the early 1990s. The significance of this book is that it shows the manmade disaster was caused, whether intentionally or not, by the government's ruthless implementation of the Five Year Plan. While the state's economic growth surged upward, the human cost of planned technological innovation was tremendous human suffering. Although each author writes about a different part of the overall famine, there are some recurring themes throughout the book. Two examples of these recurring themes are that state collectivization of agriculture was a direct causation of the famine of 1931-1933 and that Holodomor was indeed genocide. Strong claims and evidence to back the authors' arguments make this book an outstanding tool for anyone looking to read some scholarly material on the topic.