Terrence Finley Prof. Holderman CM460 12/04/2021

# A Look Through Technological Determinism, Social Constructivism, Modernity and Social Media.

# Introduction

Social media has had a profound effect on humanity since its inception. 72% of adults in the United States use social media and social media sites like Twitter, Facebook, Instagram, Snapchat, Pinterest, TikTok, and the like. Depending on the site, social media has users using their websites in the millions to billions over two decades starting in the 2000s. Social media has allowed for electronic communication between multiple people while also sharing information, ideas, personal messages, and other content such as videos and images to anybody in the world with a Wi-Fi connection. It's used on both a personal and business level.

For many, social media has had a significant impact in many ways. This includes just in people's daily lives and has had a significant impact on society. But overall, has social media impact and implementation on society been a positive or negative one? This thesis looks at how social media may have been and is still doing more harm than good for people and society as a whole. One can say social media is good for these reasons and bad for these reasons, but through this thesis, the question of why social media is bad can be looked at through some theories. The theories in which are technological determinism, social constructivism, and modernity.

## Theories

## A. Technological Determinism

"Technological determinism is the belief that technology is the principal initiator of the society's transformation" (Hauer 1). Technology like media can determine the outcome of what happens to people and society. Hence the name. "The proponents of technological determinism argue that the society is influenced and shaped by technological development. It has to adjust and adapt to new technologies and innovations" (Hauer 1). If, say, a computer can help people, whether extroverted or introverted, connect with others around the world and create more interactions than was previously possible, then it can be determined that computers, the technology in question, can be and is inherently good. However, the opposite is this. If, say, security cameras can be used to spy on people for more than just preventing crime like invading people's privacy in public and or private spaces. It can be argued that security cameras (the technology) can be inherently evil.

The term 'technological determinism' was coined by Thorstein Veblen. Thorstein Veblen was an American economist and sociologist who was better known for conceiving the concepts of conspicuous consumption and conspicuous leisure. Thorstein believed that technology or "the machine" would overthrow the "businessman" or the working man and that a societal change would be created. However, the better-known example of technological determinism is "creation" as a concept that came from Karl Marx. Karl Marx, among other things, was a philosopher, a critic of political economy, a sociologist, and a political theorist. Karl argued that changes in technology would be the primary influences on human social relations and societal structure. Clarence Ayres, a principal thinker, was the most significant technological determinist (person who supports the theory of technological determinism) out there. As a follower and someone who worked with Thorstein Veblen, the man behind technological determinism, he often tried to elaborate more on the idea behind the theory, including the struggle between technology and ceremonial structure.

## **B.** Social Constructivism

Social constructivism emphasizes the importance of culture and context in understanding what occurs in society and constructing knowledge based on this understanding. A better understanding of social constructivism can be narrowed down specifically to The Social Construction of Technology or SCOT. It can also be referred to as the Social Construction of Technology. In this thesis, we'll more or less guide it as social constructivism for ease of understanding. Here, social constructivism is separated into four components which include the following. The first component is that "technology design is an open process that can produce different outcomes depending on the social circumstances of development" (Klien, Klienman 29). The second component is that "social groups are the embodiments of particular interpretations: "all members of a certain social group share the same set of meanings, attached to a specific artifact" (Pinch and Bijker 1987, 30). They are the agents in this agency-centered approach whose actions manifest the meanings they impart to artifacts" (Klien, Klienman 29-30). The third component is that "A multigroup design process can experience controversies when different interpretations lead to conflicting images of an artifact (Klien, Klienman 30)". The fourth and last component is that "This is the wider socio-cultural and political milieu in which artifact development takes place (Klien, Klienman 30)."

One other way to look at social constructivism is that technological determinism says that technology determines the outcome of a situation or change of society, whether good or bad. Social constructivism argues that its society's use of items (mainly referred to as artifacts when discussing the theory) or, in this case, society's use of technology has separate, individual effects on society. Technology, in this case, is just a neutral tool that can be used for either good or bad depending on how someone chooses to use it or view the piece of technology in question.

#### C. Modernity

Modernity is a historical period that left behind traditional culture and advanced exponentially in science, arts, technology, and business. Depending on the context, it can identify the current era or past significant periods of humanity's history. Modernity is also defined as the self-definition of a generation about its technological innovation, governance, and socioeconomics. To participate was to conceive of one's society as engaging in advances that make one's immediate predecessors appear antiquated. In the case of technology, the time around the 15th century in which the movable type and the printing press were invented would have been an era of modernity. The technological progression of that era is so well known it can be defined as its own era in this way as their creation would have both advanced technology and society itself. More books could be made, and more people had access to books—increasing intelligence and knowledge amongst the world's people. People and technology participate at once to make this notable era of modernity.

However, some commentators consider the era of modernity to have ended by 1930, with World War II in 1945, or the 1980s or 1990s. In this case, postmodernity, the economic or cultural state or condition of society that is said to exist after modernity, would fit this thesis. As postmodernity in reference to technology has two phases, the first phase references the end of modernity, the beginning of postmodernity, and the invention and spread of the television. The second phase, also known as digitality, is the increasing power of personal and digital means of communication, including fax machines, modems, cable, and high-speed internet, which has altered the condition of postmodernity dramatically: digital production of information allows individuals to manipulate virtually every aspect of the media environment. For the sake of this thesis, it will still refer back to modernity as overall, the technological and social changes that happen around you can be used as the definition for modernity.

# The Theories and Their Relation to Social Media

# A. Technological Determinism and Social Media

Different theorists and supporters have used technological Determinism have used the theory, among others, to explain technologies' effects on society (or lack of). Marshall McLuhan, a philosopher whose area of work includes the study of media theory, wrote the book "Understanding Media: The Extensions of Man" in part 2 of the book, which analyzes different types of media and technology and the "messages" or "forms" they carry. Including television, radio, numbers, and clothing. Another technological determinist, or rather "soft technological determinist" Robert Heilbroner, was an American economist. He wrote a journal article called "Do Machines Make History?" in which he says that "machines make history in some way" (Heilbroner 335).

However, these readings look at technology from the past. Social Media is a relatively new piece of technology that is still being explored through the technological determinist lens. Today's technological determinists see the positive and negative changes and advances that came with the advent of social media. It has been noted that social media has allowed people online to connect with others anytime and anywhere. Still, the drawback is that less genuine human interactions and face-to-face conversations occur as more people use social media as a place of communication. This has caused a change in society and people as fewer people become familiar with the ability to communicate with others and instead replace the usual means of communication with the "digital communication" brought about by social media use for communication. However, it can be said that the consequences for people using social media too much to the point of losing your average communication skills "are the result of poor use by the people, not of the very nature of technology" (Hauer 1).

# **B.** Social Constructivism and Social Media

"What do philosophers need to know about technology? What kind of knowledge do we need to have? And how much" (Winner 362)? Langdon Winner asks this question in the first sentence of the article Upon Opening the Black Box and Finding It Empty: Social Constructivism and the Philosophy of Technology. Supporters of the social constructivism theory or social constructivists ponder ideas such as, "perhaps, it is enough simply to have lived in a society in which a wide variety of technologies are in common use" (Winner 362) or if there is something more to technology than we take for granted or understand. "Drawing upon an everyday understanding of such matters, one can move on to develop general perspectives and theories that may enable us to answer important questions about technology in general" (Winner 362). These are related to the "social constructing" and "technological" relationships: societies' impacts and changes with the use of specific technologies.

To quickly recap, social constructivism is "The theory of social constructivism defines knowledge as something that is constructed within a social context in a collaborative way. That is, learning is viewed as a situation in which people construct their own meaning of what is being presented to them, avoiding simple memorization of information" (Gayton, Carolina 1). So how does this connect to social media? As more and more people, and specifically youths, continue to use social media, educators have been looking to use social media and the "social constructivism principles to effectively and efficiently integrate innovative technologies into the learning environment of the classroom" (Gayton, Carolina 1). They combine social media and social constructivism principles into education to better connect with students and help students gather knowledge from social media and connect learning to the context of the real world and transfer knowledge to new applications. Anne Nevgi and Erika Löfström provide a framework for the principles of social constructivism. They're eight of them. These eight principles result from studying the effects of information and communication technology on teaching and learning. "However, a potentially complicated relationship exists between the term "social" as education theorists conceive it and the adjective "social" used to describe online networking. Analysis shows that the former emerges from a paradigm that sees people's interactions as capable of integration, while the latter refers to activities that tend to promote fragmentation" (Hynes 1).

#### C. Modernism and Social Media

"One of the most striking changes in personal life during late modernity is the use of social media for conducting personal relationships. These changes entail a growing significance in the public display of personal connectedness and the importance of the term 'friendship' in managing these connections" (Chambers 1). As of the 21st century, "digital communication technologies are contributing to new ideas and experiences of intimacy, friendship and identity through new forms of social interaction and new techniques of public display, particularly on social network sites" (Chambers 1). Social media changes much of the social structure we have been accustomed to. No longer do you need to meet with people in your community to form

bonds when you can meet total strangers online through social media and make them your friends. Businesses advertise their products through social media to deliver the message (and the product). New methods of communication are built in just tiny phrases like "tweets" or images and videos like "memes" or ".gif files." No longer are the needs for the usual social meet-ups at school dances or outside convenience stores when all you have to do is log onto a computer and make a bunch of social media accounts to form relationships. No longer are long-winded conversations about personal life and favorite things are needed when you can communicate ideas through small "netspeak" like LOL (Laughing Out Loud) and LMAO (Laughing My Ass Off) can share an idea or several ideas through one fragment of letters.

"Key debates and research evidence are assessed about emerging ways that people share their lives in a digital environment and the motives for doing so. New opportunities being offered by social media to transform identities and generate new modes of self-presentation, interaction and etiquette are identified" (Chambers 1). People are seemingly more connected to people (and the web, computer pun) more than at any other time in history. This would mark a significant change as a piece of technology; social media, vastly changes society much as the printing press did back in the 1600s. Even for the theory of postmodernity, it fits into the second phase of postmodernity, digitality, and the increasing power of personal and digital means of communication.

#### **Related Theories**

As with many theories, there are theories that either branch off from or are "improved" or "updated" versions of existing theories. These create broader contexts with existing ideas while also examining them in the current era. Some theories are outdated or don't fit in with the current generation of thought. This section will go over a few of those theories related to the theories mentioned above.

## A. Media Determinism

Media determinism is a form of technological determinism. It focuses on the idea that media can have an impact and or outcome for society. The same way the theory of technological determinism says that technology determines the outcome of society. "It addresses media and media development in media evolution terms, implying that new media emerge to address emerging social complexity management problems, creating an endless spiral of social-media complexity development dynamics" (Qvortrup 351). Harold Innis and Marshall McLuhan are two strong supporters of media determinism, also called media determinists. These media determinists saw media as the essence of civilization. McLuhan even believed that media is a more robust and explicit determinant than is the more general concept of language.

# **B.** Social Determinism

Social Determinism is the antithesis or counterpart of technological determinism. Social Determinism is the theory that social interactions and constructs alone determine individual behavior. The theory considers that human behaviors and emotions are examined through this lens to determine what makes people and societies act the way they do. Social determinists would not include biological and other non-social factors, such as genetic makeup, the physical environment, etc., as part of the reason for different human behaviors. These factors are considered to be socially constructed. Emile Durkheim, a French philosopher, was the first to study social determinism. As opposed to technological determinism, social determinism perceives technology as a result of the society in which it is developed.

## C. Postmodernity

As briefly discussed in an earlier paragraph regarding modernity, postmodernity is the economic or cultural state or condition of society that exists after modernity. "Postmodernity is a multi-layered concept that alerts us to a variety of major social and cultural changes taking place at the end of the twentieth century within many 'advanced' societies" (Lyon IX). Many scholars regard the 1980s, the early 1990s, the end of the Victorian era (1900s), or the end of WWII as the end of modernity. Thus, from those decades onward would be the beginning of postmodernity. "Rapid technological change, involving telecommunications and computer power, shifting political concerns, the rise of social movements, especially those with a gender, green, ethnic and racial focus, are all implicated" (Lyon IX). Jean-François Lyotard and Jean Baudrillard are two philosophers who subscribe to postmodernity theory.

#### Analysis

# A. Social Media, Technological Determinism, and the Social Credit System

To look at how social media and technological determinism intertwine, one may look no further than the most recent creation of the Social Credit System. The Social Credit system was created by the government of the People's Republic of China in the country of China. It was tested initially in 2009 before being formally introduced in 2011, although its history goes back as far as the early 1990s. It was a project long in development up until now. In short, "According to the planning document that outlines its most recent iteration, "its inherent requirements are establishing the idea of a sincerity culture and promoting honesty and traditional virtues, it uses encouragement for trustworthiness and constraints against untrustworthiness as incentive mechanisms, and its objective is raising the sincerity consciousness and credit levels of the entire society." In other words, the SCS is framed as a set of mechanisms providing rewards or punishments as feedback to actors, based not just on the lawfulness, but also the morality of their actions, covering economic, social and political conduct" (Creemers 2). The social credit system exemplifies the link between the theory of technological determinism and social media and how the use of a technology (social media) can affect the outcome of society.

# a. Exploring the Social Credit System

More technically, businesses are given a "unified social credit code," and citizens are given an identification number linked to permanent records. Individuals (and businesses but focusing more on individual people) are ranked based on every one of their interactions and transactions. "As a result, seemingly arbitrary things are included in the ranking, such as how individuals manage their online social activity, how often they consume fast food, or even whether they pick up after their dogs" (Packin) among various other activities. The important thing to look at is "online social activity," which would include activities like web searches, emailing and social media use.

While the Social Credit Systems benefits have been discussed, as seen in the quote from the planning document above, its detriments have been noted as being dystopian and authoritarian in word and in practice. When an individual may "showcase poor judgment, the result will be more than low credit scores that negatively impact the scored individuals' consumption, home rental, or employment prospects. A lower credit score will also impact the scored individuals' social circles, social mobility, and social capital" (Packin). In the realm of online activity and social media this includes "posted content on social media, and the sort of friends one has" (Creemers 3) on those social media sites. Let us say that if a person was using a social media site such as WeChat (a major social media site in China), and either post's content that is seen as unfavorable and "against the grain" or has friends that either participate in inappropriate activities and or have colorful opinions on different topics that site is likely monitoring the person's activity. As a result of this, their social credit score would now be affected dramatically unless it is resolved in a "timely" and "proper" manner. Not just the individual themselves, but the people around them, like other friends and family members, can also be affected. This pressures the person and those around them to act and change accordingly, specifically, with what the person has been doing on that social media site that is found to be critical. This can be seen as technology; in this case, the Social Credit System and social media sites themselves that use and participate in that system are being used to determine the outcome of people and people's actions in that society that use that technology. One that can be seen through one lens of creating an orderly and trustworthy society, but also a lens that makes people conform to certain ideas and standards and ignore those people's rights. The Social Credit System and those social media sites are determining a more "unified" and "compliant" outcome for the people under that system.

# **B.** Social Media Posts and Social Constructivism

Social Constructivism, as previously mentioned, is society's use of technology or items having separate, individual effects on society. Technology and objects are just neutral tools to be used for social and societal construction. This also means that these tools can be used can be either positive or negative. In this case, social media and social media posts can be used as "tools" to change or construct people's views. The uses of social media include anything from sharing photos of yourself to talking to random strangers to spreading news. Now you can imagine some of the negative consequences that can come from such things. Dishonesty campaigns, bullying, harassment, and more can all come from social media and social media posts being used as tools for all the wrong reasons.

#### a. Social Media Post Constructing Social Greif

In 2013, a person by the name of Justine Sacco, a public relations specialist, gained worldwide attention (not the good kind) and made Twitter trending #1 after she made a racially insensitive comment about her trip to Africa about African people. The tweet was also in reference to AIDS and her race. Pretty much in that order. The reaction to this post garnered many angry tweets and several hashtags in her name. To make it worse, it wasn't deleted for several hours, and by then, the news had spread all across the internet. Justine was then promptly fired from the internet firm she worked for, and her name lived in infamy. There was an enormous outcry against her, and it showed that everyone was not like what she was tweeting.

In essence, the lady's decision to make and send the tweet while using it to joke had far more lasting consequences for her and people in the world. On Jessica's end, she used her Tweets as a means of making "jokes," but in hindsight, would make a tweet that reaffirms racial stereotypes and highlight a prominent disease were "an estimated 1 million people died from AIDS-related illnesses in 2013, and an estimated 39 million people with AIDS have died worldwide since the epidemic began" (Damien Center). Though the destination of her flight was in Cape Town, South Africa, located at the very south end of the continent, her reference to just Africa makes the tweet and disease association worse when you know that "Sub-Saharan Africa bears the biggest burden of HIV/AIDS, with almost 70% of the global total of new HIV infections for 2013" (Damien Center). So, to recap, not only did she reaffirm stereotypes of making "whites seem immune to AIDS" and "blacks being the only people who can get AIDS," plus the insensitivity and lack of knowledge for the STD in question made this tweet a harmful use of social media as a tool. Even if it was unintended as a tool by Jessica herself, others could use the tweet to perpetuate these stereotypes. If the lady's tweets were more unintentional tools, then the population's use of calling Jessica's post out via Twitter and Twitter posts was definitely a use of the media as a tool as the collective outcry was enough to get the tweet poster fired from her job, making her name synonymous with racial insensitivity and superiority, and ruining her chance of finding another suitable position.

#### C. Social Media, Modernity, and a Fragmented World

As social media rises. It has become the most game-changing piece(s) of technology of our time, affecting our means of socializing and communication. Many people wonder if this change is for the betterment or detriment of human society. In an era of vast social communication through social media, are we coming together, or are we coming apart? "Social network sites are said to be increasing the number of friends that people have and strengthening ties between families, especially those separated by migration" (Chambers 2). Positives such as these increase people's favorability of social media. However, people worry about the negatives that can also come from social media. The main concern is that "new media technologies are being blamed for a decrease in close, 'genuine' bonds" (Chambers 2). Other fears include social media's "influence on debates about social media, fueling fears that social network sites contribute to a breakdown of community" (Chambers 2). Bullying, harassment, scams, growth of extremist groups and ideas, "canceling," disinformation, negative personality growth and support, and many more are all being considered all in part to social media. The idea is that people are becoming more alienated and fragmented in a more connected world than ever before.

## a. Cyberbullying

Suppose social media has made more connections between other people, then it has also done an immense disservice by making it easier to target people without much control or consequences. It is creating "disconnections" with others. Bullying has always been a problem in the public sphere in places like schools and workplaces. People who are bullied tend to suffer physical and mental injuries. These include low psychological well-being, poor social adjustment, psychological distress, and physical unwellness. This can lead to many other serious consequences. Bullying in the traditional sense has always been a problem, especially for those who can't get the right help. However, there was always some reprieve as people who were being could move somewhere else or be able to return home to enjoy peace. But, in this modern age, bullying can now follow you home and to whatever new place you go to escape it. This is the age of bullying online that is significantly impacting our current era.

The term for this is cyberbullying. "A corresponding definition of cyberbullying is: 'An aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and overtime against a victim who cannot easily defend him or herself" (Smith, Mahdavi, Carvalho, Fisher, Russell, Tippett 376). "The potential for cyberbullying has grown with the increasing penetration of networked computers and mobile phones among young people" (Smith, Mahdavi, Carvalho, Fisher, Russell, Tippett 376). What makes cyberbullying nefarious is that it can happen to anyone. A student in school can be bullied by their peers both in their "real lives" and their "lives" on the internet. It can also happen anonymously. As random strangers can either join along or start the bullying themselves and the person being targeted

doesn't have much recourse. It's hard for anything to be deleted off the internet and social media as a means of bullying makes it harder for the bullying to go away. Material that can be used to bully a person can travel faster via social media, and more people, including those in a bullied person's social circle, can become involved. This leads to the same physical and mental harm a person being cyberbullied can suffer. Even more so than the usual "traditional bullying." When a person gets "traditionally bullied," only the person being bullied, the bully or bullies, and the community around them are involved. Still, the entire online community can get involved with cyberbullying. This either results in pity for the bullied or more piling on for the driven individuals. The extreme results from these cases involve the driven individual committing suicide on screen for everyone to see and even the negative responses from the online community towards the bullies themselves after they realize their antics have resulted in the death of a human being.

## b. Bad Humans of the Internet

With the connections we make to other people using social media, is it possible we can get connected to the wrong type of people? How might this affect the person in question? An idea about the internet, especially on social media, is to meet and converse with any type of person online. These can include the rotten eggs of our world. Anywhere from your narcissists and typical anonymous bully mentioned in the section above to some of the more terrible people you could meet like extremists and thieves. Before, these people might have been harder to find in a public space. You'd have to find them yourself if you wanted to, or they would find you. The internet and social media give these people a place to group up, be more noticeable, and even get unsuspecting people into their clutches. This is a new era of negative human interaction. The social media app TikTok had come under scrutiny as a "magnet for pedophiles" after The Sun Online revealed that children as young as eight were being targeted by predators and bombarded with sexually explicit messages. The social media site Facebook has been seen as the center of disinformation or recruitment. Different extremist groups use the app to make pages and groups for other people to join and spread/expose misinformation, usually for political affiliations or for conspiracy theories. The social media site Twitter had cases of accounts of major companies and individuals being compromised by hackers. The sites lack security measures, and how anybody using the site can have their accounts and even personal information compromised within minutes. Everywhere you turn, there's some new scandal that tries to bring people down society by using social media in some way or another. Whether it means using the site itself or taking advantage of it through hacking or malware. The worst part is that these issues are either loosely resolved or left alone by social media sites' creators and or employees. Either the problem is too large or too complicated to figure out in a straightforward method.

## Conclusion

Social media has profoundly affected humanity since its inception or series of beginnings. Looking through the lens of technological determinism, social constructivism, and modernity, there is no denying that while it has had some positive effects on individuals and society, social media has played a more prominent negative role in modern society and the people who use it. Through technological determinism, merging the social credit system and different social media platforms can determine people's attitudes to act more loyal and agreeable to their society whether this is seen as a gracious act by the people who run the social media sites and the government implementing the system to make a country and its people more productive or as a forceful push by those same people to make people conform to a corrupt government. Through social constructivism, we've looked at how a nasty post on a social media site can construct people's ideas about other people in a negative light and further affect society and the people in it for the worst—fostering and constructing the worst ideas about people or groups of people through stereotypes and misinformation. Lastly, modernity (or postmodernity) has been ushered in by the creation of social media. But this new era will be pessimistic rather than optimistic, as people take advantage of social media, this new technology to harass others and ring in a new age of dread and panic.

Social media as a technology and tool, while initially being used as a tool to bring the world and people together, is instead being used to bring the world and people apart. Everything from government systems, depression, and cyberbullying are problems that stem from or because of the creation of social media. Social media may have opened a pandora's box of negative consequences we as people and society were not fully ready for. For all of it to turn around, social media may have to be reined in or stopped/taken down altogether, but the latter seems impossible as social media is now too ingrained in our lives. However, we as a people and society can take this technology (social media) and rework it so that it may not be used for all the wrong reasons but all the right ones.

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