Auto-Modernity after Postmodernism: Autonomy and Automation in Culture, Technology, and Education

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This chapter argues that in order to understand the implications of how digital youth are now using new media and technologies in unexpected and innovative ways, we have to rethink many of the cultural oppositions that have shaped the Western tradition since the start of the modern era. To be precise, we can no longer base our analysis of culture, identity, and technology on the traditional conflicts between the public and the private, the subject and the object, and the human and the machine. Moreover, the modern divide pitting the isolated individual against the impersonal realm of technological mechanization no longer seems to apply to the multiple ways young people are using new media and technologies. In fact, I will argue here that we have moved into a new cultural period of automodernity, and a key to this cultural epoch is the combination of technological automation and human autonomy. Thus, instead of seeing individual freedom and mechanical predetermination as opposing social forces, digital youth turn to automation in order to express their autonomy, and this bringing together of former opposites results in a radical restructuring of traditional and modern intellectual paradigms. Furthermore, the combining of human and machine into a single circuit of interactivity often functions to exclude the traditional roles of social mediation and the public realm. For educators and public policy makers, this unexpected collusion of opposites represents one of the defining challenges for the twenty-first century, and it will be my argument here that some innovative uses of new technologies threaten to undermine educational and social structures that are still grounded on the modern divide between the self and the other, the objective and the subjective, and the original and the copy. To help clarify what challenges automodernity brings, I will detail ways that new media technologies are shaping how digital youth learn and play, then I will discuss how these automodern technologies challenge contemporary theories concerning education and self-hood, and I will conclude by suggesting different techniques for the integration of old and new media in education and political culture.

A New-Media-Writing Scene

I am sitting with my fifteen-year-old nephew Benjamin as he works on a paper for his ninth-grade English class. Benjamin has Microsoft Word open, and he is also in a chat room with some classmates who are exchanging parts of their own first drafts. Their assignment is to write individually a five-paragraph essay on the novel they have just read in class. To complete this traditional assignment, Benjamin has his book open on his desk, but he also has on his computer screen a list of Web sites that discuss the novel, and his Instant Messaging program

keeps on dinging him to warn of another incoming message. Meanwhile, he is downloading a new movie, and he is also playing a multiuser game that includes live chat with people from all over the world. He is thus multitasking at the same time as he is using multiple media to write his paper and entertain himself. If this scene is typical for many digital youth in the developed West, then these students may come to school with a radically different conception of writing and technology than their teachers have;[1] furthermore, this high level of multitasking points to the virtually seamless interplay of work and leisure activities that can be operated on a single personal computer.

This new-media-writing scene not only shows a breakdown of the old cultural opposition between work and play, but it also challenges the structural conflict between self and other. For instance, when I ask Benjamin if he is supposed to work with his friends on this paper, he responds with a quizzical look. From his perspective, like the movies and songs he is file sharing, information and media are always supposed to be shared and distributed in open networks.[2] Moreover, he reminds me that he still has to hand in his own paper, and thus he is only collaborating on the research part of his paper, and he will "write the real paper on his own." After I ask him if he is afraid that all of his multitasking will get in the way of him writing a clear and coherent paper, he informs me that he will use his spell and grammar checkers to make sure, "everything looks professional." Benjamin therefore retains a high level of personal autonomy at the same time that he is sharing information and employing automated programs and templates. In other words, instead of technological automation creating a sense of mechanical alienation and impersonal predetermination, digital youth turn to new media technologies to increase their sense of freedom and individual control.

Moreover, Benjamin and students like him are now quite used to seeing knowledge and research as collaborative processes, while they retain more traditional notions of reading and writing. In fact, the ways Benjamin and his friends copy and paste texts from the Web and then distribute them in chat rooms and e-mails depicts an important transformation in the "modern" conception of property and individual work: these young adults have become habituated to sharing all different types of media and information with little concern for property rights or plagiarism.[3] It is also important to point out that the way Benjamin jumps from writing agrammatical instant messages to typing extended essayistic prose displays the ability of young writers to transform the style and voice of their composing according to the context and the audience.

One can argue that Benjamin and his friends are using new technologies and media in innovative and unexpected ways, which in turn challenges the traditional educational structure centered on judging the work of the individual student. While many educators would simply castigate these students for cheating, I want to argue that these digital youths are leading the way for a new type of education that might be more effective and productive. For it may be that the types of collaborative activities in which students are engaging outside of school are very much like the types of activities they will be required to perform in the workplace and in their everyday lives when they finish their education. However, schools have for the most part resisted incorporating these digital innovations because the new media stress on collaboration, multitasking, automation, and copying does not fit into the older model of book-centered learning.

Since so many educators, parents, and administrators are locked into the rigid definition of education defined by the testing of memorized knowledge retained by the isolated learner, our educational systems have helped to create a strong digital divide between students' home and school uses of technology. One of the results of this divide is that students who are now

used to employing new media in innovative and unexpected ways when they are at home are often alienated from school because these institutions still concentrate on outdated modes of communication and information exchange. Therefore, on a fundamental level, our schools are still structured by the modern celebration of the isolated individual who is rewarded for individual acts of creativity and/or conformity, while our students have embraced a more collaborative and distributive mode of learning and working.

Some educators who have acknowledged this growing divide between students and educational institutions have developed "postmodern" theories to account for the current undermining of traditional and modern beliefs and practices. However, I will argue below that most of these postmodern theorists have failed to account for the ways digital youth are combining automation with autonomy. In fact, I will posit that we have moved into a new period beyond postmodernity, and it is important for educators to understand how automodernity undermines postmodern theories and educational efforts. Therefore, just as the development of postmodernism was based on a critique of modernism, I will begin my analysis of automodernity by critically examining postmodernity. This analysis of postmodernity is especially important, because in many ways automodernity represents a popular reaction to the postmodern emphasis on social determinism.

Four Versions of Postmodernity

Before the reader stops reading because of the use of this word, "postmodern," I would like to posit that this cultural category has many different possible uses: some of them helpful and some of them not. In fact, I turn to this term because it helps us to enter into discussions occurring in many different disciplines about our current cultural order and how new technologies and social movements are changing the ways we think about education and learning. While some people have sought to dismiss the whole idea of postmodernity by labeling it an intellectual fad or a nihilistic radical movement, my intention is to show that postmodernism describes a series of contemporary social transformations.[4] To be more precise, I want to rescue this term from its misuse by arguing that there are in fact four separate forms of postmodernity that have often been confused.

Perhaps the most important postmodern idea is the notion that our world is made of multiple cultures and that we should respect the knowledge and cultures of diverse communities. In fact, multiculturalism is a reflection of the important social movements of the twentieth century, which fought for civil rights, minority rights, women's rights, workers' rights, and political self-determination. Thus, in recognizing the vital values and historical contributions of diverse social groups, multiculturalists have posited that there is no single, universal source for knowledge or truth.[5] Unfortunately, this multicultural idea has often been confused with the extreme postmodernist notion that there are no truths or moral values since everything is relative to one's own culture.[6] This mode of cultural relativism is often a caricature of the more subtle idea that all truths and values are socially constructed. Therefore, a more accurate statement of multicultural relativism and social constructivism is that while there are truths and values in our world, we can no longer assume that they are universal and eternal, particularly when "universal and eternal" often function as code words for "white and male."[7]

Besides multiculturalism and social constructivism, a third mode of postmodernity concerns the cultural model of combining diverse cultures in entertainment and art through the processes of collage, remixing, and sampling. On one level, we can say that all cultures

feed off of other cultures; however, some people have rightly claimed that our incessant recombining of diverse cultural representations does not necessarily help us to understand or encounter other cultural worlds.[8] I would add that while this esthetic version of postmodernity is probably the most prevalent, it is also the easiest to dismiss for its tendency to be superficial and short-lived.

Finally, I would like to define a fourth form of postmodernity, which concerns the academic critique of modern culture and philosophy. This mode of academic discourse often comes under the title of deconstruction or poststructuralism and has been attacked for offering the extreme idea that our world is determined by language. But, language can never escape its own domain, and thus ultimately all knowledge and meaning is suspect.[9] While this overly generalized representation of postmodern philosophy can be questioned, what is often missed is the way that this theory of rhetoric has worked to hide the important connection between postmodernity and social movements. After all, what has fueled multiculturalism and the critique of modernity is the rise of collective action around minority rights, civil rights, and women's rights. These social movements of the twentieth century have challenged many of the presuppositions of modern culture, and it is important to not confuse these vital cultural changes with their reflection in various academic fashions. Indeed, many of those most involved with these social movements as activists or theorists have challenged the extreme focus on difference within postmodernism, positing instead a kind of navigation between "sameness" and "difference."

It is also essential to emphasize that if we want digital youth to use new media to engage in the social and public realms, then we must be able to point to the social movements of postmodernity without being caught up in the more extreme forms of academic discourse. In short, while we desire our students to see how culture, knowledge, and subjectivity are influenced by important social forces, we need to avoid the pitfalls of promoting theories that destroy the foundations for any type of stable meaning, argument, or social action. Moreover, as I will stress below, since one of the determining aspects of automodern youth is that their seemingly seamless combination of autonomy and automation often excludes the social realm of cultural differences and collective action, we need to show the importance of the social realm in contemporary, postmodern culture.

Postmodern Theories of Education and Society

In surveying several texts defining postmodernity from the perspective of multiple disciplines, I have found that the one consistent factor in the circumscribing of this historical period is a stress on the transition from the modern notion of Enlightenment reason to an emphasis on the social nature of all human endeavors. Thus, whether one is speaking about the contemporary loss of master narratives, the critique of universal science, the rise of multiculturalism, the downgrading of the nation state, the emergence of the global information economy, the mixing of high and low cultures, the blending of entertainment and economics, or the development of new communication technologies, one is dealing with an essentially social and antimodern discourse. According to this logic, modernity represents the rise of capitalism, science, and democracy through the rhetoric of universal reason and equality. Moreover, the modern period is seen as a reaction to the premodern stress on feudal hierarchy, religious fate, cosmic belief, and political monarchy.[10] This coherent narrative moving from premodern to modern to postmodern modes of social order and collective knowledge can be challenged and debated, but what is certain is that this schema plays a

dominant mode in contemporary intellectual history. However, what I would now like to show through an analysis of the representation of modernity and postmodernity in various fields of study is that this prominent intellectual narrative does not help us to account for the major modes of subjectivity and culture employed by digital youth today, which I have labeled automodernity.

In the field of education, the movement from modernity to postmodernity has often been tied to a belated acknowledgment of the multiple cultures that make up our world in general and our educational populations in particular. For example, Marilyn Cooper has argued that the central guiding force behind the development of postmodernism in education is the acknowledgment of cultural diversity:

Postmodernism is, above all, a response to our increased awareness of the great diversity in human cultures, a diversity that calls into question the possibility of any "universal" or "privileged" perspective and that thus values the juxtaposition of different perspectives and different voices and the contemplation of connections rather than a subordinated structure of ideas that achieves a unified voice and a conclusive perspective.[11]

By stressing cultural diversity and "the contemplation of connections," Cooper points to a social and cultural mode of postmodern education challenging the modern stress on universality and unified subjectivity. Therefore, in this context, postmodern theory can be read as a response to multicultural diversity and the juxtaposition of different voices and disciplines in an environment where social mediation trumps universal reason and individual autonomy.[12]

Like so many other theorists of postmodernity, Cooper's understanding of this epoch is based on the idea that our conceptions of what knowledge is have shifted away from the previous modern stress on universal truth and unified individualism:

The transition involves a shift from the notion of knowledge as an apprehension of universal truth and its transparent representation in language by rational and unified individuals to the notion of knowledge as the construction in language of partial and temporary truth by multiple and internally contradictory individuals.[13]

According to this common academic argument, the movement away from the "modern" conception of knowledge as universal truth pushes people in postmodern culture and education to sift through competing forces of temporary truths, and this destabilized conception of knowledge and truth leads to the undermining of the modern individual of unified consciousness. In turn, under the influences of postmodernism, education and culture become social and nonuniversal.

This social definition of postmodernism is linked by Cooper to the role played by new computer-mediated modes of communication in culture and education: "in electronic conversations, the individual thinker moves . . . into the multiplicity and diversity of the social world, and in social interaction tries out many roles and positions."[14] According to this description of electronic discussions, new technologies help to create a situation where individuals enter into a multicultural environment that stresses the social, dialogical, and interactive foundations of knowledge, communication, and education. However, I will later argue that this emphasis on the social nature of new communication technologies does not take into account the contemporary dominance of automation and individual autonomy in the production of automodernity. Moreover, due to their desire to promote a more socially responsible and multicultural society, many educators have made the questionable

assumption that networked collaboration equals an acceptance of cultural diversity and so-
cial responsibility. Not only do I think that this easy equivalency between new technologies
and multicultural awareness is too simple, but I will argue that many new technologies can
foster a highly antimulticultural mode of communication and actually inhibit an under-
standing of or experience of difference.

   Another serious problem with the theories stressing a radical shift from modern universal
reason to postmodern social mediation is that they are predicated on a strict linear conception
of historical development, and this progressive model tends to ignore the continuation of
modern and premodern influences in postmodern culture. An example of this common
mode of argumentation can be found in the "new science" idea that we are now witnessing
a radical shift in the transition from modern universal knowledge to the postmodern stress
on the social construction of truth. Thus, in George Howard's understanding of the conflict
between objectivism and constructivism in the natural sciences, we find the postmodern
critique of modern universality:

All across the intellectual landscape, the forces of objectivism are yielding to the entreaties of con-
structivist thought. But it is rather surprising that even our notion of science has been radically altered
by recent constructivist thought. Briefly objectivism believes in a freestanding reality, the truth about
which can eventually be discovered. The constructivist assumes that all mental images are creations
of people, and thus speak of an invented reality. Objectivists focus on the accuracy of their theories,
whereas constructivists think of the utility of their models. Watzlawick (1984) claimed that the shift
from objectivism to constructivism involves a growing awareness that any so-called reality is—in the
most immediate and concrete sense—the construction of those who believe they have discovered and
investigated it.[15]

According to this social constructivist interpretation of the sciences, the modern conception
of knowledge as being universal and objective has been challenged by the postmodern notion
that knowledge is always an act of interpretation and invention.[16] Furthermore, by seeing
science as the formation of shared constructed versions of reality, postmodern scientists
often take on a social and anti-individualistic conception of reality.

   This contemporary movement in the sciences from the modern individual as a neutral
observer to the postmodern social construction of accepted theories is linked to the rhetorical
turn in all aspects of current academic culture. In fact, Alan Ryan has made the following
argument about how postmodern rhetoric changes our definitions of the self and the very
process of recording our perceptions:

Postmodernism is a label that embraces multitudes, but two ideas especially relevant here are its skepti-
cism about the amount of control that a writer exercises over his or her work, and a sharp sense of the
fragility of personal identity. These interact, of course. The idea that each of us is a single Self consorts
naturally with the idea that we tell stories, advance theories, and interact with others from one particular
viewpoint. Skepticism about such a picture of our identities consorts naturally with the thought that we
are at the mercy of the stories we tell, as much as they are at our mercy. It also consorts naturally with
an inclination to emphasize just how accidental it is that we hold the views we do, live where we do,
and have the loyalties we do.[17]

Here, individual autonomy is seen as something that has to be constantly negotiated and
revised, and is thus not a finished product, and this conception of subjectivity feeds into the
social definition of postmodernity. However, as my students often posit in reaction to these
postmodern notions of social construction, they do not feel that their autonomy and self-
hood are being challenged and rendered transitory; in fact, students most often report a high

level of perceived individual control and freedom.[18] Furthermore, the conflict between how students experience their own lives and how postmodern theorists describe contemporary subjectivity often works to make students simply reject these academic theories, and this student resistance to theory is one reason why we may want to rethink postmodernism through the development of automodernism.

Thus, as academics are concentrating on critiquing modern notions of universal reason and unified subjectivity, students are turning to modern science and technology to locate a strong sense of individual unity and control. However, I am not arguing here that we should simply reject all postmodern academic theories because they do not match our students' experiences and perceptions; rather, my point is that we should use these students' resistances to better understand how people today are influenced by the technological access to a heightened sense to individual control that can downplay social subjectivity and multicultural differences. Therefore, by seeing what postmodern theories have gotten wrong in the underestimating of virtual subjectivity, we can gain a better idea of what new educational theories need to get right. For instance, in fully articulating both a social and a psychological theory of student subjectivity, we can show why it is important to defend the social realm at the same time that we expose the reasons why new media caters to a psychological downplaying of social mediation.

In fact, what the social or postmodern theory of self-hood tends to neglect is the psychological and virtual foundation of autonomy and subjective unity. It is important to stress that if we examine how the sense of self is developed psychologically, we learn that one first gains a sense of individual identity by looking into a mirror or external representation and seeing an ideal representation of one's body as complete, whole, and bounded. This mirror theory of self-hood (Lacan) teaches us that since we never really see our whole body at a single glance—at least not without several mirrors or cameras—our internal body map is actually an internalized virtual image and not a concrete material fact. In other words, our sense of self is psychological and virtual and not primarily social and material. Moreover, our subjective feelings of autonomy are built upon this imaginary level of self-hood: To have a sense of self-direction, one must first have a sense of self, and to have a self, one needs to first internalize an ideal body map.

Social theories of subjectivity are thus misleading when they claim to depict a generalized undermining of unified subjectivity; yet, these same theories are vital when we want to discuss the possibility of social and cultural change. In the case of automodernity, I will be arguing that the power of new automated technologies to give us a heightened *sense* of individual control often functions to undermine the awareness of social and cultural mediation, and this lack of awareness can place the isolating individual against the public realm. Therefore, when my students reject postmodern theories because these self-denying concepts do not jive with their own self-understandings, we can posit that students and postmodern theories are both failing to distinguish between psychological and social models of subjectivity. In other terms, many of the postmodern theories discussed here stress the social determination of subjectivity, while many contemporary students focus on their sense of psychological determinism, and we need to offer models of education that integrate both perspectives.

However, instead of balancing the social and the psychological, postmodern educators like Lester Faigley posit that the contemporary subject is defined as being multiple, and identity is seen as a process.[19] In turn, this postmodern notion of subjectivity is contrasted with the Enlightenment ideology of subjective unity, coherency, objectivity, individuality,

and universal scientific reason.[20] Moreover, for Faigley, postmodern culture and new media technologies challenge these modern ideologies by emphasizing the contingent and social nature of all acts of writing and knowledge construction.[21] It is also important to note that from Faigley's perspective, there is a growing divide between postmodern students and modern teachers in the ways students and teachers tend to understand the functions and roles of writing, technology, and literacy in culture and education. While I do agree with Faigley that new technologies help to build a growing divide between teachers and students in terms of how they conceive knowledge, identity, and media, my conception of automodernity argues that the simple replacement of modern individual unity with postmodern discontinuity fails to see how digital youth are merging the two sides of the modern divide: unified individuality and universal science. For example, in a prize-winning essay from the Global Kids contest on Digital Literacy, we find a digital youth making the following argument: "Today, almost all the information that humans have gathered over thousands of years is at the tips of my fingers . . . or those of anyone who cares to use this incredible technology" ("From Gutenberg to Gateway").[22] On the one hand, this statement points to a heightened sense of individual control and access, and on the other hand, it highlights a universal notion of information and technology. By stating that "anyone" can get almost "any" information from the Web, this writer universalizes both the subject and object of global information distribution. The internet is positioned here as using automation and modern science to enhance the ability of individuals to access all information. Of course, this common conception of universal access of the World Wide Web represses many real digital divides as it presents a universalized notion of individuality, and it is important to note that one possible reason for this rhetorical neglect of differences is that the power of automation tends to render social and material factors invisible.

The same essay indicates a possible source for this common contemporary rhetoric of universal access:

Of all the media that I use, I have only touched a spoonful of the ocean that is digital media. There are still thousands upon thousands of other sites, games, songs, and other things that I have never used and probably never will use. Every day, though, I find that I need some obscure piece of information, and this new technology allows me to find it. I play games and listen to music, and this helps define what I like and don't like.

This digital youth feels that since there is too much information available on the Web for one person to encounter, then all information must be available: here, information excess leads to a sense of universal access. Furthermore, it is often the automated nature of new media that functions to hide social disparities behind a veil of easy, global access. In turn, this automation and autonomy of access heightens a sense of individual control. Thus, what postmodern critics like Faigley might be missing in their accounts of contemporary digital youth is the power of new technologies to reinforce the imaginary and real experiences of individual autonomy through automated systems. In other terms, even in situations where information on the Web is determined by social mediation, digital youth are able to absorb cultural material into the frames of their individual point of view. As I will argue below, the PC often gives people the sense that they are in control of the information that appears on their screen, just as they are in control of the perceptions that they let into their own consciousness.

Another important clarification to make is the connection between universal science and automation. In the common understanding of modern science and culture, academics and

philosophers often claim that science is universal because it does not rely on social or personal beliefs. In fact, a key to Descartes' development of the scientific method is his call to employ universal doubt to undermine all prejudices and approach every object of study with a shared transparent method open to all. Of course, Descartes developed his method as a counter to the dominant religious beliefs of his time, and central to his understanding of science was his investment in the idea of universal reason. While we may want to applaud the democratic and rational foundations of Descartes' universal approach, it is important to also note that this universalizing model of science, which posits the importance of a "value-free" method, can actually free scientists from ethical and social responsibilities. Furthermore, in the application of modern science through the development of new technologies, we see how automated devices may create a responsibility-free zone where it is hard to locate any responsible ethical subject.

What then often accounts for the connection between universal science and new automated technologies is the shared process of downplaying the role of social contexts in the shaping of science and technology. Within the context of education, science and math are usually taught as if these subjects were purely objective and neutral, and therefore void of any individual or social influences. For example, even when teachers are discussing such issues as genetic manipulation, pharmaceutical intervention, and technological innovation, the knowledge is delivered without concern for ethical and social issues. Here, we see a division between the postmodern stress on social mediation and the modern rhetoric of science as being objective, neutral, universal, and ultimately inevitable.

We can further understand the presence of modern universality in contemporary education by looking at how literacy is defined in many higher education institutions. Thus, in *Reinventing the University: Literacies and Legitimacy in the Postmodern University*, Christopher Schroeder posits that most textbooks and governmental policies present, "a universalized definition of literacy, as if what it means to be literate can be separated from the contexts in which literate practices are meaningful."[23] In this critique of the common use of the term literacy, Schroeder affirms the distinction between a functional and a critical understanding of literacy by distinguishing the modern stress on universal neutrality from the postmodern stress on social context. From Schroeder's postmodern perspective, the myth of a universal model of literacy is derived from the ability of powerful vested interests to hide their own particular values behind false claims of universal objectivity. Moreover, Schroeder posits that this rhetoric of universality still dominates the ways our educational systems are structured and the types of literacy that are affirmed in schooling.[24] It is also important to note how this universalizing rhetoric has been adopted by digital youth in their common claims of global access, and therefore a key task of critical literacy studies is to explore with students these rhetorical constructions that function to hide important differences and discrepancies. For instance, when students claim that, "Anyone can access any information from any place at any time," we need to engage them in a conversation about the role of the word "any" in falsely universalizing and globalizing a rhetoric of unquestioned equality. In other words, we need to counter a functional model of technological literacy with a critical model of rhetorical understanding.

In fact, essential to Schroeder's analysis of the conflict between functional and critical models of literacy is his claim that the more school literacies are based on de-contextualized, universal models of information delivery, the more individual aspects of culture become the sole purview of experts.[25] Thus, central to the modern organization of education is the dual process of universalizing educational access to school *and* segmenting individual subject

areas into separate areas of expertise. Furthermore, from Schroeder's perspective, functional literacy is dominated by the modern ideological interests of white, middle-class America, and these modern values, which are presented as being universal, no longer fit with the majority of contemporary students.[26]

In opposition to the modern stress on universal reason and neutral functional models of literacy, Schroeder affirms that students bring multiple literacies to universities, and these diverse models of social knowledge and learning are most often neglected by our traditional institutions.[27] As many other scholars have argued, postmodern student literacies are shaped by the cultural realms of television, movies, the Internet, and advertising, and not by the modern emphasis on books and reading as the central source of literacy.[28] While I do feel that Schroeder and other postmodern critics are correct in seeing this conflict between older and newer models of literacy, the stress on the modern universality of school-based literacies versus postmodern diversity of student literacies does not account for the spread of globalized media in automodernity. In other terms, new media technologies have absorbed modern universality into the globalized structures of automated systems, which in turn act to hide social mediation and to highlight individual control. Therefore, as I will argue below, automodern literacies based on television, advertising, movies and the Internet do not typically function to undermine people's belief in modern universal reason and unified subjectivity; instead, automodern technologies help to provide a greater sense of technological neutrality, universalized information, and individual power, even if this sense may be illusory.

Automodernity

To clarify what I mean by automodernism, I will examine several common technologies that are used heavily by digital youth in the early twenty-first-century globalized Western world: personal computers, word processors, cell phones, iPods, blogs, remote-controlled televisions, and first-person shooter computer games. These technological objects share a common emphasis on combining a high level of mechanical automation with a heightened sense of personal autonomy.[29] In fact, this unexpected and innovative combination of autonomy and automation can be read as the defining contradictions of contemporary life in general and digital youth in particular. Importantly, while automation traditionally represents a loss of personal control, autonomy has been defined by an increase in individual freedom; however, automodernity constantly combines these two opposing forces in an unexpected way.[30]

We can begin our analysis of this strange combination of autonomy and automation in automodernity by analyzing the automobile as the precursor to this new way of being. In fact, the very name of the automobile indicates a technological push for both the autonomy and automation of movement. Moreover, cars represent a truly nonsocial mode of movement that conflicts with the more social modes of public transportation. Thus, in the contemporary car, the driver not only has the feeling that he or she can go where he or she intends, but there is also the development of a heightened sense of personal control and autonomy. After all, in American popular culture, the automobile is one of the central symbols for freedom, mobility, and independence: it is the car that allows the teenager and the angry adult to escape personal alienation and set out for individual autonomy.

The automobile also creates the sense of a personal environment where technology enables a controlled world full of processed air, artificial sounds, and windowed vision. The car may even be experienced as a second body, and even though many people spend so much of

their time stuck in traffic, the car retains the virtual and psychological sense of automated autonomy. In fact, by analyzing the cultural and psychological import of the car, we can begin to see some of the limits of the postmodern notion that contemporary society is founded on the social construction of reality, the overcoming of individual unity, and the critique of universal science. For the car, as an early sign of automodernity, is a vehicle for a nonsocial mode of personal freedom combined with a strong belief in the naturalness of scientific technology: Cars are experienced as artificial bodies that combine automation with autonomy and seem to render invisible most forms of social and cultural mediation.

While the automobile appears to be a prime technology of modernity, I would like to posit that it embodies the seeds to automodernity through its integration of privacy and automation and its downplaying of social mediation. In fact, Raymond Williams coined the term "Mobile Privatization" to indicate how this type of technology, unlike the telegraph, the radio, and the subway, allows for mobility in a personalized and privatized milieu.[31] We can thus posit that the automobile has helped to lay the cultural groundwork for the new stress on autonomy through mechanical automation.

Like automobiles, personal computers indicate a paradoxical combination of individual autonomy and automated mechanics. While some of the postmodern theorists discussed above argue that computers and other modes of new media allow for a high level of social and cultural interaction, and thus these new communication technologies help digital youth to see how the world is based on social mediation and intersubjective communication, we can also understand these machines as central sources for an antisocial sense of personal control and autonomy. Therefore, in the PC, the world comes to me: not only can I bring my office to my home, but electronic commerce and e-mail allow me to escape from the need to engage with people in a public space. This privatization of public interaction echoes the larger political movement to undermine the notion of a modern public realm protected by a centralized government (The Welfare State). In short, the PC has unexpectedly enabled digital youth the freedom to avoid the public and to appropriate public information and space for unpredictable personal reasons. Furthermore, even when students are engaged in collaborative writing online, the power of the PC to personalize culture can turn this social interaction into a privatized experience. Thus, while it may appear that new communication technologies are actually broadening the social realm of digital youths, I am arguing that the ability of the individual user of new media to control the flow and intake of information provides a strong antisocial and self-reinforcing sense of subjectivity. For example, it is clear that students who are participating in an online discussion or chat room are free to read and respond to only the conversations that interest them or cater to their own individual points of view; however, in a classroom discussion, it is much harder for students to only respond to one person or to just respond to their own ideas over and over again.

It is important to point out here that my argument is not that new technologies are replacing the social realm with the private realm; rather, I want to stress that the power of new media to cater to real and imagined feelings of self-direction threatens to hide and render invisible important social and public forces. Therefore, although it is essential to consider the social construction of new technologies and their usages, we need to start off with a heightened attention to and analysis of the subjective and embodied nature of electronic culture in order to understand how new media is being lived and experienced by digital youth. In fact, one way of rereading the initials PC is to think of Personal Culture as a new mode of privatized social subjectivity. The feelings of personal choice and power that digital technologies so powerfully proffer are at least as important objects of investigation and

critical reflection as the social networks they may enable. Perhaps the ultimate technology of personal culture is the laptop computer, which functions as the logical extension of the PC, as demonstrated by the way that it gives the individual user the freedom to perform private activities in public. Thus, the laptop may turn any public or commercial space into a private workplace or play space. Since people can take their work and their games with them wherever they go, the whole traditional opposition between workspace and private space breaks down. For example, when one goes to a café, one sees people working with their laptops as if these customers are sitting at home: they have their food, their phone, their newspaper, and other personal items displayed in public. The reverse of the public being absorbed into the private is therefore the private being displayed in public.[32]

Of course, both the privatization of the public and the publicizing of the private are fueled by the twin engines of autonomy and automation. In this context, subjective freedom is tied to the mechanical reproduction of a set system of technological functions. For instance, one of the central uses for the PC is the employment of various word and image processing programs. These technologies center on the preprogramming of "universal" templates and systems of scientific order, thus, programs like spell-checker function by automating tasks that individuals traditionally controlled. However, instead of seeing this transfer of responsibility from the individual writer to the machine, most digital youth that I have interviewed feel that this automation gives them more autonomy to concentrate on what really matters. Moreover, as we saw in my initial example of Benjamin exchanging texts with his friends, the automation of the copy and paste functions increases the freedom of the individual writer to move text around and to engage in acts of constant revision. Automation therefore adds to textual fluidity, which in turn, feeds a sense of personal autonomy.

Powering the PC revolution of automodernity are the Internet and the World Wide Web. At first glance, these technological systems appear to represent the epitome of the post-modern stress on multiculturalism, social interaction, and the movement away from the individuated modern self; however, we can read these technologies as actually undermining the social and the multicultural worlds by giving the individual consumer of information the illusion of automated autonomy. In many ways, the digital youth's experience of the Web challenges the postmodern idea that we are constrained by time and space and that our relationships with others are defined by our cultural and social differences and relations. From the perspective of digital youth, all information from any culture and any person is immediately available to any user at any time and from any place. Thus, in cyberspace, temporal and spatial restraints do not seem to matter.

In fact, by reviewing several of the Global Kids essay winners, we find a reoccurring theme concerning this loss of spatial and temporal differences and a growing sense that cultural differences no longer pose a barrier to understanding. For example, in the essay entitled "From Gutenberg to Gateway," mentioned earlier, the digital youth writes, "My generation is more understanding of other cultures, simply because we are better informed than our parents were. We play games that prepare us for the world by heightening our awareness and teaching us to solve problems." According to this writer, new media digital youth are not only more informed about cultural differences than previous generations, but new communication and gaming technologies are training youth for a globalized world. Another essay reiterates this same point about the growing multicultural awareness of globalized digital youth; however, in this writing, intercultural understanding is founded on a denial of differences, "Since there is no way to tell who people are when they're online, people have to be accepted for who they are. We learn to think about what a person says often times

without knowing who said it, thus eliminating any possible bias" ("Digital Media in My Life"). This statement reflects on the fundamental conflict of modern universalism: on one level, universality promotes equal rights and a rejection of prejudices, but on another level, universality can indicate a lack of sensitivity regarding cultural and ethnic differences. Thus, if we are all treated equally, then none of our differences count.

In automodernity, the conflicted nature of modern universals is often repressed below a hyper-modern sense of globalized access and information exchange. Furthermore, as the following quote from the same digital youth essay implies, modern and automodern universality is haunted by the conflicted double legacy of individualism and social conformity:

Self-reliance and assertiveness are other important qualities gained from the Net. There are Web sites for all sorts of purposes, from fantasy football to free speech. Internet-based self-reliance comes from the independent nature of the computer because it is designed for use by one person. When on the Internet, people decide where to go and what to do entirely on their own, and that idea has been firmly engrained in the minds of this new generation. These thinking characteristics acquired through frequent use of the Internet can be valuable in society, whether taking a stand for a belief, accepting a person's opinion, or setting a goal, are all positive attributes of the way we think, which makes me optimistic about the new generation.

This digital youth rightly proclaims the power of autonomy afforded by the personal computer, and I do not think that we should posit that he is simply being duped by a lure of false individualism. However, what we do need to examine are the possible consequences of this universal model of libertarian self-reliance. One important issue that this same essay brings up is the common connection between individual autonomy and consumerism: "The way kids are going to function in the world is amazing, particularly as consumers. The Internet provides nearly unlimited options and choices. The vast 'information superhighway' gives so many options that it will become necessary to offer customization for every product." This statement does seem to reflect the notion that while the internet can increase our sense of individual control, it can also function to steer our autonomy into spaces that are controlled by economic interests. Furthermore, this version of autonomy appears to be predicated on the marketing rhetoric of free choice in a frictionless economy, and what we often see in this type of belief is a libertarian equation of free markets, free speech, and personal freedoms.

It is important to examine how this new media mode of libertarian autonomy often calls for a privatization of the public sphere and a use of automation in the pursuit of personal liberty and controlled social interaction. For instance, in the following statement from this essay, the young writer combines together a celebration of the social aspects of multiple-user video games with a denial of cultural and ethnic differences.

Online multiplayer video games are, contrary to common belief, very social atmospheres where players get to know one another personally. Gamers often group together in clans or guilds to play alongside each other on a regular basis. I've spoken to forty-year-olds with wives and children who still cut out a half-hour each day to play a World War II-based shooting game. One of the greatest aspects of these groups is that no one sees what the other people look like, but they respect each other nonetheless. These guys could have completely different backgrounds, different ethnicities, and totally different religions, but all of these variables dissolve when you are shooting virtual enemies as a team. Clans and guilds are microcosms of the business world in that people must learn to work together to achieve goals systematically.

In reading this passage, I believe that is necessary to not fall into a simple pro versus con conception of video games and virtual violence; rather, I want to stress that this new model

of social interactivity transforms the public realm into a shared space populated by highly autonomous users/consumers. Instead of the public realm being a place of ethnic and cultural conflict and difference, the privatized public realm becomes a space to ignore differences and to focus on commonalities: once again this is both a positive and a negative universalizing gesture.

On one level, we are seeing a growing tolerance of cultural differences, and on another level, these differences are simply being denied. Moreover, as these digital youth essays reveal, this repression of cultural differences is linked to the veiling of temporal and spatial differences. From a critical perspective, we may want to affirm that without the limits of time and space, many modes of otherness begin to disappear and fade beneath a veil of global access. Therefore, while the Web may enable digital youth to encounter multiple cultures and various social relationships, they often experience those interactions through the window and frame of their PC, and in this technological context, all encounters with others become visually boxed into the confines of the screen: here, the frame of the screen serves as a mental container for Otherness.[33] Like a cage at a zoo or a picture frame at a museum, the structure of the framed screen provides a strong sense of limits and borders. Moreover, it is important to stress that it is the individual who decides what to put up on the screen, and this sense of individual control reinforces the feeling of autonomy for the PC user.

Another location of automated autonomy on the internet are search engines, which allow individuals to perform quickly and easily the complicated tasks of locating, sorting, and accessing diverse information. Through automation, search engines, like Google.com, render invisible the multiple methods and technologies employed to scan, for personal reasons, the globalized Web. Furthermore, instead of relying on experts or modern sorting systems, like library card catalogues, automated search engines appear to put the power of cultural filtering into the hands of the autonomous user. Of course, these technological systems have their own inner logic and preprogrammed priorities, but these systemic issues are most often hidden from view.

In fact, one could argue that PCs and the Web work together to hide social and technological determination behind the appearance of autonomous user control. For example, many blogging programs offer highly controlled and limited templates, but these technological restrictions are buried beneath the power of the individual to create his or her own media. Therefore, even though most MySpace sites look the same and have similar content, digital youth often feel that these automated templates provide for a great deal of personal freedom, self-expression, and personal identity. Furthermore, as in the case of other social networking technologies, personal blogs are a great example of the breakdown between the traditional division between the private and public realms: For blogs give every individual user the possibility of distributing private thoughts in a public space. Like personal homepages, these internet sites trace the movement of media control from large social organizations to the fingertips of individual users and producers. Thus, one of the most exciting aspects of these new media modes of information distribution is that instead of people having to rely on large, corporate media outlets for their news and information, private individuals can become their own public media reporters. In fact, this absorption of the public media into the private realm has also resulted in the use of these private blogging sources in traditional journalistic media. Furthermore, in an unexpected twist, broadcast journalists are now searching blogs for news and personal reporting.

While some may say that the use of blogs exemplifies the postmodern emphasis on the social foundations of knowledge production and exchange, I would argue that the PC world

of personalized culture absorbs the social construction of information into the autonomous echo chambers of individuated media. In other words, when every user also becomes a producer of media, the multiplication and diversification of potential sources for information increases to such an extent that individual consumers are motivated to seek out only the sources and blogs that reinforce their own personal views and ideologies. Here, the screen truly becomes an automated mirror of self-reflection.

One way to summarize the effects of many of these automodern technologies that I have related to the PC is to look at the iPod. On one level, the iPod is the perfect example of the use of automation to give individuals the autonomy to select and filter information and to absorb a previously public domain into the control of the private individual. We often forget that at one time, music was heard mainly in public settings; however, with the advent of recording technologies, music was freed from its live expression and was allowed to enter into the homes of individuals through shared distribution systems. It is also important to point out that the radio, like the television, is still a public medium, which is most often absorbed into private homes and now automobiles. Yet, on the radio, the selection of songs belongs to someone else, and therefore it caters to a more public and shared reception of music. Likewise, albums combined songs in a particular order that pre-package a predetermined collection of music. However, with the iPod, these public and industry-related restraints are eliminated, and the user is free through automation to create his or her own selection of songs.

Most importantly, the iPod allows people to take music anywhere and to use headphones as a way of cutting off the social world around them. For example, I often see students in public spaces listening to their iPods and moving and singing to the music as if they were alone in their private bedrooms. Here, we rediscover the loss of the distinction between the private and the public realms. Also, the fact that so many digital youth take their songs from illegal peer-to-peer internet sites shows how the loss of the public realm is coupled with an undermining of certain commercial interests. In a way, individual users are privatizing the music industry by illegally downloading music and creating their own systems of distribution and consumption. Yet, the success of Apple and iTunes points to the ways that the anticorporate mentality of some peer-to-peer file sharers has been quickly absorbed back into a corporate and consumerist structure. The libertarian impulses of the autonomous new media user are thus quite compatible with the production of a new consumer economy. In fact, in many of my students' essays about their uses of new media, they often equate individual freedom with the free market. Of course, what is usually left out of this equation is the idea of a public realm of protected and enacted citizenship.

Automodern Convergences

Many people feel that the next stage of technology development will be the combination of the iPod, the PC, the internet, and the cell phone. In this synergistic approach to automodern technology, we see the desire for total mobility and individual autonomy through the use of highly automated systems. One fear is that once all of these new media and technologies are absorbed into the cell phone, individuals will lose all ability to differentiate how to act in public from how to act in private. Already, cell phones make it easy for people to have private conversations in public, and this ignoring of the public often results in a situation where people in a public setting are all having their own private interactions with people who are not in the same physical space.

Another danger is that cell phones tend to make people forget where they actually are physically. For instance, it has been shown that when people drive cars and talk on the cell phone at the same time, they are more prone to accidents because they literally forget that they are driving.[34] Like so many other automodern technologies, cell phones allow people to enter into a technological flow where the difference between the individual and the machine breaks down. In other terms, due to the fluid and immersive nature of these technologies, people forget that they are using them, and in many ways, they become one with their machines.

With the immersive fluidity of cell phones, digital youth often claim that they are addicted to the use of this technology and that they suffer from withdrawals when they are forced to not use these machines. In fact, I often see my students approach my classes while talking on the phone, and then when class ends, they immediately, compulsively get back on the cell. Sometimes, I overhear the conversations these students have between classes, and these communications seem to have no other content than "checking in" or stating the students' present location. It is as if they do not feel that they exist unless someone else hears about their current presence. Here, autonomy is shown to be dependent on the recognition of others. Furthermore, it is interesting that students often detail the location and the time of their calls as if to show that time and space are still relevant. Thus, as new automodern technologies break with past conceptions of time and space, they also call for a continuous unconscious return to temporal and spatial coordinates.[35]

This need for digital youth to have their autonomy registered by others can also be seen in blogs, Web cams, and online diaries. All of these new technologies point to the desire for people to be heard and seen by people they may not even know. Like public confessional booths, these automodern processes allow for an externalization of interior feelings and ideas. However, unlike past uses of confession by religious orders, psychologists, and police, these types of self-disclosure do not seem to serve any higher public purpose other than the desire for recognition. Moreover, the fact that the audience of the confession is often absent shows how this type of communication reduces the social other to the role of simply verifying the individual's presence. One could argue that the more mass society makes us feel that we are just a number and that our voices do not count, the more we need to simply use technology to have our autonomy registered through automation. For example, one of the appealing aspects of popular television shows like *American Idol* is that they allow for the individual viewer to call in and register his or her own preference and presence. Likewise, CNN news programs often read viewers' e-mail on air and hold constant polls where viewers can voice their own immediate opinions. In this new combination of autonomy and automation, we have to wonder if this is what direct democracy really looks like, or are these uses of personal opinions just a lure to make people feel like they have some control over situations where they really have very little power? From an automodern perspective, this question of whether these new modes of participatory technology produce false or real autonomy and democracy can be seen as irrelevant because automodern digital youth usually do not distinguish between real and virtual identity.

The production of false autonomy in highly automated systems can also be understood through the example of the elevator button, which is supposed to control the closing of the door, but in reality is not usually attached to any real function. When elevator designers were asked why they include this nonfunctioning button, they responded that many people feel out of control and anxious in elevators, and so this button gives them a sense of control and eases their worries. According to Slavoj Zizek:

It is a well-known fact that the close-the-door button in most elevators is a totally dysfunctional placebo which is placed there just to give individuals the impression that they are somehow participating, contributing to the speed of the elevator journey. When we push this button the door closes in exactly the same time as when we just press the floor button without speeding up the process by pressing also the close-the-door button. This extreme and clear case of fake participation is, I claim, an appropriate metaphor [for] the participation of individuals in our post-modern political process.[36]

For Zizek, automation often allows for a high level of false autonomy and therefore represents a fake mode of social participation. Here, we refind the short-circuiting of the public realm by the automodern combination of autonomy and automation. Therefore, like pushing a nonfunctioning elevator button, instant television polls may only be giving people the feeling that they are participating in direct democracy, while their actual individual power is being diminished.

This high reliance on automation to prove autonomy is connected to an interesting reversal of the modern opposition between the roles of active subjects and passive objects. For example, in modern science, the scientist is supposed to be active and mobile, while the object of study is fixed in time and space.[37] This same opposition can be seen in modern art where the natural object stays rigid on the canvas, as the painter is free to move around. Furthermore, modernity sees technology as a tool or object that is controlled by the active subject. However, in automodernity, all of these relationships are reversed. For instance, in video games, the player's activity is often reduced to the movement of a finger or fingers, while the object on the screen moves around.[38] Likewise, in contemporary physics, the object of study is in constant movement or chaos, while the scientist remains an immobile watcher. Therefore, through automation, autonomy has been projected onto the external object, while the subject remains passive (Zizek calls this "interpassivity").

Of course, television is really the technological object that first introduced us to this curious reversal between the subject and the object. In fact, when the television was first reviewed at the World's Fair by *The New York Times*, the reporter wrote that this invention would fail because no one would want to just sit in their homes and stare into a box for hours at a time. Yet, this type of autonomous passivity is precisely what the automodern culture is willing to do, and the fact that the television became the first real object of the global village shows that there is almost a universal desire for people to be inactive as they watch activity appear in the realm of their objects.

Not only do televisions and computer games share this reversal of the subject and object relationship, but both technologies represent a global spread of popular culture that denies its own value and meaning. For example, whenever I try to get students to analyze critically the shows they watch or the computer games they play, they insist that these activities are escapes and sources for meaningless enjoyment. From this perspective, culture is a way of escaping society and the burden of thinking. What then has helped this type of technology and culture to spread around the world is that it is essentially self-consuming, and by this term I mean it denies its own import and value.

Connected to the television and the computer game is the remote control, whose very name points to the idea of autonomous, automated control from a distance. As Christine Rosen argues in her essay "Egocasting," the clicker allows for a sense of total personal freedom:

The creation and near-universal adoption of the remote control arguably marks the beginning of the era of the personalization of technology. The remote control shifted power to the individual, and the technologies that have embraced this principle in its wake—the Walkman, the Video Cassette

Recorder, Digital Video Recorders such as TiVo, and portable music devices like the iPod—have created a world where the individual's control over the content, style, and timing of what he consumes is nearly absolute.[39]

For Rosen, the ability to just turn people off or go to the next channel represents a strong combination of automation and autonomy, which can be seen as being highly antisocial:

By giving us the illusion of perfect control, these technologies risk making us incapable of ever being surprised. They encourage not the cultivation of taste, but the numbing repetition of fetish. And they contribute to what might be called "egocasting," the thoroughly personalized and extremely narrow pursuit of one's personal taste. In thrall to our own little technologically constructed worlds, we are, ironically, finding it increasingly difficult to appreciate genuine individuality.[40]

From Rosen's perspective, these new technologies not only do not increase unexpected and innovative activities, but they work to get rid of new and unexpected encounters. While I will discuss below different ways that digital youth are now challenging this thesis of ego-centrism in new media, I often think that one reason why students seem to turn off so quickly in class is that they are so used to having so much control over what they see and hear, and yet, like video games, television still provides a highly limited set of possible interactions and activities. While it is common to point to the use of interactivity as the key driving force behind the popularity of computer games for the automodern generation, we often find that the type of interactivity allowed by automated games is highly restricted. Therefore, not only does most of the activity reside on the machine's side, but the activities the machine can perform are all prescripted and form a limited range of actions. In many ways, we are seeing a usage of new media technologies to simultaneously erase and produce individual freedom, while individual freedom is being equated with the free market.[41]

For instance, in order to allow for a high level of preprogrammed interactivity, first-person shooter computer games must replace human interaction with restrictive social stereotypes. However, people still enjoy playing these games and repeating the same scenarios and choices over and over again. While at first glance, this high level of automation and repetition would seem to preclude a sense of personal autonomy, we must see that individual freedom in automodernity often represents a freedom not to do something. Thus, the freedom not to think or not to interact in a social relationship is a highly valued freedom in this cultural order. Likewise, the automodern celebration of free speech is in part derived from the desire to be free from social, political, relational, and traditional restrictions. What is then loved about computer games and contemporary media is that they are often so politically incorrect, and therefore they celebrate the autonomy of the individual no matter how repetitive and reductive the media representation.

Future Uses of Automodern Technologies in Education and Politics

The challenge for educators and public policy makers in the period of automodernity is to first recognize the dominant combination of autonomy and automation and then employ this new cultural order in a more self-critical and social way. For example, educators can create learning spaces where students engage in creative file-sharing activities; however, these same students need to be given critical thinking tools to reflect on the social and public aspects of their activities. This process will require the development of critical technology studies as a central core to automodern educational systems, and essential to this new form of education will be a constant effort of forming a dialogue between "old" school and "new" home models

of media and technology. Therefore, instead of simply ignoring how the digital youth are using new media and technologies in unexpected and innovative ways, it is important to first understand these usages, to theorize and analyze their appeal, and then to find ways to employ them in a productive social manner. Ethnographies like those found elsewhere in this volume offer one method of exploring usage; however, traditions in critical theory, rhetoric, and philosophy offer other modes of thinking about the age we inhabit. And, as I've suggested throughout this essay, careful attention to the subject positions crafted by new technologies will also help us refine the theories humanities scholars deploy when explaining the world around them. If, as scholars, our theories help us to discern the world around us, the new relations of self to power emerging in our networked age suggest we need more supple, nuanced theoretical tools. Whether automodernity represents an extension of postmodernity or a break from it, this chapter argues that we are certainly in a moment of shifting relations of self to other that we need to theorize and understand.

One place where new automodern technologies are being reconnected to the public realm is in the development of social networking Web sites and software dedicated to getting people to organize online and meet offline. For instance, Meetup.com provides templates and strategies for creating social networks that engage in particular group activities. According to their Web site, this electronic social network is involved in combining new media technologies with more traditional social and public activities: "Meetup.com helps people find others who share their interest or cause, and form lasting, influential, local community groups that regularly meet face to face. We believe that the world will be a better place when everyone has access to a people-powered local Meetup Group." Like Moveon.org, this site uses technology and media as a facilitator to connect people online and motivate them to meet in person. In fact, I would argue that this structure employs automodern media for postmodern purposes, and therefore these sites show that the privatization of the public realm is not the only possible result of the combination of autonomy and automation. Furthermore, these new social collective sites may point to the future of both democratic education and politics. In starting off with how people are already using new media technologies, these forums for digital connection offer a new hope for a more democratic public realm.

While I have found that most of my digitally minded students tend to use new media social networking sites as another mode of ego-casting popular culture and personal communication, it is possible to help work from students' own interests while also moving them toward more publicly minded online activities. For example, as an experiment in grassroots online social involvement, teachers can have students create social networks dedicated to a particular social intervention. In using their Viewbook or Facebook personal pages, students can transform their social networks into ad hoc, grassroots collectives directed to whatever causes they want to pursue. One place to look at possible projects for digital youth is the book *MoveOn's 50 Ways to Love Your Country*.[42] This text discusses ways new media technologies can be used to enact a wide variety of public action activities, including letter writing campaigns, product boycotts, social petitions, election activism, voting drives, media criticism, political house parties, and community service projects.

Another way of incorporating the unexpected activities of digital youth is to take advantage of the automodern fascination with viral videos. These short digital movies can be used to collect evidence of consumer fraud and political abuse. In fact, throughout the world, young people are using new technologies to document human rights abuses and other social issues. These social activities display the possible roles new media and digital youth can play in the global democratization and social justice movements. If we still believe that teaching

is meant to broaden our students' horizons, challenge them to think and behave ethically, and expose them to ideas and worlds they might not otherwise encounter, we must take seriously the ways in which new technologies address and engage them and then use their interests as a platform for ethical engagement with the world.

Returning to my opening example of Benjamin as a multimedia, multitasking student, it is important to begin to reimagine how our institutions can both hold onto past effective modes of teaching and cater to new media methods of learning and new forms of the self. The first step in this process will be to develop a more critical and tolerant view of how new technologies affect all aspects of digital youth. My hope is that this chapter will begin a conversation that steers between the extremes of naïve celebration and pessimistic dismissal of radically ambivalent automodern media. In developing a critical model of new media literacy, we can work to integrate new modes of learning and living into older forms of social interaction. Furthermore, by defending the public realm against the constant threats of privatization, we can open up a new automodern public space.

Notes

1. Lester Faigley, *Fragments of Rationality: Postmodernity and the Subject of Composition* (Pittsburgh, PA: University of Pittsburgh Press, 1992).

2. Robert Samuels, *Integrating Hypertextual Subjects* (Cresskill, NJ: Hampton Press, 2006).

3. James Gee, *What Video Games Have to Teach Us about Learning and Literacy* (New York: Palgrave Macmillian, 2004), 169–198.

4. One of the most popular criticisms of postmodernism can be found in Alan Bloom's The Closing of the American Mind; see Alan Bloom*, The Closing of the American Mind* (New York: Simon, 1987).

5. The work of Homi Bhabha has shown a strong recognition of the role of multiple cultures and social movements in the postmodern challenging of modern universalism and European ethnocentrism; see Homi Bhabha, *The Location of Culture* (London: Rutledge, 1994).

6. It is hard to cite sources for the extreme form of postmodern relativism since it is often the critics of postmodernism who have defined this extremist position. A strong example of a critic who has insisted on an extreme version of postmodern relativism is Dinesh D'Souza's Illiberal Education; see Dinesh D'Souza, *Illiberal Education* (New York: Vintage Books, 1991).

7. Many of the first strong theories of social construction can be derived from Saussure's work in linguistics and Claude Levi-Strauss's work in anthropology. These social science works were imported into the humanities in Jacques Derrida's early work; see Ferdinand de Saussure, *Course in General Linguistics*, eds. Charles Balley and Albert Sechehaye, trans. Wade Baskin (New York: McGraw-Hill, 1966); Claude Levi-Strauss, *The Savage Mind* (Chicago: University of Chicago Press, 1970); Jacques Derrida, *Margins of Philosophy* (Chicago: University of Chicago Press, 1982).

8. One of the earliest theorists to connect collage and cultural re-mixing to postmodernity was Frederick Jameson.

9. While the work of Jacques Derrida has been blamed for ushering the extreme cultural relativism into Western philosophy and literary studies, I would argue that it has often been his followers and imitators who have offered a less nuanced and more generalized mode of postmodern extremism.

10. Zygmunt Bauman, *Modernity and the Holocaust* (Ithaca, NY: Cornell University Press, 1989); Ulrich Beck, *Risk Society: Towards a New Modernity* (London and Newbury Park, CA: Sage Publications, 1992); Jean Baudrillard, *The Transparency of Evil* (New York: Verso, 1993); Frederic Jameson, *Postmodernism: Or,*

the Cultural Logic of Late Capitalism (Durham, NC: Duke University Press, 1991); Jeremy Rifkin, *The Age of Access* (New York: Putnam, 2000).

11. Marilyn Cooper, Postmodern Pedagogy in Electronic Conversations, in *Passions, Pedagogy, and 21st Century Technologies*, eds. Gail E. Hawisher and Cynthia L. Selfe (Logan: Utah State University Press, 1999), 142.

12. While it may seem that Cooper's stress on the connection of diverse voices helps to explain my example above of the unexpected use by students of technology for collaboration, I argue here that automodern collaboration should not be confused with the postmodern stress on public and social mediation.

13. Marilyn Cooper, Postmodern Pedagogy in Electronic Conversations, 143.

14. Ibid., 143.

15. George Howard, Culture Tales, *American Psychologist* 46, no. 3 (1990): 187–197.

16. I have found that many students reject this type of argument because they believe that science is neutral and objective and not subject to cultural and historical influences. Students, and many academics, also tend to confuse social constructivism with subjectivism.

17. Alan Ryan, cited in Lawrence W. Sherman in Postmodern Constructivist Pedagogy for Teaching and Learning Cooperatively on the Web, *CyberPsychology & Behavior* 3, no. 1 (Feb. 2000): 51–57.

18. A central reason why students do not feel that their sense of self is being undermined by postmodern society is that the self is a psychological and virtual entity that is not strictly determined by social forces.

19. Lester Faigley, *Fragments of Rationality: Postmodernity and the Subject of Composition* (Pittsburgh, PA: University of Pittsburgh Press, 1992).

20. Ibid., 4–7.

21. Ibid., 8.

22. Essays from the 2006 Global Kids Digital Media Essay Contest can be accessed at http://www.community.macfound.org/crossvolume. This contest asked students from all over the world to write about their diverse experiences using new media (accessed November 12, 2006).

23. Christopher Schroeder, *Re-inventing the University* (Logan, Utah: Utah State University Press, 2001), 2.

24. Ibid., 3.

25. Ibid., 5.

26. Ibid., 6.

27. Ibid., 7.

28. Ibid., 10; Kenneth Gergen, *The Saturated Self: Dilemmas of Identity in Contemporary Life* (New York: Basic Books, 1991); Neil Postman, *Technopoly: The Surrender of Culture to Technology* (New York: Vintage, 1992); Henry A. Giroux, Slacking Off: Border Youth and Postmodern Education, *Journal of Advanced Composition* 14, no. 2 (1994). http://www.henryagiroux.com/online_articles/slacking_off.htm.

29. A major problem with my analysis is that it tends to hide the real economic divisions in our culture that prevent many young people from having access to the same technologies. However, I still feel that the technologies I will be discussing are used by a majority of students who end up going to college.

30. Throughout the 19th and 20th centuries, the mechanized assembly line is often seen as the ultimate example of how automation alienates people and takes away their sense of personal autonomy.

31. Raymond Williams, *Television: Technology and Cultural Form* (London: Fontana, 1974).

32. Behind this discussion of the privatization of the public realm through technology is an acknowledgment of the political movement to undermine the public realm and the welfare state.

33. I am drawing here from Heidegger's work on the enframing power of technology; Martin Heidegger, *The Question Concerning Technology and Other Essays* (New York: Harper Colophon Books, 1977).

34. In fact, some studies equate the effect of using a cell phone while driving to driving under the influence of alcohol.

35. I stress the unconscious nature of the retention of spatial and temporal concerns because students claim that they are not aware that they often have conversations about their locations in space and time.

36. Slavoj Zizek, Human Rights and Its Discontents, 2005, http://www.lacan.com/zizek-human.htm.

37. Jean Baudrillard's work is the major source for explaining this reversal of the subject and the object in contemporary science.

38. While it may be true that new game designers are trying to make the movements of the player a larger part of games, this movement is still highly restricted.

39. Christine Rosen, Egocasting, *The New Atlantis*, 2005. http://www.thenewatlantis.com/archive/7/rosen.htm.

40. Ibid.

41. All of these trends feed into the neo-conservative and neo-liberal movements to justify the cutting of taxes through the downgrading of public programs and the deregulation of the free market. Since the public realm has been absorbed into the automated activities of the machine, and the private realm has been equated with the free subject of the free market, there is no longer any need to fund public welfare projects.

42. MoveOn, *MoveOn's 50 Ways to Love Your Country* (San Francisco: Inner Ocean, 2006).