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# CYBORG GENESIS

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# CYBORG GENESIS

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
English Composition

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by  
Andrew Theodore Castillo  
December 2014

# CYBORG GENESIS

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A Thesis  
Presented to the  
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San Bernardino

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Andrew Theodore Castillo

December 2014

Approved by:

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## ABSTRACT

We are currently living in an artificial, increasingly complex created system of discourse heavily base on socially constructed systems of language and digital technologies. How we use these technologies to advance the human condition in terms of our very existence makes us inherently cyborg in nature. With the increase in digital technologies in every aspect of day –to-day existence from your morning coffee to higher education, we have become increasingly dependent on our cyborg identities. This thesis, then, serves as a project that looks to understand how we have come to this point and to what extent our newly found cyborg identities can serve as the catalyst for progress particularly in education and the further production and transmission of human knowledge.

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CHAPTER ONE  
A CYBORG POSSIBILITY

In *Cyborg Citizen*, Chris Hables Gray claims that:

[f]or good or ill (probably for both) the era of posthuman possibilities is beginning. To deny it is dangerous. To recognize it is to begin to understand, perhaps even control, our postmodern present and the political future of our cyborg society. (12)

The cyborg as Gray describes is in this sense describes our current connection to, and relationship with digital technologies that furthers the production and transmission of knowledge. The cyborg is central in understanding and envisioning a posthuman existence. Simple recognition of the cyborg, however, is not enough. Recognition alone does not take advantage of the potential benefit of the cyborg. Recognition alone does not help us understand the cyborg's place in the world. To fully realize the cyborg's role in this "postmodern present," we must explore its rhetoric in relation to social power structures in this posthuman era. Particularly, we must explore how the cyborg can work to improve the conditions in which knowledge is created and how this we negotiate knowledge production. In project, I attempt to explore the connection between socially constructed power systems and the cyborg as well as the role of cyborg rhetoric as a tool in mitigating hierarchical power structures. Specifically, I



highlight cyborg rhetoric's relationship with the classical Sophists and look at the implications of that relationship for confronting existing power structures.

A cyborg rhetoric has emerged, and is actively evolving, in the current age of the digital. Just as the technology of writing has become inseparable from human consciousness, so too have the technologies of computerized informational systems become so ingrained that we cannot separate our consciousness from or deny the impact of such systems. From smarter and smarter smart phones to the digitization of media, currency, and information in general, the cyborg is an integral aspect of day to day existence whether we are aware of it or not. Our ever-increasing need for and access to information drives the evolution of the technology that makes us inherently cyborg. As with most anything concerned with technology there should be a sense of urgency when thinking through this idea that we are cyborgs; however, with that sense of urgency should come a realistic admission that we have been constantly approaching this moment for some time. *What* we are approaching is an entirely unknown. There may be no ultimate destination or completion. However, we are moving towards a profoundly different way in which we understand our humanity. An understanding of the evolution of balance between our technology and our humanity is in order to continue on this path in any meaningful manner.

In 1985, Donna Haraway offered the initial theorizing of the Cyborg when she stated: “[W]e are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs” (150). Her “Cyborg Manifesto” presents

the bulk of ideological underneath the rhetoric of the cyborg. Cyborg rhetoric is the continual discursive negotiation of the human relationship with digital technologies to alter and resituate the traditional discourse of identity and power. This resituating nature of cyborg rhetoric is inherently progressive and ever-changing as it is intimately tied to the technology it employs. Operating without regard for the traditional allows cyborg rhetoric to avoid simply existing as a palimpsest of itself; its existence relies entirely on the current moment and not the past.

Haraway states that her manifesto is an “argument for pleasure in the confusion of boundaries and for responsibility in their construction” (150). She claims these boundaries have been “systematic to the logics and practices of domination” of all people “constituted as others” (177). This otherness serves as the catalyst for understanding and defining the cyborg. The many different instances of otherness are where the cyborg wishes to fit. Haraway defines these as the dualism of the self/body, male/female, civilized/primitive, etc. More specifically Haraway’s cyborg sets the stage to escape and not simply replace these boundaries and dualisms. To do so, one must be both dominant and subordinate; the cyborg inhabits both positions because it is created (machine) and creator (human). Because of the cyborg’s connection to the traditional as well as the nontraditional, its rhetoric consciously dismantles all that has developed solely from the traditional. All the harmful dualisms, binaries, and hierarchies become increasingly less relevant and possibly even unable to

function in a cyborg rhetoric due to the cyborg's ability to simultaneously embody both sides of established dualisms and binaries.

According to Haraway's definition, the cyborg is "a creature of social reality as well as a creature of fiction" (149). As a creature of social reality, the cyborg exists, and can only exist, within the same type of shifting, situational truth that appealed to classical Sophists. In fact, Michelle Ballif calls the cyborg the "third-sophistic" and suggests a need to shift from the lacking Aristotelian temporal and functional definitions of rhetoric. While denying the privilege of *technê* (a means of production and doing) in rhetoric, Ballif calls for an understanding of this new rhetoric in terms of *mêtis*, which she defines as "a knowing, doing, and making not in regards to Truth, but in regards to a 'transient, shifting, disconcerting and ambiguous' situation" ("Third-Sophistic" 53). Rejecting the idea of Truth suggests a rejection of that which already exists, while offering the promise of an evolving, ever-changing rhetoric.

In *Rereading the Sophists*, Susan Jarratt argues that the sophists reject traditional religion as an explanation for natural phenomena [and] they evinced a special interest in human perceptions as the only source of knowledge in all fields [...] and emphasized the significance of language in constructing that knowledge. (xviii)

In line with this idea is Haraway's contention that the cyborg has no "seductions to organic wholeness through a final appropriation of all the powers of the parts into a higher unity" and that the "cyborg has no origin story in the Western sense"

(150). The strength of the cyborg stems from this resistance to an abstract ideal of both absolute truth and its disconnect from the Western origin myth. Much like the Sophists, the cyborg resists any reverence for past or current power systems and works to dismantle such systems that act as siphons for social power.

For the purposes of my project, I draw upon Foucault's idea of power, because it provides the foundation for discussing the potential social power of the cyborg. According to Foucault, power is everywhere:

not because it has the privilege of consolidating everything under its invincible unity, but because it is produced from one moment or the next, at every point, or rather in every relation from one point to another. (*History* 93)

This net-like system of power that Foucault describes is where I want to position the rhetoric of the cyborg. By adopting this view of omnipresent power and understanding that the cyborg has no stake in this system, it is possible to see the cyborg's potential for subverting existing power systems and as a figure that exists, paradoxically, despite those very systems.

### The Foundation

An appropriate beginning for the discussion of this emerging cyborg rhetoric is Friedrich Nietzsche's *On Truth and Lies in a Nonmoral Sense*. This work represents a major shift in the history of the idea of an absolute Truth in terms of reality and human identity. Nietzsche suggests a kind of

epiphenomenon as he describes the human will to distinguish and maintain one's self from others at the same time wishing to exist within the social and the herd (1172). In this sense, truth does not exist in terms of Plato's ideal forms but rather stems from, as Nietzsche claims, a "legislation of language" (1172). The shift here is important because it allows for an active construction of truth and reality, a kind of truth based on a congress of ideas that relies heavily on the user. This fundamental difference in thinking about truth and its relationship with identity and the social allows for a less anthropocentric view of human nature and insists that a more flexible ideal be accepted as a possibility. Nietzsche insists that social reality, including truth and identity, exists as nothing more than a created system, a system that suits the needs of the user.

The created system that arises out of this "legislation of language" is not an isolated and closed system that operates independently. In fact, this system is entirely dependent on what Mikhail Bakhtin might call an "informational feedback-loop" of varying ideological products. In *Marxism and the Philosophy of Language*, Bakhtin claims that social interaction is essential to human consciousness and, I would argue, the human experience as a whole. Where Nietzsche is concerned with the construction of truth through language, Bakhtin moves further and the concern becomes social interaction through the use of signs to construct human consciousness. For Bakhtin, the truth created through language that Nietzsche proposes is only possible through social interaction. More importantly, this interaction is inherently a dialogic feedback-loop: a

continual exchange that depends on the active participation of those involved. This dependence is most obvious when we consider that Nietzsche's created system of social reality is a user created system which suits the needs of the user: for the user by the user, if you will. Bakhtin's claim that "a sign does not simply exist as a part of reality—[that] it reflects and refracts another reality" speaks to the participation required in order to maintain such a feedback-loop (1211). In other words, human intelligence and consciousness can be viewed, in a way, as the manipulation of signs and symbols. This manipulation takes place in the scope of spoken language, images, and text with which we are constantly in conversation every day.

Attempting to view human intelligence and consciousness as nothing more than the signs and symbols of language may appear to be a drastic idea. However, this idea becomes less drastic when viewed alongside a similarly constructed technology: writing. In his 1986 essay, "Writing is a Technology that Restructures Thought," Walter Ong explores the transition from a society with an oral tradition to one highly dependent on written texts; he argues that this technology of writing has affected the way we think as well as how we view the world around us. Ong acknowledges the difficulty we have viewing writing as a technology. He claims "we have interiorized the technology of writing so deeply that without tremendous effort we cannot separate it from ourselves or even recognize its presence and influence" (19). In much the same way, the signs and symbols of technology have become so ingrained and interiorized that the parts

become almost incomprehensible without the larger context of the whole. Writing is an artificial extension of consciousness, language, and intelligence, and according to Ong, “artificiality is natural to human beings. Technology, properly interiorized, does not degrade human life but on the contrary enhances it” (24). Ong outlines how writing has affected thought and consciousness, specifically through separation and distance: knower from the known, interpretation from data, word from sound, the source of communication from the recipient, past from present, logic from rhetoric, etc. (24). In this sense, writing has restructured how we think; it has actively shaped our consciousness.

A critique of the idea that consciousness is shaped by language or technologies seems to stem in large part from the absoluteness and non-reciprocal nature of such a claim. For instance, the Sapir-Whorf Hypothesis, which treats language in a similar way that Ong treats the technology of writing, is widely criticized, as are Ong’s ideas, for being deterministic. Technological determinism is the idea that technology has transformed our consciousness in a non-reciprocal way, lacking input from the users of the technology. Andrew Feenberg, for example, in “Subversive Rationalization: Technology, Power and Democracy” claims “determinism rests on the assumption that technologies have an autonomous functional logic that can be explained without reference to society” (3). Here we see the critique of the non-reciprocal nature of Ong’s theory. The criticism seems to be that while Ong shows how technology may have an effect on consciousness, he ignores how *society* changes a technology

in turn. Ong's argument about writing can be extended to current digital technologies, specifically regarding the way in which technology has been adopted and reciprocal connection we have with the cyborg.

There is no strict societal/technological separation when considering the cyborg. The cyborg exists within the liminal state of society and technology, neither entirely of one or the other. The fact that Ong chooses to focus on the change undergone by the users of technology, as opposed to the change in technology does not suggest the autonomous nature of technology that critics rail against. In fact, the very nature of technology, its artificial nature, suggests the very opposite: that technology is heavily shaped by society. Feenberg's claim of technological determinism ignores the intimate relationship of human and technology that is the cyborg. While Ong's focus on the technology of writing and its impact on consciousness may appear deterministic, he never dismisses, nor does he discuss, any social or human impact on technology itself.

Considering Ong's idea regarding the ways in which our consciousness can be constructed by and mediated through artificial technologies, I would like to examine this evolving cyborg identity as the direct result of ever increasing digital technologies. The ideas of Nietzsche, Bakhtin, and Ong provide a foundation for considering digital forms of communication in the same way we might consider the technology of writing. Where the artificial technology of writing has been the preeminent technology involved in the construction of human consciousness and



knowledge, now the increasing presence of digital, interconnected computerized systems are at the forefront of influencing and shaping human thought.

### The Cyborg's Potential

Digital systems, especially the Internet, are the new technologies that mediate our thoughts and consciousness. Moving away from the linear separation and literal distance that writing provides, the digital realm of the Internet allows for a less linear transfer of knowledge. To understand how information is disseminated within the interconnected system of the Internet, and the cyborg's role, it may be helpful to look briefly at Gilles Deleuze and Felix Guattari's concept of the rhizome. In *A Thousand Plateaus*, Deleuze and Guattari describe the rhizome in terms of multiplicity and structure, or lack thereof, and claim "a rhizome may be broken, shattered at a given spot, but it will start up again on one of its old lines, or on new lines" (10). To further this concept of the rhizome Deleuze and Guattari explain that a rhizome is composed of plateaus and that exist never in the beginning or the end (24). This suggests a connection with the middle for the cyborg: no beginning, no end, but existence nonetheless. Gordon Calleja and Christian Schwager echo a similar idea in "Rhizomatic cyborgs..." noting that the "organization of the World Wide Web turns it into an instantiation of the concept of the rhizome whose defining attributes bear a strong affinity with those inherent in the structure of the Web" (7). Here we witness an essentially structureless structure that defies that which

is linear: no left to right (or right to left), no requirement to read from first page to last. The “rhizome has neither beginning nor end,” lacks subject and object, and “connects any point to any other point” (23). The Internet provides just such a system without a defined subject, without a defined object, and not restricted to any linear progression. As an entity, the Internet has no predetermined entrance, no particular path to any particular destination; it is the rhizome.

While structurelessness may be a technical misnomer when referring to the Web, due to the underlying code and intentional specifications, for most users, these inner workings are of little concern. For instance, many users learn to navigate the Internet through the use of domain names or website addresses. However, these addresses are technically for ease of use. Each website is actually linked to an IP address assigned to a particular server, and some sites such as Google and Wikipedia have many IP addresses since they operate across multiple servers. Even a complex action such as connecting one computer to an external server becomes so commonplace to a user that the mechanics and technology behind that action become secondary and insignificant. We, in some way, want to interact with our technology in a familiar manner, one which we are used to and that mirrors personal interaction with other humans.

Calleja and Schwager, who touch on the reason our interaction with technology becomes essentially effortless, claim that “[t]he interiorization of an essentially non-linear technology brings with it a cognitive reconfiguration” (8).

This claim echoes Ong; restructuring thought and interiorizing the new technology of writing is essential to Walter Ong's "Writing is a Technology...". Within a digital age, thought, consciousness, and knowledge must be resituated, reconfigured, and reevaluated as the linear transfer of knowledge becomes increasingly less compatible in navigating the vast, highly interconnected digital consciousness that constructs the Internet.

It is exactly this non-linear, layered way of thinking with which the cyborg figure is concerned. To define fully the mechanics and boundaries of a cyborg rhetoric, computerized systems and digital technologies would have to be fully interiorized; however, the evolving technology behind the Internet is in its infancy and still evolving. Nevertheless, the strategies, tools, and reasoning behind a cyborg rhetoric can be examined.

Cyborg rhetoric resists established boundaries and binaries, as N. Katherine Hayles writes in *How We Became Posthuman*. The dialogic feedback-loop that has been established as a result of homeostasis has, according to Hayles, led to a more subversive idea of reflexivity. Hayles defines reflexivity as "*the movement whereby that which has been used to generate a system is made, through a changed perspective, to become part of the system it generates*" (8; emphasis in original). This concept of reflexivity "confuses and entangles the boundaries we impose on the world in order to make sense of that world" (Hayles 8-9). An implication of this confusion is that if a boundary or binary is constructed, the reflexive nature of this new cyborg rhetoric "tends

notoriously toward infinite regress” (Hayles 9). For instance, as technology advances it tends to retain aspects of its predecessors; it remains, in a way, connected to what came before it. A simple example appears in word processing software or an email client. Take the “save” icon in word processing or the “attachment” icon in an email client. The icon to save a document is a diskette and the icon to attach a document is a paperclip. Both of these examples demonstrate the need for technology to remain familiar and reach back to previously established ideas even in the face of a changing technology. So, too, does the rhetoric of the cyborg reach back constantly to established boundaries and binaries, and are in perpetual disruption leaving them unstable and unable to ever become permanent fixtures. Just as the Sophists rejected an absolute truth, the cyborg in a similar way rejects any permanent position or role in an ever-evolving rhetoric.

My next chapter will provide an analysis of how cyborg’s disruption of traditional nodes of social power is possible using Foucault’s ideas on knowledge and power. Foucault claims “that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations” (*Discipline* 27). It is the reflexive nature of power that I wish to explore through the figure of the cyborg. Here it will be possible to see the cyborg’s potential to “disrupt the circuit, [and cause] the ‘perfect communication’ to crash” (Ballif 64).

## CHAPTER TWO

### GOVERNANCE

The posthuman condition resituates the human condition and allows for a larger conceptualization of what our existence means in relation to our traditional concept of humanity. Rosi Braidotti, in *The Posthuman*, suggests that the role of critical theorists should be “to provide adequate representations of our situated historical location [and aim to] produce socially relevant knowledge” (4). The cyborg in this context allows users to assume the role of critical theorists and allows for a much less guarded production of knowledge. This production of knowledge fueled by the cyborg becomes increasingly heterogeneous and socially relevant due to the increase in digital connectivity.

The cyborg in a posthuman world exists digitally and relies on the increasing interconnectedness that manifests itself more and more in daily life. With this reliance comes the question of how the cyborg exists: if the cyborg is a combination of organic and non-organic then users of this digital technology collectively make up and contribute to the identity of the cyborg, how are the tensions of order and autonomy balanced? Power in its simplest sense can be understood in terms of governance: power over one group or another. Can the cyborg be governed, while governing? Is the cyborg’s governance governed? This question of governance is important, as it is, for the most part, the sole means by which societies understand power. There are other measures of

power (money, fame, and social status being the most obvious), but with these measures often come some type of governing influence which is then exercised as a controlling power. To gain insight into how the cyborg can succeed in performing governance, I wish to look at some particular means of governance and their relation to the cyborg's digital existence.

Working with the writings of La Mothe Le Vayer, Foucault draws out three particular forms of government: "the art of self-government, connected with morality; the art of properly governing a family, which belongs to economy; and, finally, the science of ruling the state, which concerns politics" (*Power* 206).

These old conceptions of power exist today and can be seen in the digital spaces that are now commonplace. If we find correlations to these types of government on the web (political, economic, and moral concerns, for example) we can begin to see how online communities govern themselves without the need for intervention from some Machiavellian prince.

Foucault distinguishes between upward and downward continuity, claiming upward continuity comes from the governed's understanding of how to govern themselves and that downward continuity comes from the governed being governed by a well-run state (*Power* 207). However, if we are to assume that there is no governing prince in the case of the cyborg's digital realm, we can say that there is no downward continuity, and therefore the cyborg seeks sovereignty: the cyborg is its own sovereign authority. Foucault claims an end to sovereignty while maintaining finality in a system governed by laws rather than a sovereign

(*Power* 211); however, the cyborg embraces sovereignty while neglecting finality. In other words, Foucault's ideas suggest law as a governing force in itself; no one is above the law. The cyborg's claim here, however, asserts an evolving set of laws with nothing being absolute. Finality, in this sense, can be understood as permanent under an authority and the law. In the case of the cyborg, sovereignty does not stem from laws, but rather from a similar place like that of a sovereign (a general common good). However, cyborg sovereignty lacks the finality implicitly granted to such a figure. Consider that no one person controls the content of the internet, yet there is a basic structure that is followed. This structure, however, can and always will be abandoned by the ever-evolving figure of the cyborg unable to embrace finality in any sense.

For Foucault, any people wishing to resist subjugation must engage in some form of struggle against that subjugating power (*Power* 331). For the cyborg, the struggle is different. And if this discussion is ultimately about power, specifically the potential power of the cyborg, it is necessary to determine what the ultimate struggle is. Foucault seems to echo the goal of the cyborg here: He says of the objective of any struggle that it "is to attack not so much such-or-such institution of power, or group, or elite, or class but, rather, a technique, a form of power" (331). In this case then, the struggle itself is not against traditional power systems, but instead an attempt at equalization—a struggle for power itself. This difference is worth drawing on considering the potential this idea has for the cyborg figure. Consider some of the major

revolutions or movements of the past: the Arab Spring, the civil rights movement, or the women's liberation movement. Rarely was the struggle *against* something or someone, but rather it was *for* something: freedom from some sort of oppression in the previous examples. Just think how successful the "war against drugs", "the war on terrorism", or "the fight against communism" has been. These are all wars that have been continuous and ongoing failures which rely on the notion of a defined opposition, an opposition which believes it, too, possesses moral superiority. A struggle *for* something has no defined opposition; there is no *other* to be defeated, but rather something to be attained. The distinction becomes even clearer when considered with the two definitions of "subject" which Foucault points out: "subject to someone else by control and dependence and tied to his own identity by a conscience or self-knowledge" (*Power* 331). A struggle *for* suggests the latter, whereas the struggle *against* seems to indicate control by some outside power not connected intimately with the self. For the cyborg, power manifests itself through the lack of control by an outside power. The cyborg's gaze is upon itself.

### The Online Panopticon

"The gaze is alert everywhere" (Foucault, *Discipline* 195). For Foucault, this alertness referred to sentinels and guards moving from house to house and maintaining a presence in the streets. For the idea of the cyborg, however, this alertness refers to our own gaze as it exists in any online space. This online



gaze is enacted through our own participation, through online web crawlers bookmarking content, through website moderators, and through increasingly physical government entities. Monitoring, or gazing upon, such vast digital expanse seems impossible. However, what this difficulty in monitoring means for the participants is that, essentially, a form of mob morality wins out. Anything straying from the general consensus is considered deviant, So certain principles and rules of conduct are imposed not only within any actual terms of service agreement (which, for the most part, users remain blissfully ignorant of), but by the consensus of the users themselves. Users no longer exist as, in Foucault's words, "docile bodies" to be governed and managed, but rather as the governing force of one another and the digital spaces they populate. Here we see the example of upward continuity in users understanding how to govern themselves without the need for a Machiavellian prince. In fact, without users, participants, online digital space is nothing more than a void on webhosting server. Just as a school without a student body ceases to exist as a school, less frequented spaces online cease to exist in any meaningful way.

While we as users watch ourselves, most do so under the ever-thinning cloak of anonymity. This potential lack of anonymity may be threatening to some, however, if technology is to be a primary space for educational, economic, and government engagement; users cannot expect any level of privacy different from that of the physical world. The benefits of online technologies should be weighed carefully with concerns regarding privacy. Surveillance, after all, is

inherently unavoidable in online spaces. The permanence of texts, especially digital texts hosted on redundant server space, leaves any hope of anonymity or pure privacy a laughable notion. After all, it is not that a user's information is being viewed that matters, but rather what is done with that information. We as users are all subject to digital surveillance as participants, whether we are aware of said surveillance or not, which is just as Foucault suggests it must be:

And, in order to be exercised, this power had to be given the instrument of permanent, exhaustive, omnipresent surveillance, capable of making all visible, as long as it could itself remain invisible. (*Discipline* 214)

This is precisely the manner in which any type of surveillance works in our ever more familiar online world.

Save files, data caches, backups, and copies all offer a sense of permanence to most types of online data. Online surveillance is inherently exhaustive as the very nature of data on the Internet, in forms of conversation; forums, posts, blogs, tweets, etc. render any form of discretion and precision nearly impossible. All information created and developed with online digital technologies potentially exists forever; omnipresent, indeed. The invisible nature of our watchers, however, is slightly skewed as the extent to which we know who watches seems to stop at entities rather than people. In other words, Company X sold your personal information, not John Schmidt at Company X. These entities, though, are comprised of the very same users who are being watched: in

essence, the watched are the watchers as well. Now this idea might seem a convoluted one, but the fact that the line between watched and watcher is so blurred is the exact reason, the very reason, the online panopticon is so effective. User data is collected on a massive scale by social media and news sites, but the user tends to provide valuable information freely and openly. Facebook founder Mark Zuckerberg, in a 2007 interview, commented on collecting user data in this way, "The question isn't, 'What do we want to know about people?', It's, 'What do people want to tell about themselves?'" (Zuckerberg, Rose). Facebook is the quintessential panoptical model: the surveillance here is passive and entirely dependent on user participation. There is no covert data mining, but rather an agreement between the user and the entity. This agreement is often ignored by the user, but it is an agreement nonetheless. What does this mean for our cyborg identity in online spaces? It demonstrates the increasingly casual, yet complex, relationship that we have with online technologies and the extent to which we are willing to provide information about ourselves without hesitation.

This model of power cultivates a unique inverse power relationship online in that no power exists unless it is freely given. This power relationship is unique when viewed alongside Foucault's notion of what power actually is and what power is supposed to do:

[Power] is a set of actions on possible actions; it incites, it induces, it seduces, it makes easier or more difficult; it releases or contrives, makes more probable or less; in the extreme, it constrains or

forbids absolutely, but it is always a way of acting upon one or more acting subjects by virtue of their acting or being capable of action. A set of actions upon other actions. (*Power* 341)

The Facebook example of power does, indeed, follow Foucault's basic outline, but it is the users who hold the actual power. It is the user who acts upon Facebook's actions, the user who has the power to *forbid absolutely*. If, for instance, Facebook changes a particular privacy setting, or interface, it is the user base who has the ultimate end option, deleting their Facebook account. There exists no ultimate action that can be enacted upon a Facebook user, however. As willing non-captive participants, the users of Facebook hold the real power, and the onus is on Facebook to maintain that willingness of its users.

While the *gaze* of Facebook may be extensive, it does not inherently translate to any form of real power. In fact, even Facebook's identity is constituted by its users (an identity owed in large part to the accessibility of the service). Whether it is accessed on a smart phone, tablet, smart TV, or via a computer, Facebook is extremely simple and easy to use. This simplicity combats, for the most part, what is known as the digital divide: unequal access to various technologies on the part of the user. To combat this divide, however, Facebook must compromise its technology in the sense that it must cater to the lowest common denominator in terms of literacy level and technology (not that this limiting of technology is in any way a bad thing for Facebook's purpose). The concept, however, of catering to the lowest common technological denominator

for the sake of increasing access has two specific negative implications. First, it limits the overall experience, and second, it restricts any significant growth in the technology or a user's overall understanding of a technology.

Indeed, it may be the case that technology, rather than being limited, is actually being filtered and certain technologies are ignored. Certain less practical technologies for large groups, for instance, are not employed due to simple logistics and manageability. As we increasingly depend on technology for education, entertainment, and social interaction, what effect does limiting the technology for the sake of access have on the experience? To what extent do we inhibit our cyborg identity? In my next chapter, these issues of access, governance, power, and self-limiting practices are issues I will attempt to address in the context of a kind of digitally situated pedagogy that should be fully embraced in our current digital age.

## CHAPTER THREE

### CYBORG STRATEGIES

In chapter three, I examine the pedagogical implications of this emerging cyborg rhetoric. Building on the work of my previous chapters, I plan to examine how cyborg rhetoric is, or could be, manifested in learning environments. Through this examination of digital learning communities, I will highlight the ways in which cyborg rhetoric acts a subversive force that seeks to alter traditional systems of power. Paula Freire in *Pedagogy of Freedom* states:

The great challenge for the democratic-minded educator is how to transmit a sense of limit that can be ethically integrated by freedom itself. The more consciously freedom assumes its necessary limits, the more authority it has, ethically speaking, to continue to struggle in its own name. (96)

For whom does the cyborg struggle then? The cyborg is decentralized in its struggle and can act in the interest of all users. This decentralized approach allows for an open pedagogy that promotes critical thinking, creation of knowledge rather than simple transmission, and an aversion to finality concerning learning and knowledge. The cyborg's authority here, in terms of pedagogy, results from its own freedom and openness: its willingness to evolve. A digitally situated pedagogy must evolve to maintain the various connections that are necessary and always evolving as well. Not only do technologies

constantly change, but also the communities in which these technologies are employed change.

Online social communities vary in the ways that they are manifested, usually owing their identity as a site to the more real and tangible attributes of those who contribute to, and exist within, the larger community. Facebook, Reddit, 4Chan, and Wikipedia, for instance, are all vastly different sites, each with a vastly different user base, yet each serving the same basic functions: sharing, discussing, communicating, etc. Learning communities that incorporate online spaces and digital technologies should strive for identity in the same way as online social communities. Without an identity, an online learning space becomes a template with no regard for particular strategies, learning communities, or distinct pedagogical approaches. The question of usefulness for the purposes of education, however, seems to be an ongoing debate. Before addressing some of these concerns, I would like to highlight a previous critique of online technology that proved to be shortsighted. This will set the stage for discussing the current state of digital technologies and the role of the cyborg plays in the current digital climate.

In 1995, Newsweek published the article “Why the Web Won’t Be Nirvana” in which author Clifford Stoll outlines the various reasons why the Web falls short in shaping future human interaction. Stoll writes

I'm uneasy about this most trendy and oversold community. Visionaries see a future of telecommuting workers, interactive libraries and multimedia classrooms.

While this is easily dismissed, the point is simply that early technologies can easily be criticized and its potential can be unrealized. Certainly, this community is more than a passing trend and the multimedia classroom has evolved beyond a classroom with walls at all, moving ever-closer to online education as an alternative to the traditional classroom. This fact, however, was unknown to Stoll in 1995, but his critique seems almost comical in the current day as he continues his condemnation of online technologies with the insistence that "What the Internet hucksters won't tell you is that the Internet is one big ocean of unedited data, without any pretense of completeness...the Internet has become a wasteland of unfiltered data" (Stoll). While his lack of foresight can be forgiven, his flawed assumptions cannot be ignored. One of the very simple, yet important, tenets of online technologies gets blasted by Stoll as he comments on users ability to generate content and post for audiences to see. Stoll provides this misguided interpretation, "Everyone can be heard cheaply and instantly" and "[w]hen most everyone shouts, few listen" (Stoll). Stoll's sentiment here seems to privilege order over some imagined form of chaos; however, existing in this imagined chaos is exactly what makes users more cyborg than not. Cyborg identity ceases to be about the technology used, but rather the extent to which users integrate themselves with a given technology to cultivate a new and



innovative discourse that depends on the very shouting Stoll condemns. While Stoll's arguments can be dismissed today, there are still many concerns about the effect of digital learning spaces on students. These concerns involve the mediated interaction of online spaces vs. face-to-face interaction, issues of technological access, and student learning.

Online spaces depend on an oversaturation of voices; this potential chaos is where the cyborg strives and is what allows for endless potential in digital spaces. Education, for instance, has become increasingly connected to, even dependent on, online technologies. With the ever-increasing demand for access to education, and the increasing cost, online technologies will be increasingly used to accommodate a myriad of student needs. In terms of cost, for instance, William Bowen, in *Higher Education in the Digital Age*, references a 2012 College Board report which states that tuition rates have, over the thirty-year period between 1982 and 2013, increased an average of 257% (19). This rise in cost coupled with increased demand has led to the inception of the Massive Open Online Course, or MOOC, as a means to “teach” thousands of students per class. Susan Meisenhelder, in “MOOC Mania”, comments that the MOOCs are mostly “‘talking head’ or ‘sage on the stage’ lecture videos” and because of the size “professors do not interact with student either to encourage them, to add insights, or even to tell them they are on the wrong track” (7). Meisenhelder explains that the appeal of the MOOC comes from promises of access and affordability for low-income and working-class students (9). Meisenhelder points

out that any faculty member teaching a traditional face-to-face course with the same characteristics of the MOOC could “expect the harshest criticism...for his or her retrograde pedagogy, inadequate assessment of student learning, and dismal failure to foster student success” (8). So, while employing technology, the MOOC does so in way that simply compounds and continues poor pedagogical approaches.

The MOOC is inherently anti-cyborg, however, due to the means in which online technology is employed. The MOOC, by its very design, is anti-chaos; it is over structured to such an extent that online technologies are reduced to nothing more than delivery systems, e.g. videos, slide shows, lecture notes, transcripts, and message boards. In short, the MOOC’s superficial use of technology ignores the potential for meaningful integration of technology that enhances human interaction. The sheer scale of the MOOC is another obvious defect. *Massive* is the unique distinction that sets the MOOC apart from a number of other open online courses offered by online sources from YouTube to MIT. Even the *Massive* qualifier has a somewhat negative connotation that conjures images of instability and unsustainable growth. The MOOC model, with its 1000:1 student teacher ratio, can in no way afford students an effective educational experience, just as a single arrow shot will have no effect on brick wall. And, as is the case with the limiting of technology by Facebook, the MOOC by its very nature must operate within the lowest common technological denominator to teach the thousands of students it claims to be able to reach.

## The Digital Divide and Access

Traditionally, the digital divide has been discussed simply in terms of varying levels of access to digital technologies by different groups. Initially, this divide was viewed at a simplistic *have vs. have not* level; however as digital technologies have become more commonplace, there seems to have been a move to accept that the inequality of access is the issue rather than simply access vs. no access. In a 2008 article, “Exploring the Gap of the Digital Divide” Stale Rye addresses both of these viewpoints. Rye first mentions the traditional concept of *bridging* that hopes “that the underprivileged [without access] can join the privileged [with the benefits of access]” (73). This traditional model of the digital divide, however, is impractical and unrealistic given the social and socioeconomic disparities that are a reality across communities, counties, states, and even countries. Rye next addresses the concept that should seem the logical and, in my mind, inescapable, attitude towards this digital divide: that access and technology should be viewed as a continuum where access and quality of access vary greatly (73). This model of the divide is a practical, realistic acceptance that I wish to work under. The underlying reasons behind these variations are due in large part to variations in socioeconomic status, education, and even geographical placement. The fact is that these differences do exist and are the root cause of the misinformed pedagogical position of MOOCs.

Given the differences in quality of access, the only way the MOOC works is to ignore this divide and exist in a perpetual retreat, in the lowest common technological denominator. The MOOC adopts a traditional top-down pedagogical model and uses technology simply for dissemination of information. This top-down approach is no different from using a bullhorn to reach a large audience. In fact, this bullhorn approach works counter to the upward continuity approach of the self-governing discussed earlier. What the MOOC does, in terms of the cyborg, is stifle and restrict potential. The MOOC provides connectivity based access to a large number of students; however, what it neglects to do is provide any of the benefits of a truly digitally situated pedagogy.

Access should be considered in terms of not only connectivity, but also level of technology. The very best connectivity means very little if an attempted digital pedagogy is simply text-based, for instance. The use, or under use, of a particular technology has to be considered with the same weight as the level of technology itself. A pedagogy that simply reproduces a traditional classroom model, but employs technology, is counterproductive in terms of addressing the digital divide. In part, the digital divide can be viewed as less of a technological divide and more in terms of some of the broader social issues that affect quality of access. Without a certain degree of technological literacy users will be unable to effectively use technology in a truly beneficial way. In fact, in “Digital Divide Across Borders” researchers point out this very fact and note that “mere access to a computer or the Internet does not imply that people actually can or will make

effective use of it” (Notten et al. 552). So, in essence it is not the technology that is key in a digitally situated pedagogy, so much as it is how the technology is used in a way that enhances a student’s learning experience. What can technology do that was previously not possible?

Mark Zuckerberg, with Facebook, connects billions of users through ease of use, cross-platform compatibility, and a limited, just enough technology model. The MOOC can reach thousands of students per course through ease of use, cross platform compatibility, and a limited, just enough model. This increase in activity and access is, as previously mentioned, the bullhorn approach. A well-developed digitally situated pedagogy should be less about an increase in audience and more about how particular technologies can be used to enhance student learning in new and innovative ways. In my next section I will propose some tenets of an effective digitally situated pedagogy and contrast these tenets with the current top down educational model that technology is currently being used to perpetuate.

### Digitally Situated Pedagogy

Just as with traditional pedagogical approaches, a digital pedagogy should be about effective teaching and student learning. An online course, for instance, is not good simply because it is online in the same way a face-to-face course is not good simply because it is traditional. There can, and always will be, terrible courses whether online or face-to-face. The idea here is to consider what an

effective course does and how technology can enhance that effectiveness. A lateral move of traditionally bad in-class practices to an online digital space (as is the case with the MOOC) makes no sense in terms of improving either student learning or pedagogy. The move towards increased digital technologies in the classroom remains an unavoidable fact and to best take advantage of these digital technologies we must consider some of the best ways to use technology and move from the bullhorn approach of the MOOC.

The underlying approach when using technology in the classroom should be not to privilege technology over pedagogy; in other words, technology should not be used simply for the sake of using technology. The most ubiquitous digital tool in online and traditional face-to-face courses is a common management system, or CMS, such as Blackboard and Moodle. These tools act as the interface for a course providing access to grades, assignments, discussion and message boards, and any number of other tools available to faculty and student. A CMS system provides a foundation for a well-designed student centered course, although conversely provides the same foundation for the flawed teacher centered approach of the MOOC. However, as I mentioned, it should be pedagogy over technology and how the technology is used to enhance a course.

The obvious benefit of the using digital online technologies is the traditional concept of distance learning, which is the exact rationale for the MOOC. However, to compensate for this distance the MOOC simply yells louder. To compensate for this benefit of distance a truly digital situated pedagogy

should aim to recreate much of the lost interaction between students and instructor; one of the benefits of a face-to-face classroom. David J. Staley suggests, in a chapter in *Teaching the Humanities Online*, however, that the traditional embodied classroom approach should not be privileged over the seemingly disembodied approach that online teaching provides. Staley comments that:

Young people inhabit two worlds: a physical world and a virtual networked world [and that] virtual, disembodied interactions and experiences are as real to these students and as valued as their embodied, face-to-face relationships. (161-162)

For many students, a disembodied digital existence supplements their own embodied existence in a very real way. This fact indicates that online interactions would be as meaningful to them as traditional in class interactions. I think the key here is interaction and what technology is does to enhance this interaction.

An online course employing various digital technologies has the potential to afford students many options not always possible in the traditional classroom. The fact that learning can be asynchronous or synchronous in a virtual classroom provides much more flexibility for instructors and students. In fact, the options afforded to both student and teacher are discussed by Merry Rendahl in "It's Not The Matrix: Thinking about Online Writing Instruction". The essay describes the combinations of certain factors that are possible with online education. These

interactions are discussed in terms of time, interaction, and space. First, “time can be synchronous, asynchronous, or diachronic (developing over time)”. Second, “learning space can be co-located or separated”. And third, “interactions can be described as unmediated, necessarily mediated, or optionally mediated”. The idea behind these types of interactions and connections, according to Rendahl, is the mitigation of distance that must be addressed in both online and traditional classes (146).

Mitigating distance can also be viewed in the context of assignments that incorporate students’ increased natural interaction with digital technologies. Jonathon Alexander and Jacqueline Rhodes in *On Multimodality* note the “importance of paying attention to student literacy practices” (39) when considering discourse in composition classrooms. For students, this means being allowed to incorporate their own kind of technological literacies without privileging traditional rhetorical practices. Alexander and Rhodes continue this idea with the assertion that “we shouldn’t apply older notions of literacy to the new technologies” (42). They also echo my contention that technology should not be used simply for the sake of technology in state that technology should “explore what those new technologies offer us by way of an expanded notion of rhetorical practice and engagement with different discourses” (42). So, to what extent does using digital technologies in the classroom move us away from traditional literacy practices and enhance our ability to cultivate the alternative rhetorical practices of our students? Knowledge production changes as the



means of production changes. A critical analysis of a text, for instance, would look vastly different whether initiated in the form of a traditional essay or via collaborative Twitter posts. This URL ([https://docs.google.com/forms/d/1Qj1g9NpAtjzuL\\_ypmn6l\\_yeF8WSrK7YDaLAHIXw44Tk/edit](https://docs.google.com/forms/d/1Qj1g9NpAtjzuL_ypmn6l_yeF8WSrK7YDaLAHIXw44Tk/edit)), for instance, means little in a traditional essay format; however, embedded in a web page, it allows the writer to direct readers to more information. Ultimately, the way information can be produced, presented, and played with becomes increasingly varied and important when attempting to integrate new literacy practices with new technologies.

### Conclusion

According to Chris Hables Gray:

*Knowledge is power.* To be empowered, the cyborg citizen has to have the specific information that govern our technical and political situation, and we need to understand information, theory which lays out the limits of knowledge.... Knowledge as power moves from the specific to the general and back again. (198-199)

For the cyborg and a functional digitally situated pedagogy to succeed we must consider this movement of power as knowledge. As technological progress is made and particular knowledge becomes less powerful, we must continue to adapt emerging technologies in ways that will allow students to remain active producers of knowledge in and outside the classroom. We must not simply use

new technologies for the sake of using new technologies. Trends and educational fads must be avoided. A true digital pedagogy should employ technology in ways that enhance student learning and advocate for student-centered approaches in the classroom. Where technology is superfluous, it should be dismissed. Where it enhances, it should be embraced. The third-sophistic, the cyborg, works best to advance pedagogy when concerned with progress rather than finding a footing in a historical context. The cyborg does not seek to make a name for itself, but instead to further pedagogical progress. As we move beyond everything that is current, we must not be caught up with the difficulties of the new and the issues of the past and refuse progress for the sake of nostalgia.

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