Virtual and Physical Environments, One and the Same

Matthew Klimuszka ’14

Bonchek House

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Matthew Klimuszka is a physics major from Wilkes-Barre, Pennsylvania. He led the F&M quidditch team, acted as an Oriflamme editor, served on the Bonchek House Supreme Court, and organized both Dump 'N' Run and Diplocon. He has completed research as both a Patton Geophysics Scholar and a Hackman Scholar, and plans to attend graduate school for sustainable energy engineering.
As Americans, we spend a great deal of time online, an average of over 5 hours per day per person this past year ("Digital Set to Surpass TV in Time Spent with US"), and that number is constantly growing. Access to the web is essentially a requirement to survive in the modern world; and the social activity of many Americans, especially those in their twenties and younger, seems to revolve around tweets, posts, and snapchats. Even if you've never used these services, you know what tweets and snapchats are, and are probably familiar with likes, +1’s, and upvotes. The internet has become an integral part of modern society, but most discussions about its role keep it separate from our “real lives.” We treat it as some ethereal plane where our actions are only tangentially linked to people and places in “the real world.” Even direct communication over modern technologies is somehow viewed as being less than their physical counterparts. E-mails and text messages can convey the exact same information as a letter or a short note, but they are rarely viewed in the same way. Even the activities that have received the most attention are separated from their physical counterparts. Bullying becomes cyber-bullying and all of a sudden it's a different activity and discussion begins to center around the facilitating technology instead of the actual behavior. Today, to start discussion, I will challenge the psychological line that we tend to draw between modern communication technologies and “the real world” or “real life.” We need to focus on the content of human networks, societies, and communication as opposed to the technologies that make them possible. This is a pro-technology presentation that encourages you to shift your focus away from technology. I hope that in the next 45 minutes, you might stop thinking of Facebook posts and dungeon raids as online socialization and instead think of them as human socialization.

For the rest of this presentation, I will use the words “online” or “virtual environment” when referring to interaction through the internet, and “offline,” “traditional,” or “physical
environment” to refer to traditional communication.

I will begin by discussing personal responsibility and impact in terms of California's eraser law, reddit's response to the Boston Marathon bombing, and offline parallels to online harassment. After that, I will spend some time presenting a few examples of how the evolution of online social media has impacted how we interact with each other. Finally, I will end by emphasizing the growth of virtual economies and how we can improve educational techniques through virtual environments.

In many cases, parental behavior and recent laws seem to shift responsibility away from individuals and towards the technology itself. Last month we discussed heavily censoring online discussions for offensive content, and many of the publications that I could find did something similar and often report attempted solutions to online problems as just pulling the plug. Instead, we need to focus on personal responsibility for what we do and what we expose ourselves to.

This past September, California passed an “eraser law” that allows minors to force a service provider to remove posts that the minor made so that they cannot be viewed by anyone using the website or application ("Senate Bill No. 568 Chapter 336"). Whether or not this law has any teeth is a matter for a different conversation, but its intent is very clear. It serves to remove responsibility from posters for any actions they make online. This is a message from the State of California telling children and adolescents that they can say and do anything online with no consequences until they are 18. Sure, most websites already have delete buttons, but a government given right to hide behavior is a grave detriment to teaching personal responsibility.

It's not just individual posts that have consequences. The proverbial pitchfork-wielding mobs can gather in orders of magnitude larger and quicker than in the past. We have seen Wikileaks expose government scandals, Anonymous lead many demonstrations, and an Egyptian
uprising made possible thanks to social media. We also saw the best intentions go horribly wrong during the Boston Marathon bombings. Members of the popular website reddit set up housing for travelers who were stuck in Boston during the event, sent pizzas to police and hospitals, and organized dog therapy sessions in local parks ("BBC News Technology"). They were successful in creating many positive changes shortly after the bombing, but the formal creation of a “Find Boston Bombers” thread went too far. All of a sudden, the site was filled with wannabe detectives combing through the internet for possible suspects. Several incorrect names were listed, causing a media frenzy around the innocent. The suspect who eventually floated to the top in the social media witch hunt, 22-year-old Sunil Tripathi, went missing during the investigation and was found dead over a month later. Cause of death was not released, but initial reports said there was no foul play.

The website issued an apology for its actions a day before his body was found, and I would like to read an excerpt of it.

“This crisis has reminded all of us of the fragility of people’s lives and the importance of our communities, online as well as offline. These communities and lives are now interconnected in an unprecedented way. Especially when the stakes are high we must strive to show good judgment and solidarity. One of the greatest strengths of decentralized, self-organizing groups is the ability to quickly incorporate feedback and adapt. ... After this week, which showed the best and worst of reddit's potential, we hope that Boston will also be where reddit learns to be sensitive of its own power” ([hueypriest]).

Reddit learned a valuable lesson about organizing communities around emotionally charged events. This has sparked discussion over when and if this behavior should have stopped. Perhaps the police or a government agency should have stepped in to stop the amateur
investigation. What would they have done if instead of online posts, the top suspects as identified by the thread were named on posters placed on bus stops and telephone poles? I really don't know what should have been done, but the ability for communities that exist solely online to grow to astounding numbers and instigate change in physical environments has become evident.

Now to switch to the elephant in the room that meanders in whenever social media is discussed, cyber bullies and general online harassment. I'm going to look at it in a little different light. The most important thing to remember about online bullying is that the internet is just people. This applies to both the victims and the perpetrators. That means that cyber bullies are really just bullies, and even without social networking, a sixth grade classroom is still one of the most hostile places you will experience in your entire life. The internet and text messaging just make it easier to continue these activities after school. So other than the advice that parents should be more active in their children's lives, I can't give a solution that will get rid of mean people, and I doubt anyone can. It's not in the scope of today's discussion. Instead, I want to focus on how people can protect themselves and their children by drawing parallels to offline behavior. I mentioned a classroom so far, but my meaning is age independent. Anyone can be a victim of harassment or worse online crimes such as identity theft.

When people are first introduced to the internet, they have dreams of endless information, cute cat videos, and communication with all of their friends. This isn't wrong, but it is very incomplete. Here's an approximate image you should have in your head. Drop yourself in New York City, a bustling metropolis. Remove the police, allow people to access your location from any part of the city instantaneously, and give everyone a mask: the heroes, the criminals, the deviants, and the annoying. All of New York City has direct access to you and they are all, for now, anonymous. I hope that this is obviously not safe, but for some reason, many people expect
nothing but kindness and cute cats when they boot up their computer and open themselves to the teeming masses.

Traditionally, how do we deal with this? First we install locks on our doors and then we avoid dark alleys and neighborhoods with lots of crime. You're not going to drop your 13-year-olds off in Harlem or Brooklyn and tell them to have fun as you drive away, and you probably feel uncomfortable walking in those neighborhoods alone as well. I'm sure that right now you are carrying a key to your dorm, apartment, or house and you know exactly who else has a copy of that key. On the online communities you visit, do you have a key for it and know who else does? That is, do you have a strong password and carefully chosen privacy settings to determine who can view your content and send you messages? We teach children and adolescents to stay in well-lit areas and never take candy from strangers. You preach these things all of their lives and slowly give them the freedom to go where they want with the trust that some of what you told them sunk in. What would you, or what have you, told your children about the dark alleys of the internet and where to avoid? The dangers are the same. Online and offline, you can be emotionally abused or be robbed of all you have. I could go on and give examples of dangers on the internet and compare them to traditional situations, but I think I've introduced the topic of treating online protective measures just like we do offline ones well enough for further discussion, and I would like to provide some more positive reports of our social situation.

First, we'll look at some empirical studies of socialization, and then examine the size and complexities of some online communities. Then, I will describe some of the economic and educational interactions between virtual and physical environments.

Researchers at the University of Michigan published a report in 2007 that examined college students' use of Facebook and its effects on social capital. To define social capital, it is
the sum of resources accumulated through relationships. It is increased through forming durable networks based on mutual acquaintance and recognition. It is linked to better health, lower crime rates, and more efficient financial markets.

The study found a positive relationship between Facebook use and all types of social capital. Willingness to support physical communities due to what is called “weak ties” is supported by Facebook, and the researchers believe this is due to lowered barriers to social interaction afforded by the website. In addition to community support, Facebook users typically had higher self-esteem and satisfaction with their lives. Part of this was attributed to an increase in bonding capital, or “strong ties.” This wasn't so much due to new strong ties being formed thanks to Facebook, but the service made it much easier to maintain existing close relationships even at large geographic distances. Overall, the report did admit to some image management issues and privacy issues that we are all aware of, but it also demonstrated a robust connection between Facebook usage and indicators of social capital (Ellison, Steinfield, and Lampe 1143-1168).

Researchers at the University of Nebraska and Missouri State University examined social capital among various age groups and published their findings last year. They found that millennials are not suffering from a decrease in social capital (good job, guys!), but we do tend to have a different type of capital than the generations before us. Social networks are shifting from geographic centers such as neighborhoods to global networks. Current technologies are allowing us to create and maintain social ties with the people we want to be with, as opposed to the people we have to be with due to geographic restrictions. The long-term effects of this shift are unknown, but a decrease in neighborhood social ties has historically led to perceived powerlessness and alienation. On the other hand, the greater variety of ties has a greater potential
for generating opportunities and resources. The study suggests that this may prove to be a better type of resource in a globalized and information-driven society, but I believe this is a self-fulfilling prophecy of sorts, stating that globalized social networks are better in a globalized society. Either way, this shift to geographically larger networks is a well-established trend that is coming to dominate our behavior (Schwadel and Stout 233-252).

Many modern communities have come to transcend geographic restrictions almost entirely. This is especially true for some social networks and most massively multiplayer video games. In practicality these are two very different things, but they all produce their own unique cultures and communities with specialized language and behavior. Just from personal experience, some of the strongest community associations people have are with the online communities and games they frequent. Considering the size, complexities, and specialized content of these services, it is easier than ever to find people with similar interests. For example, one of my roommates is a redditor through and through, participating in reddit secret Santa events, technology swaps, and threads that he would never be able to find a strong community for at F&M, such as goth-ninja fashion. To give a size to the reddit community, they had over 86 million unique visitors last month with nearly six thousand active subreddits. It is organized as a meritocracy based on a karma system that is affected by the quality of your contributions as judged by other members of the community. It has become such a far-reaching community that President Obama took part in an AMA (ask me anything) session during his 2012 campaign. There were over three million page views that day, and the President went so far as to suggest a constitutional amendment during the event to overturn the Supreme Court decision in Citizens United v. the FEC, the controversial court case that protected corporations’ rights in elections. This was a huge step in the recognition of online communities as entities in their own right as
opposed to just a tool for people to communicate (reddit admins).

These communities have more than just communication at their core, many of which also have thriving economies as well. I'm not talking about people selling physical items on Craigslist or eBay, but full economies where items and services are produced and then paid for in traditional currency. Some of the biggest games released in the past few years have included marketplaces where in-game items can be bought with traditional currency, U.S. dollars, yen, or whatever you happened to have. Unfortunately, the sizes of most of these economies are held in confidence by the games' creators, so I can't say much other than they exist and have been generally successful, but I was able to dig up some information about *Eve Online*, a massively multiplayer game released in 2003. A team of economists regulates the in-game economy and, during the game's peak years, produced quarterly reports on its size and state. In 2013, it was estimated that there were over 500,000 players and a GDP of $36 million after converting the in-game currency to USD using actual exchange rates (Chayka). For the sake of comparison, the Lancaster metropolitan area had a GDP of $21 billion in 2012 ("GDP by Metropolitan Area (millions of current dollars)"). So we're not quite on the same scale yet, but economies in virtual environments have great potential for economic experimentation that can help us learn more about how much larger economies function and how to manipulate them to produce desired outcomes.

Even if they aren't on the same scales as physical economies, virtual economies do project into physical environments. With a large number of gamers who are willing to exchange physical currency for virtual currency, a market has opened up for mining gold, and it is often done in Chinese sweatshops. An estimated 100,000 people are working in China as full-time gamers, producing virtual currency that can be traded for USD. They typically make less than a
quarter a day, but they often get room and board as well (Barboza). This exploded into the media in 2011, when it was discovered that 300 prisoners in a Chinese labor camp spent 12-hour shifts mining gold after performing their prescribed physical work. They were forced to play until they could not see the screens anymore and were beaten if they could not meet quotas (Vincent).

People pour their time and money into online environments, and in the process learn about characters in the story, specialized language, and community culture. This holds true for in-game knowledge, but a 2009 paper in the Modern Language Journal shows that players often use virtual environments to learn about their own character, different languages, and international culture. The study found that a player's virtual representation is linked to how that player behaves in-game, and different characters facilitate exploration of one’s own character. In addition, many virtual environments completely disregard geographic boundaries. Being forced to play with, or wanting to play with, people from other countries establishes a transfer of culture and, to a greater extent, language. Through the comfort of text instead of the spoken word, virtual environments have proven to be a great learning tool for people learning a second language to interact with native speakers. Conversation is naturally slower and pronunciation fades away, so grammar, speech patterns, and colloquialisms are learned more easily (Thorne, Black, and Sykes 802-821).

With learning being such an integral part of online gaming, both though learning about the game world and how to interact with your fellow adventurers, I often wondered over the years why we don't take more aspects from gaming and augment traditional learning styles to improve our educational system. The first steps have been taken in recent years, such as the study focused on language learning that I cited above and online classes becoming more
common. Unfortunately, online classes haven't been much more than recorded lectures most of the time. There is one group, however, that has taken the merger of education, gaming, and the internet seriously. Believe it or not, it's NASA. They have been helping to develop a game called Starlite since 2009. It is planned to be a full-fledged massively multiplayer game set in the near future. Players are astronauts who must use real physics, chemistry, and math to solve problems as they explore the Moon, Mars, and other locations in space. It is planned as a learning tool to teach a variety of scientific concepts ("Starlite Astronaut Academy"). I can't wait for the day when I can put my video game achievements on a resume.

As I am probably running out of time at this point, I am going to end my presentation here in the hope that I have planted at least one seed that will yield good discussion on evolving forms of human interaction. I have presented California's eraser law, and supported the need for personal and institutional responsibility online both to avoid harming others and protecting ourselves. These responsibilities are best put into perspective by drawing parallels to situations we are already familiar with. After that, two studies regarding social capital in our changing world were summarized. Finally, you heard how growing virtual environments provide grounds for experiments in economics and education. Overall, the line between actions online and offline is blurring away and will soon be gone. When examining our decisions, I urge you remember that your online actions are just actions.
WORKS CITED


