CUNY Queens College

Final Exam

Aryeh Winter

Media Studies 255: New Technologies

Professor Andréa DeFelice

May 15th, 2018

**Essay Question I.**

**New technologies have always produced unintended consequences. One result of this would be how UX designers and engineers face a number of new ethical challenges today with the rise of technology regarding our interaction with it and dependence on it.**

**What is the primary job of a UX designer? Discuss the principle ethical quandaries faced by UX designers. What is persuasive design? Discuss the ways you feel this positively and/or negatively affect user behavior.**

The UX, or user experience, is what the individual users interact with when using a product. “The primary job of a UX designer is to enhance user satisfaction by improving the usability, accessibility, and pleasure provided in the interaction between the user and the product”. The UX designer is often not just a single individual, but rather an entire development team to deal with all the work. They are in charge of the design, they ensure that things are done correctly and enhanced from the point when the idea is formed through the point where the finished product is distributed. They have to analyze the user scenarios, propose possible interfaces, conduct usability testing and beta-testing, and finally when all of that is done they release it to the public and/or target audience.

However, there are quite a few ethical issues that come up and UX designers need to deal with. The first major issues, or quandaries, is the human cost and the devaluing of work. Initially UX designers simply continued to optimize the system design and then further to augment the ability for humans to do more work and do it better, but it has reached the point where human work is often unnecessary. Automation is excellent when eliminating dangerous work where humans would have to work slowly and carefully to avoid danger or harm to themselves or others, as well as in repetitive or tedious work where humans may doze off or reduce the quality of their work as they become bored and distracted. However, there are many ethical issues with this the UX designers must take into account. Automation diminishes the value of human work. Automation can do things faster, more cost efficiently, and, while less creatively, will do it all day and night without break. It dehumanizes the work and the company, diminishes worker growth, and the value of rewarding work is stripped away. This leads to the second issue where the convergence of so many technologies can tax our attention spans and distract people, making it more distracting and therefore dangerous.

The third major issue is the it can de-skill people. By augmenting human intelligence with computer support systems, systems can be made so complicated that they cannot be used without artificially intelligent assistants. While this reduces errors and improves safety, it reduces the need for highly skilled personnel and knowledgeable people. The fourth issue is that of UX designers influencing user behaviors. User experience designers must know that while they may design a product with good intentions, they must consider ways it could nudge users to ends that are not in the user’s best interests. An example of this is software that allows parents to monitor their children. Though initially this seems like it might be a good idea, this allows and pushes parents to violate their child’s privacy and jeopardize the trust and relationship between the children and the parents. This is the fifth and final issue in that it erodes the privacy of people, whether they are elderly, young, or otherwise. UX designers must recognize that they have the power and ability to affect the behavior of their users.

There are positive and negatives to the way UX design, or persuasive design, affect user behavior. Persuasive design is the ways to influence user’s behavior through the characteristics and designs of a product or service. In my opinion persuasive design is often more negative than anything else. An example of a positive is that the elderly can feel comfortable living on their own and yet if anything happens they will be fine. However, for the most part I feel that most persuasive designs are used either by the designer to cause people to buy their products or to convince them to do something they often wouldn’t do. Very rarely, in most situations, are they used to truly help the user, and those scenarios are for things such as activity and fitness trackers. As a whole my opinion of persuasive designs is low as they are often used for the designers benefit rather than that of the user.

DeFelice, A. “255\_WEEK09\_UXD”. Kiely Room 315, Queens College, NY. 27 March 2018. Powerpoint/Lecture.

**Essay Question II.**

**The rise of digital technology has had a massive impact in the international creative community. Small digital video cameras and editing software have made it easier than ever for aspiring filmmakers to make a movie. Inexpensive recording software has done the same for musicians. Digital photography now rivals the traditional chemical process for resolution, while image manipulation is simpler and more sophisticated than ever before. Ultimately, the Internet provides a worldwide platform for artists of all stripes to share his/her work.**

**What are some of the core characteristics of the digital world? Discuss how these have impacted the arts. What are some specific developments that have impacted artists? In what ways are they unrewarding and in what ways are they beneficial?**

There are three core characteristics of the digital world. The first is that it’s electronic. This means that everything is stored digitally rather than in any physical form. Furthermore, there does not even have to be a physical object in existence, and yet it can even be considered something as amazing as artwork. The second core characteristic is that it is networked. Due to the fact that the materials are digital rather than physical, it can be moved all over the world via networks, up to and including mobile networks and the internet. The third core characteristic of the digital world is that it is interconnected. The internet has a theoretical infinite number of points, especially when compared to the likes of Television and Radio. Especially when speaking about how this has affected the arts, there are a number of implications from this.

To preface, electronic artwork is created differently, and more diversely. Digital artwork can be made by photographing or recording things that are already made in the physical world and placing it onto digital devices. It can further be made by changing, editing, or manipulating electronic information and artwork that already exists. Not all digital artwork is copying or editing other’s work though; There are numerous works that are created completely digitally, such as drawing digital graphics, that are created from scratch in digital formats. These processes can be combined in any which way and in any combination to create a new work of art.

Returning to the original point, there are a number of implications that the digital world has had on the arts. The first is that every work of art, whether it was originally physical or only ever digital, is now open to modification, regardless of whether the original artist wishes it to remain unaltered. They can add to it, remove parts from it, alter it, whatever they please. The original artwork can still be seen as the original inspiration, but it can be altered to such a point without damaging the original that they can all but be called their own work of art and be displayed and sold as such to the public. This brings me to the second implication which is that it is open to public interaction. In the past the public could only go and view such pieces of art when they were occasionally on display in certain museums across the globe. They couldn’t go all the time, couldn’t see them as often as they wanted, and couldn’t interact or work with the piece at all. That has all changed now as entire collections are posted digitally to museum and collector’s websites and everyone can now view and interact with the different pieces of art. This goes for old artwork that only ever existed in museums to brand new and digital only pieces of art that can be found anywhere online. The third and final implication that I will touch upon is that of tracking visits. Now that we can view artwork online, websites can track who comes and goes, how often then come and go, how long they stay, where the come from, and where they go to. This allows them to better learn what type of artwork people enjoy, how to better target people with their art for display and sale, and to draw people in to see new and original pieces of art.

These changes are highly beneficial to artists and museums as they make it easier to display their art, connect with people, and even monetize to support themselves. However, the problem comes in when much of the artwork created today can be stolen and used by others without the original creator’s permission. This poses a problem as people are less likely to want to put in the work if their creations can simply be stolen and others can take credit or monetize their creations, “skill, cost, and value are in question”.

In conclusion, there is a very difficult balance that must be struck between public interaction and appreciation. Due to the freedom and rapidly changing nature of the digital world, this is immeasurably difficult, but it must be done. And yet, it must be done in such a way that people are not relegated to simply viewing the art as was once the norm as modern society, and especially the younger generations, will not respond well to that and the appreciation and enjoyment of art will become relegated to such a niche that it will all but be lost. I leave such a daunting task in the hands of those who are far wiser in such matters than myself.

DeFelice, A. “255\_WEEK10\_Tech&Art”. Kiely Room 315, Queens College, NY. 10 April 2018. Powerpoint/Lecture.

**Essay Question III.**

**Human enhancement technology converges nanotechnology, biotechnology, information technology and cognitive science to improve human performance, attempting to temporarily or permanently overcome the current limitations of the human body through natural or artificial means.**

**Discuss some specific developments in human enhancement technology. Do you have trouble with the idea of these technologies making us stronger, faster, better? Do these advancements come at any cost? Such as privacy issues or a question of morals? What technological innovation do you think we need most and why?**

To begin, “Human enhancement is any attempt to temporarily or permanently overcome the current limitations of the human body through natural or artificial means”. This includes anything from Organ transplanting to powered exoskeletons, to even electronically augmented senses. There is a wide range of enhancements available even today, and an even longer list of those still theoretical, still discussed in science- fiction novels. Yet, there are moral and ethical dilemmas that spring forth from this topic, as well as issues of privacy, all of which will be discussed in this essay.

In discussing human augmentation, it’s best to begin with the present before moving on to the theoretical futures and future augmentation that could occur. An easy one to discuss is one that is used for treating disabilities, specifically deafness, which is the Cochlear implant. These directly connect to the nerves in the inner ear as well as to the brain and replace the loss of hearing in those with deafness or other deafening conditions. Another would be a pacemaker to control the pumping of a weakened or ill heart. A newer and more radical example would be that of a replacement hand or limb that responded to neural signals and could fully function as a replacement for a missing body part. This has escalated to the point where we now have people who are completely paralyzed who will be able to move robotic limbs with their minds and help them function more on their own. Another possibility is the creation and use of exoskeletons to augment soldiers, assist disabled people, or strengthen law enforcement and allow them to move like the could not previously, strengthen their existing abilities, and give them sustainable strength in situations where they might not have had it.

Personally, I have no issue with the development and enhancement of these sorts of technologies. We are reaching the limits of human capabilities. People can only get so much stronger, so much faster, so much smarter. The Olympics demonstrates the pinnacle of what mankind can do, but fewer and fewer records are being broken each year as we simply cannot advance further without any sort of enhancements, whether that be chemical in the form of drugs, or technological in the form of implanted chips or exo-suits, or through some convergence of numerous technologies including nano tech, bio tech, informational tech, and cognitive sciences. The human form never had any of the advantages that many other animals did. We did not have the strength, speed, dexterity, scent, or specializations such as digging, hanging, crawling, etc. Sure, we could do all of those things, but nothing compared to animals that specialized in those fields. Rather, human beings were granted the intelligence to craft, to create, and were given a form that could do everything that every other animal could do, and more than any single other animal could do, and was just begging for enhancements and modifications. As Michael Chorost said, “The future is not about giving our bodies ways to do things they already do, it’s about ways to give our bodies entirely new things”.

Yet, we still must be careful in our advances, lest we overlook something that can come back to hurt us. In everything we must always ask ‘should we do something’ before we ask, ‘can we do something’. In our race to become superior we must not forget who we are, and where we come from. There are dangers in enhancing our bodies and adding technology to ourselves, not the least of which are in the forms of hacking, security, and privacy. Humans are imperfect and make mistakes. By that logic there is nothing that we make that comes out flawless, and therefore everything has loop holes and can be hacked. Furthermore, by having technology in your body, you can theoretically be tracked anyway, you can be monitored all the time, and theoretically your information can be used and sold. That’s not even breaching the idea of, as Michael Chorost calls it, telempathy, where you can use your mind to not know only a person’s thoughts, but also their emotions. These are questions of privacy and morals that need to be considered and need to be answered before things go too far, rather than in hindsight where it is already too late.

In conclusion, and after much thought and consideration, I can’t think of any particular technology that we need more than any other. Every major breakthrough and every theoretical technology need time and thought, and each lead down the road to newer and more innovative ideas. We need tech for medicine, for military, for convenience, for production, and the list goes on. I cannot prioritize one over another as all are equally necessary for different reasons and no two people from different backgrounds will agree on one. As such, my conclusion is that I cannot wait for the future to come and I only hope that the points I have highlighted in this paper are considered and thought over, and that greed and necessity are not completely prioritized over safety, privacy, and reason.

DeFelice, A. “255\_WEEK12\_Creative-Future-Thinkers\_1”. Kiely Room 315, Queens College, NY. 24 April 2018. Powerpoint/Lecture.