Alice in Cyberland:

Haraway's Mythology at Work on the Web

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5/11/15

"We're all mad here:" An Introduction

Humans are growing more physically entangled with their tools than in any other point in history; we are starting to inscribe technology on our bodies. Already, pacemakers control heartbeats as fitbits monitor metabolisms, GPS chips track and map our movement, cell phones are permanently affixed to pant pockets, or purses, always at hand. Soon, advances in bioengineering may enable titanium bones, or on board computer systems to optimize our bodily functions. Communication, or the search for information, may be as breathless as a blink or, one day, a thought. Soon, we will be cyborgs, cybernetic organisms, freaks of nature and our own imaginings.

Yet, 'we' does not mean everyone, for technology does not reach, impact or enable everyone in the same way. Technology, like other human resources, is allocated according to cultural politics, according to the hierarchies and dichotomies through which we order our lives, notably along axis of class, gender, and race. In 1991, Techno-Feminist Judy Wajcman noted the deliberately exclusionary usage of the very word technology, observing "the very definition of technology. . .has a male bias. The emphasis on technologies dominated by men conspires in turn to diminish the significance of women's technologies, such as horticulture, cooking and childcare" (as cited in Ferrando, 2014, p. 4). Like other political decisions, the creation and allocation of technology has differential affects on identity groups, especially those who did not have a voice in the decision making or technology creation. Eileen B. Leonard points out that "Since minorities are systematically steered away from technology, it has become a major instrument of elite male domination" (as cited in Ferrando, 2014, p. 4). Donna Haraway, the first 'Cyberfeminist', wrote in the early 1980s out of a legacy of Marxism and feminism, lending a voice to the technologically disenfranchised with "A Cyborg Manifesto."

Thirty years ago now, Haraway called for an appropriation of technology by the oppressed to enable the destruction of marginalizing cultural and political dichotomies. The time is ripe to reexamine her monstrous cyborg, looking to the internet to see how Haraway's call has been answered. Intrigued by the ubiquity of the web and the potential dis- and re-embodiment in the virtual world, and motivated by the question 'is Haraway's cyborg being realized with the internet?" this paper will examine Haraway's cyborg, why the internet is an appropriate place to look for Haraway's myth made real, and the slew of cultural ramifications inherent in elective, virtual disembodiment. It will contend that while various internet platforms have enabled brave re-appropriation of some religious, class, or national identities, the "genderless utopia" is but a hazy dream, in part thanks to the entrenchment of gender significance in the virtual world.

Meet Alice, Cyberland's Resident Cyborg

Haraway's cyborg identity is a useful political myth which calls on us to embrace technology even in its incorporation with ourselves. Once we are both biologically and cybernetically constituted, the boundaries we set for ourselves, (fictions we propogate to define the borders of our daily, lived experiences) are called into question; man/machine, natural/crafted, man/woman, black/white. The cyborg rests on the spectrum in between these polar identities, contending, with its transience, that these traditional dichotomies are not composed of opposites, but two different states of being which are continuous with one another. To these myriad traditional dualisms, the cyborg recognizes "they have all been systemic to the logics and practices of domination of women, people of color, nature, workers, animals—in short, domination of all constituted as others whose task is to mirror the self" (Haraway, 1991, p. 312). The existence of the cyborg (literally or metaphorically) demands a thorough interrogation of our most fundamental assumptions about the dichotomies which define us, which set the

'good' against and apart from the 'other', and create boundaries of oppression. The cyborg is both the question and the answer to that interrogation; a multiplicity of identities, a being of ether, a monster by traditional metrics. Speaking from a strong legacy of feminism, socialism and materialism, Haraway's cyborg defies domination in its search for affinities, not unities; its acknowledgement of the dynamic, multilayered matrices which make up each of our political identities, and its embrace of "the skilful task of reconstructing the boundaries of daily life, in partial connection with others, in communication with all of our parts. It is not just that science and technology are possible means of great human satisfaction, as well as a matrix of complex dominations. Cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves" (Haraway, 1991, p. 316).

The World Wide Rabbit Hole: Characteristics of Cyberland

The internet has created a platform rife for this kind of reconstruction, owing to its connectivity, its ubiquity, and its accompanying disembodiment. The internet is the ultimate in information-communications technology. It is both a massive information database (a tool enabling personal growth and exploration) and a locus of connectivity (a tool enabling faster interactions from farther away). As the ultimate information communications technology, it is therefore too the ultimate tool for use by the informatics of domination, Haraway's term for the "scary new networks" of the traditional white capitalist patriarchy, the traditional oppressors (Haraway, 1991, p. 301). Domination in the 21st century comes from control over the flow of information. Drawing from Michel Foucualt, Haraway talks about control of information as the tool of organizations for monitoring and "inscribing social relations of power" (Brooks Smith, 2009, p. 70). "Statistics, record-keeping, and advanced information systems today are marking new lines of prejudice and reasserting old ones in oppressive ways that deeply affect people's

daily lives" ways that are facilitated by the internet, on a very real level (Brooks Smith, 2009, p. 70). The internet has become a prime tool for both government and multinational corporations alike, between the National Security Agency and Google each documenting a profile on every internet user, for their own varied purposes. Though used to further power disparities between the informatics of domination and the marginalized, the internet was born ready to be repurposed for resistance.

Secondly, the absolute ubiquity of the internet makes it an appealing potential tool for a cyborg. Increasingly, the internet is available to the oppressed and oppressors alike. A research project for Women's Studies Quarterly found that "Women remain the poorest global citizens; the digital era has not shifted this in significant ways. However, aggregate-level country-specific data show that women have increasing rates of participation online, often at faster rates than men" (Daniels, 2009, p. 105). Increased access in developing nations, and in public facilities (libraries, coffee houses, etc) in leading nations is rapidly decreasing the 'digital divide' in internet access. Internet access has been a UN declared human right since 2011 (Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression), and countries like Estonia, Finland, France, Greece, Spain and Costa Rica have made internet access a constitutional or legal right (Rothkopf, 2015). Currently, it is estimated some 3 billion people have internet access; a number that is rapidly expanding (Rothkopf, 2015). Though the identities of those 3 million people are still very much a matter of politics and privilege, nearly half the world will have internet access by the end of the decade, making it one of the most dispersed and democratized high ICT technologies ever; a prime candidate for the emergence of cyborg consciousness.

Finally, there is something notably unique in the internet's form of disembodiment. The internet offers anonymity, initially, and then, through various forms of social media, or other communications that require identifiers, individuals can experience a form of self creation, "identity tourism," during which they can seek to experience the culturally and politically assigned benefits of a different form of embodiment, or the freedom and experimentation of a fantastical or counter-cultural form of embodiment (Daniels, 2009). Either way, identity tourism, a rudimentary example of what it would be like to be able to technologically define our own physical embodiment, provides a literal example of what Haraway had in mind when she found "communications technologies and biotechnologies are the crucial tools recrafting our bodies" (Haraway, 1991, p. 302).

Whooo Are Yooooouu?: Internet and the Gender Dichotomy

More than any other divide, Haraway emphasized the implications of technology for removing the cultural significance of gender. Not, importantly, eliminating the distinctions of male/female, but rather moving away from the predetermined, culturally assigned roles and ramifications of gender, to "deconstruct the biological basis of patriarchy," as feminist Shulamith Firestone explained in 1971 (cited in Dvorsky & Hughes, 2008, p. 7). Many transhumanists too see gender socialization as a concern not only for women who experience normalized inequality and abuse, but also men who, thanks to societal conditioning, are led to have "shorter life expectancies, to be more likely to take health risks, to die in combat and work in dangerous occupations. . . males tend to have more accidents than females across their entire life spans; four every girl that is injured on the playground, four boys are likewise injured" (Dvorsky & Hughes, 2008, p. 2).

At first glance, it seems as though the disembodied virtual world accessible through the internet might potentially allow for radically free exchange of ideas unhampered by social ties and physical descriptors. Outside of dating forums, why should someone's gender identity matter in internet mediated communication? Unfortunately, predominate internet practices hint at the inescapability of gender, even in bodiless space. Without a physical presence, men find themselves stuck with ". . .the electronic loss of the physical self" which "ultimately leads to a violent and sexualized verbal compensation," Cyberfeminist Kira Hall has dubbed the "talking penis" effect (1996). Her research on communication in various internet chat rooms revealed an electronic discourse with gender based characteristics mirroring face-to-face conversation. That is to say, "male participants, even when in cyberspaces. . . silence their female conversation partners by employing electronic versions of the same techniques they have been shown to employ in everyday face-to-face interactions" including but not limited to "ignoring the topics women introduce, producing conversational floors based on hierarchy instead of collaboration, dismissing women's responses as irrelevant, and contributing a much higher percentage of the total number of postings and text produced" (Hall, 1996, p. 154). The result is a masculinization of virtual space, in which "bodyless communication, for many men at least, is characterized not by a genderless exchange, but rather an exaggeration of cultural conceptions of masculinity" (Hall, 1996, p. 158).

There is no clearer example of this terrifying trend than the "Gamergate" scandal of 2014. In short, what started as a public breakup between a journalist and designer in the gaming industry ended with hundreds of death and rape threats scaring at least 4 professional women out of their homes. The Washington Post has referred to "Gamergate" as a "culture war" and a "never ending onslaught of internet misogyny" enabled by the safety of anonymity and fueled by

the hyper-masculinization of internet communication (Dewey, 2014). The article is careful to

note that, while they may speak the loudest, these talking penises are not speaking with the voice

of the majority of internet users. There is reason to hope then there are still people using the

internet in ways that undermine, rather than entrench, gender conditions and stereotypes.

For example, seeking to avoid the outbursts or aggression of the talking penises, some

women engage in "cross-expressing" or "identity tourism" in which they try on for size the

descriptors generally applied to persons of another race or gender" giving them the freedom to

actively avoid the pitfalls associated with their real-world physical embodiment (Daniels, 2009,

p. 110). This might be particularly appealing for people who would feel most comfortable with a

different embodiment (members of the transgender community, perhaps), or even people who

have certain traits or habits of the opposite gender society prohibits them from expressing. Yet,

rather than shaking the foundations of the gender dichotomy through fluid gender identification

and the free construction of identity, cross-expressing reinforces the gender dichotomy, and the

preference for the experiences of one gender over another. Socially constructed identities reassert

themselves, even as people are allowed to construct however and whatever they wish, and a

cyborgian reconstruction is hampered (Squires, 2000).

"Imagination is the only weapon in the war against reality:" Undermining Assumptions

with the Informatics of Dissent

The internet has had a somewhat more substantial impact in creating social solidarity in

opposition to oppressive political regimes. Haraway's informatics of domination (the networked

white-capitalist-patriarchy) now has to contend with the "informatics of dissent," "a growing

section of people in the industrialized world who experience civil and social disenfranchisement

under capitalism, but who do have relatively privileged access to advanced technology" and "are

developing their own "scary new networks" of resistance" (Brooks Smith, 2009, p. 69). The

internet is replete with these kinds of communities. J. Daniels (2009) specifically points to the

Revolutionary Association of Women of Afghanistan, a forum where women under Taliban rule

can feel safe in discussing their oppression, discussing their bodies, or feminism, or revolution.

For them, the internet is a powerful tool for identity construction, a tool that offers a "textual

process of self expression without the prohibition or limitation of physical space—offers new

possibilities for women's agency and empowerment" (Daniels, 2009, p. 109). Here, they can

construct political identities, can be active participants in a global movement, and can engage in

garnering global awareness about their embodied situations. Cyberland, for these "educated

young Iranian women," is a "liberating territory of one's own—a place to resist a traditionally

imposed subordinate identity while providing a break from pervasive Islamic restrictions in

public physical space" (Daniels, 2009, p. 108). And still, the possibilities for the internet are even

more literally liberating than that.

Alana Brooks Smith discusses the importance of "Twitter Revolutions," a colloquial term

to describe the way in which the Arab Spring was facilitated by social media platforms (2009).

Throughout Moldova, Tunisia, Iran, Egypt, and later Ukraine, social networks are being hailed as

the most powerful tool of modern protest. Not only did social media provide an unprecedentedly

fast and easy way to mobilize thousands of people, but it also projected the revolutions onto the

world stage in real time. The irony here is that the revolutions were promulgated with a

technology the elites of countries like Iran and Tunisia censored and used to control the

population, monitor the revolutions, track certain leaders, store texts and document

conversations. In response, their attempts were overridden by the grassroots network of dissent,

the cyborgs, who adapted and harnessed the technology for their own use, creating with it

"circumvention technologies" to prevent surveillance (Saletan, 2011).

   The opportunity is immense for these tools, these connected, "little technologies--cell

phones, text messages, CDs, flash drives, Twitter" that pair with the internet to massively

disseminate information faster and more effectively than traditional media outlets, and "are

critical to circumventing totalitarianism" (Saletan, 2011). These tools are so powerful, in fact, the

US Army issued a report in 2008 fearing Twitter could be used for terrorism (Brooks Smith,

2009) and, four years later, was participating in the development of "circumvention

technologies" in the Middle East (Saletan, 2011). New technologies, especially when they

facilitate increased social solidarity, discussion and debate, catalyze a process of cyborgian

reconstruction when people realize "things do not stay the way they have always been and laws

are not unshakable, eternal truths; we simply shaped our behavior to accommodate them—until

now, when they no longer fit our lived experience" (Brooks Smith, 2009, p. 71).

"I can't go back to yesterday because I was a different person then:" Suggestions for Aspirant Cyborgs

   One of the primary drivers for action on the internet is the potential for anonymity. Yet,

even in a world, a web, where you are allowed to speak without a name, allowed to see without a

face. . . you still must have a gender. Other users will look for it, most social media sites will

demand it, and if you say something a particularly community finds distasteful, your gender will

be on trial. We seek it out as an anchor to our physical identities in a way we do not similarly

demand or scan for race, or class; perhaps an indication of the preeminence of gender as a social

identifier.

As previously discussed, the internet has two primary functions; an information database and a communications network. We *can* seek to undermine the gender dichotomy on both fronts. Our gender defines our lived experience which defines the obstacles we face which defines the types of questions we seek answers to which will defines the information we might seek out on the internet. That does not necessarily mean the information is gendered, just that certain genders might seek and find certain types of information. The bias enters in when the content/information available is predominately generated by white men (owing to long-standing gaps in higher education, and then job prospects, then the so called glass ceiling preventing job advancement for women and minorities). Luckily, this is increasingly not the case as university attendance starts to balance between the genders and, more noticeably, thanks to the 'amateur revolution.' Brooks Smith notes "professional categories were (are) called into question as regular people started reporting news and posting photos, challenging longstanding distinctions between who and who was not 'a journalist'" (Brooks Smith, 2009, p. 72). Information, photos, stories, blogs, opinions on the internet can become popularized without being constrained by a lack of education or proper financing. On the internet, people can hold 'jobs' or titles they might never be able to achieve in the real world, enabling themselves with a do-it-yourself attitude. And our communication, which requires more of an identity than information seeking, could be even less limited by physical realities.

Haraway was careful to note, after the initial release of the Manifesto, what it meant for her to transgress gender boundaries. "I have no patience with the term post-gender. I have never liked it. Gender is a verb, not a noun. Gender is always about the production of subjects in relation to other subjects, and in relation to artifacts. . . Things need not be this way, and in this particular sense. . . I approve of the term 'post-gender.' But this is not 'post-gender' in a utopian,

beyond-masculine-and-feminine sense, which it is often taken to mean" (cited in Ferrando, 2014,

p. 11). Not the absence of gender, but a diminishment of its social significance as an automatic

reference point to other subjects and other things. It seems the internet is the ultimate platform

where one can operate without needing gender, because one could be infinitely referenced back

to oneself, with a hyperlinked, networked identity, an identity built from scratch. Why

automatically link to a gender and all of the subtext that implies when you can build something

truly unique? Be a truly networked self without a physical anchor.

An abandonment of gender for virtual space is not yet a sufficient answer. It does not

sufficiently highlight the spectrum of gender potentials, the benefits of finding gender-based

communities, or the fact that we might not be able to ultimately abandon gender. Post-modernist

Katherine Hayles deliberately points out how much the body matters even in disembodiment,

that "the body is the net result of thousands of years of sedimented evolutionary history, and it is

naïve to think that this history does not affect human behaviors at every level of thought and

action" (cited in Ferrando, 2014, p. 4). Even still, attempting to operate on the internet in a

fashion that makes gender irrelevant might be a way to undermine its significance for

oppression, for resource allocation, for what is worth 70 cents and what is worth a dollar in the

physical world. Take, for example, the vast internet usage profile of the (hypothetical) Kim

Jones. They have no gender listed. They love cooking, and the TV show Friends. They work as a

nurse in a maternity ward, drive a Ford F-150, and make a point of attending every demolition

derby within a 50 mile radius. On social gaming, they play as both men and women, orcs and

even cyborgs, from time to time. Is Kim a man? A woman? Does it matter? Does he or she need

any referent beyond themselves, in this virtual forum, outside of which we may never meet?

Perhaps *an* answer to undermining the gender dichotomy with the internet is to respond to forums that have the gall to ask "male or female" with a resounding "neither" or "here, it does not matter." Here could identities be "ether, quintessence." Here could there be cyborgs.

Curiouser and Curiouser: A Conclusion

The cyborg is a myth, an origin story, a guide showing us how to revel in technology, undermine assumptions, defy the informatics of domination, and cross boundaries. Clearly, it requires initiative on the part of the aspirant cyborgs who must harness the technology in certain ways; it is not determined, in other words. Currently, the internet is complex web of interaction. There are those who go to feel disembodied, and those who go to feel reaffirmed in their embodiment, or to change their embodiment, or to politically mobilize with others who are embodied in the same way. However, disembodiment is more often used as an escape from fixed gender than as a weapon for the destruction of the significance of gendered embodiment, or a tool for the reconstruction of cyborgian identities. While social media platforms have enabled affinity and consolidation against oppressive regimes built on money, race or religion, gender stands as an unquestioned tyrant.

Haraway, 30 years past, has been wired into discussions of feminism and of technology, a cybernetic reminder that "Technologies and scientific discourses can be partially understood as formalizations, i.e., as frozen moments, of the fluid social interactions constituting them, but they should also be viewed as instruments for enforcing meanings" (Haraway, 1991, p. 302). The utilization of gender as a basis for oppression need not be more than a moment, frozen in cyberspace. But the thaw will require a recognition of our behaviors, an embrace of the informatics of dissent, and an acknowledgement that new technology means things do not have to be the way they always have been. Rather than "reinscribing existing power networks in new

forms and media" (Squires, 2000, p. 364) the internet is the most powerful and pervasive

opportunity we have ever had to redefine ourselves towards the realization of Haraway's

"genderless utopia" if only we decide to use it that way.

References

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Annotated Bibliographies

Feigenbaum, Harvey. "Is Technology The Enemy Of Culture?." *International Journal Of Cultural*

> *Policy* 10.3 (2004): 251-263. *Academic Search Complete*. Web. 23 Feb. 2015.

> Feigenbaum, writing here for the Journal of Cultural Policy, is primarily concerned with

the effects of globalization on culture; specifically, globalization facilitated by specific

technologies. He introduces this enigma, this fear pervading the world circa the late 90s (and

today, I would argue) about stemming the tide of Americanization through technology, which

can destroy cultures. He also, markedly and as a useful premise for my argumentation, notes

that technology shapes culture, that it transmits ideas which are shared within an area, thereby

"creating not only the illusion, but also the reality of shared experience and thus identity." I

need to find a more philosophically geared article which can perhaps articulate how technology

can be an integral part of a culture, both arising from and shaping its ideologies, and then carry

those ideologies with it to deplete those of a different culture, and whether or not this is a

necessary effect. In the meantime, it will be useful to note the different programs in effect to

stem the tide of American programming.

> While Feigenbaum's article provided some excellent contextual examples of this

pervasive fear of cultural erosion at the hands of American messages broadcast with the help of

specific technologies, it was not very instructive as to the implications or ethic of this situation. I

do not necessarily have a way of judging the situation, or an adequate understanding of this

scenarios implication on technology itself. Is the TV, an American invention, necessarily going to

be tied to American values (which it also helped to shape?) Or is that merely a result of America

churning out the most and best content (new add-ons and updates) to this technology?

> While, on account of a radical shift in topics, I did not end up incorporating this article

into my paper, the parallels between technologies role in globalization and Haraway's call for a

political movement based on affinity, rather than unity, are striking. In fact, there seems to be a

strong analogy between the two authors' arguments; Feigenbaum is arguing for preventing

technologically enabled cultural imperialism; recognizing important cultural differences when

exporting technology. Haraway is calling for a theory that, unlike other theories, does not try to

either encapsulate the lived experience of all women, for example, and therefore excludes all who do not fit into that specific set of experiences, but instead one that recognizes a plurality of experiences, and emphasizes common goals and modes of being.

Batchelor, Bob. "Digital Technology And Teaching American Culture." *Journal Of American Culture* 34.1 (2011): 49-55. *Academic Search Complete*. Web. 23 Feb. 2015.

Batchelor's article is an interesting exploration of technology's relationship with American culture, and what happens within that relationship when that technology is exported. However, it is important to remember Batchelor's audience and intent in this essay. He is an American Culture Studies professor writing an advice column to a group of American Culture professors about how to navigate an increasingly digitized environment, and what effect that digitization has on American culture globally. Nonetheless, he did provide some insight through examples, such as Apple, Google and Mcdonald's, as far as how American ideals are broadcast through technology, but not labeled as American ideals. He also brings up the intriguing idea, worth exploring further, that ". . individuals can be drawn together based on a piece of technology that provides them with a means of commonality, drawing their allegiance to the symbol or logo on the device with little or no thought about its American roots."

Ultimately, I think I could benefit from using Batchelor's broad examples, and that this piece really served more as a spring board for me insofar as hinting at other areas of prospective research. (As I am not entirely wedded to this topic yet, viable articles seem few and far between, one thing in particular Batchelor mentioned may set me on a different tract. He quoted a technologist who noted that "the goal is no longer to be 'in touch' but to erase the possibility of ever being out of touch. To merge, to live simultaneously with everyone, sharing every moment, every perception, thought and action via our screens." While this is similar to our discussion on schizophrenic-digital personas and what an authentic self in a virtual culture looks like, I think it transcends that in a way, idealizing the idea of a shared consciousness. There are plenty of reasons we may or may not want such a thing, and plenty of ways in which it will someday be possible. Perhaps I will look into that. .)

Again, due to a dramatic shift in topic, I did not end up utilizing Batchelor's article, though his thoughts reverberate off of Haraway's in interesting ways. He drastically, it seems, under-represents the impact of capitalism in technology transfer. While he focuses on the benefits and potential dangers of those privileged enough to use modern high-tech, Haraway recalls those who are forced to suffer through its creation, and spins a myth to incorporate the disenfranchised, so intimately bound up with technology, and yet so invisible to we who actually use it.

Cozzens, Susan E. "Social cohesion at the global level: The roles of science and
      technology." *Science & Public Policy (SPP)* 39, no. 5 (October 2012): 557-
      561. *Academic Search Complete*, EBSCO*host* (accessed March 15, 2015)

Susan Cozzens' article emphasizes the varied and important roles of science and technology in a globalizing world that is in some ways unifying, and in others becoming increasingly polarized. For her purposes, social cohesion refers to concepts such as *gesellschaft* and *gemeinschaft*, the 'unity of will' that can hold a society together, in modern times organized and motivated by a self-interest in the division of labor. She notes that the very concept of social cohesion may have arisen simultaneously with and be dependent upon capitalism, modernization, and democracy. Whereas typically social cohesion was oriented around the concept of a nation state, modern technologies are making national boundaries permeable and "through communications technology, affluent members of the world community can observe on their televisions and internet connections a world full of vibrant, re-emerging local identities and global economic and political dynamics." She forms her argument around three main hypothesis, the first of which is that there is no reason to expect social cohesion in this century at the level of the nation state. Whereas some states were indeed formed after a consolidation in the face of an outside threat, most states in today's world are colonial holdovers, or the conglomeration of historical nations mixed together after post-war boundary re-assessments, which explains why most wars today are civil wars. Her second hypothesis is that science and technology contribute to integration, but not cohesion. The rich elite, knowledge and culture producers, and members of global civil society enjoy a privileged level of global connection unattainable by many in the "Black Holes of the Information Economy," those at the bottom of society whose exclusion is being intensified by modern tech. Their lives and realms are "defined by the technologies that are

not there." Her final argument, then, is that "global technology is power;" scientists and engineers, the manufacturers of technology, ought to act more like civil society, beholden to no government or corporate interests, to try to reduce poverty, increase connectivity, and address global challenges.

It seems Cozzens believes 'inventors' and 'innovators' ought to have a higher purpose for their technology, avoiding technology for technology's sake, or for profit. She does useful illuminate the way in which technology is the primary vehicle for globalization, and the degradation of the concept of geographical nation states, but does not really comment as to whether that is a positive or negative thing, simply that some people are harmfully ostracized in the process. If anything, her paper leaves one feeling that global social cohesion is unlikely, and if national social cohesion is lost, than the prospect of social cohesion is naught. More research into the character of a potential 'global unity,' be it a global or cyberculture, is necessary. Also, I will need to think analytically about her unspoken assertion that greater connectivity is the answer, a claim I find too simplistic. What about the ramifications of that connectivity, especially when it comes to being a global actor/participant?

While I was not able to fit the Cozzens article into my research paper, I think she and Haraway would agree on many fronts. Cozzens, essentially, points out that modern technology enables boundary crossing at the level of the nation-state, eroding its importance. This seems like another potential us-them dichotomy which would fit well into Haraway's schema. She is conscienscious in her inclusion of those in the "Black holes" of the information economy, and in her analysis, similar to Haraway's, about the absolute essential character of science and technology in shaping social conditions. Cozzens focuses on the people at the top, the generators of new technology, while Haraway focuses on the effects of its use, and disruption in its intended use and both are vital pieces of the larger picture.

Ponte, Daniela, and Theresa Cullen. "Considerations for Integrating Technology in Developing Communities in Latin America." *Techtrends: Linking Research & Practice To Improve Learning* 57, no. 6 (November 2013): 73-80. *Academic Search Complete*, EBSCO*host* (accessed March 15, 2015).

Ponte and Cullen write here on the technological diffusion taking place in Latin America, its ramifications and some important considerations about its continuation. Latin America, in

spite of being one of the least technologically developed industrialized regions in the world, has been receiving global attention as of late, between the death of Hugo Chavez, the new Latin American Pope, the World Cup and the Olympics. While gradually adopting more information communication technologies (ICTs), LA remains woefully short on qualified operators, and will experience a 35% gap between qualified employees and demand for qualified employees over the next decade. Ponte and Cullen note that "countries adopt technologies at different rates based on their socioeconomic makeup, infrastructure, and cultural constraints." L.A.'s long history of tight and oppressive colonial rule has cemented a tradition of mistrust of outside influences and ideas, as well as a lack of funding and development for infrastructure. The result is slow diffusion. Tech diffusion is usually characterized by four elements; the initial innovation, its spread through communication channels, time, and social systems, including the major stakeholders and varying cultural contexts in which that technology is supposed to flourish.

Much of the essay was devoted to strategies for garnering support for new technologies by key leaders in local communities. If the technology did not rise from your country organically, some form of pseudo-black boxing would need to take place. What isn't clear from the article is how well these technologies are being adapted, if they are being used in distinctly Latin American ways, and/or if they still hold and transplant vestiges of American culture. What is clear, as with previous articles, is that the variance in access to ICT is reinforcing the gaps in employment, income and gender rights.

While I did not incorporate this article into my paper, and its specificity to technological adoption in rural Latin American communities is only tangentially relevant to my eventual topic, Ponte and Cullen do make a poignant note about skepticism related to technology and hesistance in adoption. Judith Squires made a similar observation, noting that our faith in new technologies is inextricably intertwined with our faith in those that are selling or introducing the tech to us. While this is not a theme I developed, it does fit that the way we use technologies are definitely influenced by the forum we have access to them through, be it a local ma and pa shop, a global corporation, a government initiative, etc.

Reid, Julian. "Politicizing connectivity: beyond the biopolitics of information technology in international relations."*Cambridge Review Of International Affairs* 22, no. 4 (December 2009): 607-623. *Academic Search Complete*, EBSCO*host* (accessed March 16, 2015).

Reid is seeking to do what Cozzens did not, to disarm the trap the latter fell into. Reid here evaluates the precarious assumption in modern international relations that greater technological connectivity is the grand panacea, that closing the gap between the "information rich and the information poor" will lead, almost magically or spontaneously, to the formation of the "Connected," a body of people with unprecedented intellectual and emotional capacities leveraging their informational technologies to render traditional systems of governance null and void, leading the way to greater human beneficence and emancipation. Technology, in this view, is neutral, a result of the gradual biological evolution towards greater connectivity. Humans are physiologically walking, talking, interdependent systems with amazing communication channels and an unparalleled capacity to learn. Rosenau, a philosopher of the 1940s, theorized that should we be able to model a machine after ourselves, our physiological connectivity, it would be able to learn. After the invention of the first digital machine, we saw "a dramatically revised account of what it is to be human as well as what it is to be a living thing."

Reid references Heidegger to develop the idea that technology "is never merely an instrument that humans use; it is a way of enframing the human as a thing that both uses and can be made use of," and then describes the cult of the Connected in which the Disconnected must be made to be Connected. He quotes Thomas Barnett, advisor to the US Office of the Secretary of Dense, who holds that the gap between the Connected and the Disconnected is distinguished by a difference in conformity to the "rules that define the organization of life within the liberal core," and that this gap is used to justify aggression against peoples, making Connection a war ideology. Reid ultimately hopes to offer up a different theory of connection, a rhizomic biopolitics in which connections take many different forms, not merely the informational form that has become dominant in today's information economy. Recognizing this plurality of connections available and vital to the human experience would require an "affirmative disconnection" and result in "political assemblages forged, for example, on the basis of shared loathing for the rule sets of imperial politics."

Reid paints a dismal picture of the value IR tends to take for granted; that connectivity and information lead to prosperity. In warning that greater connectivity in this sense can be compromising to our humanity, he removes the easy answer to poverty allieviation and broadcasts a very Heideggarian warning about our reliance on connectivity. Using Reid's frame of reference, I will likely see his fears embodied as I look deeper into a global-cyberculture.

Though I was not able to incorporate him into my paper, Reid's ideas are incredibly relevant to the workings of the informatics of domination on a global scale. The Disconnected in Reid's analysis are very much the "others" of Haraways discussion. The mainstream, the Connected, the Informatics of Domination, feeling and fearing the threat of the other, finds technological oppressions, or technological justifications for oppression. They also both call for a plurality of connections, Haraway recognizing the multiplicity of our identities, Reid acknowledging the Connected have in fact limited their numerous, limitless possibilities for real connection by categorizing and labeling a small subset of scientific, logic-based ICT connection.