Mask of Technology: How the Perceived Anonymity of Technology Affects Ethical Decisions

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Introduction

Anonymity can act as a mask to hide one's identity and actions, either outright or by creating a fake identity to hide behind. Masks create the illusion of being completely hidden and safe, which allows people to act in a manner that reflects their true feelings with less regard to repercussions their actions could incur. People act differently when in public versus in the privacy of their own homes. This is a microcosm of the effects of anonymity that occur everyday in people's lives. Modern communication is far-reaching, instantaneous, and global. With every technological communication advantage gained, the ability and effects of people's masked, anonymous actions increase equally, in ease of access and area of influence. However, the ability to be anonymous is not a recent development, and in order to place the proper context on anonymity in the choices that are made, the psychological experiments by Stanley Milgram should be observed.

Milgram's Experiment

The effects of anonymity are difficult to measure seeing as though if one is truly anonymous, nobody knows who they are or how they would act if their identities were known. Psychologists have often tried to look into anonymity's effects on people's actions with various tests and experiments. One famous experiment, Milgram's Experiment, focused on a very different topic in analyzing human action, but it also shed light on how people may act when they perceive anonymity.

Milgram studied the correlation between authority and obedience. In his experiment, an authority figure would tell a subject, known as the "teacher," to administer shocks to an unknown third party, the "learner," who was in a different room, when the learner answered a question incorrectly. The experiment set-up incorporated a separation between the teacher and the learner, causing each to be anonymous to the other. One of the main findings was that "more submission was elicited from 'teachers' when... teachers felt they could pass on responsibility to others" (Billikopf, 2003). The aspect of anonymity was increasingly important to the teacher, since they knew that their actions of shocking another human being were cruel and unusual punishment for the circumstances. The teacher never would have shocked the learner to such an extent if they felt a direct connection to the learner through their identity being known.

The ability to pass responsibility onto others stems from not feeling a direct responsibility for one's actions. The teacher did not feel directly connected to the action of shocking the learner because the authority figure told them to do it. Following this logic, it is the authority figure's fault for any damage done and the teacher was absolved.

Furthermore, teachers were less obedient in administering shocks when they "were asked to force the learner's hand to the shock plate so they could deliver the punishment" (Billikopf, 2003). To deliver the punishment personally put the responsibility back onto the teacher and removed the

mask of anonymity set forth in the original experiment set-up, causing the teacher to administer fewer shocks.

There is another aspect of anonymity that is much more common in modern society and that is pseudonymity, the hiding of oneself behind a persona that others interact with. It is important to establish that people react to pseudonymity in the same way they treat anonymity, with a willingness to act in a manner they would otherwise restrain themselves from.

Pseudonymity

Much of the ways that the mask of anonymity is applied through modern technology is actually another form of hiding one's identity called pseudonymity. Jacob Palme, a professor in the Department of Computer and Systems Sciences at Stockholm University, wrote a very comprehensive paper, "Anonymity on the Internet," building on "Usenet news and anon.penet.fi," an earlier work done by Mikael Berglund (Palme and Berglund, 2002; Berglund, 1997). In Palme's paper, he explains that pseudonymity is associating with a fake identity, akin to Samuel Clemens using the pseudonym Mark Twain or, as anti-Stratfordians believe, the author who used the name William Shakespeare (Palme and Berglund, 2002).

An advantage with a pseudonym, compared with complete anonymity, is that it is possible to recognize that different messages are written by the same author. Sometimes, it is also possible to write a letter to a pseudonym (without knowing the real person behind it) and get replies back. It is even possible to have long discourses between two pseudonyms, none of them knowing the real name behind the other's pseudonym...

A well-known person may use a pseudonym to write messages, where the person does not want people's preconception of the real author color their perception of the message... Also other people may want to hide certain information about themselves in order to achieve a more unbiased evaluation of their messages. For example, in history it has been common that women used male pseudonyms, and for Jews to use pseudonyms in societies where their religion was persecuted (Palme and Berglund, 2002).

Pseudonymity provides much of the same protection as anonymity by presenting the perception of hiding one's true identity even though that identity itself may become defined. The process of defining a pseudonym can even attach a personality and persona to it that the user will put on like a mask every time they sign-in.

General Applications of Anonymity and Pseudonymity

In order to properly analyze the ethical responses people exhibit when they perceive they are in a situation that gives them anonymity through technology, it is important to identify some of the general ways that anonymity can be used. Palme continues his discourse by identifying both positive and negative applications of anonymity and pseudonymity that are known by the average citizen (Palme and Berglund, 2002).

One of the first connections to anonymity most people would identify with is anonymous tipsters. These are people who are afraid that the information they divulge will create serious repercussions from their job or an organization that they have inside information about. Police often depend on anonymous tips in cases that involve criminals, and newspapers rely on anonymous tips to report on situations they would otherwise be unable to access.

Anonymity plays a key role in the political sector in some countries. In order to avoid repercussions from a repressive regime, anonymity allows people to express or receive political ideas that are viewed as unfavorable. This is often brought up in discussions that involve Iran, China, and Russia, but racial supremacist groups or violent militias would consider western democracies oppressive to their ideas as well.

A veil of anonymity allows for open discussions about personal problems, such as cancer or alcoholism. Many people would feel uncomfortable or embarrassed should their identity be associated with their thoughts or concerns in regards to personal subject matters such as Alcoholics Anonymous. A.N. Joinson, in his paper "Self-disclosure in Computer-Mediated Communication: The Role of Self-Awareness and Visual Anonymity," states that "[r]esearch shows that anonymous participants disclose significantly more information about themselves" (Joinson, 2001).

Roger Dingledine, in his presentation on the The Onion Router, explains some of the jargon used for anonymity in several commonplace situations (Dingledine, 2011). For business, "it's network security," while government is always interested in "traffic-analysis resistant Communication Networks," and as applied to human rights activists and journalists, anonymity can be described as "reachability." When framed in these manners, anonymity of self and actions is a basic medium of communication employed daily in such situations as banking transactions and suggestion boxes.

Palme also identifies what he believes are some of the darker elements that can be established via anonymity, specifically that most criminal acts are dependent on anonymity's mask in order for successful implementation of the crime. Palme lists some of the more well known crimes of this nature: "slander, child pornography, illegal threats, racial agitation, fraud, intentional damage such as distribution of computer viruses" (Palme and Berglund, 2002). Additionally, the creation of situations necessary for performing these acts often requires anonymity, such as pedophiles presenting themselves as a much younger individual to associate with children, or con artists presenting themselves as someone they are not to lure financial gain from a target.

Finally, there are acts that are not outright illegal but can be used to damage or harm another individual when protected by a mask of anonymity. These include anonymously posting nasty remarks targeting someone, or presenting oneself as another individual to disparage their name.

With an outlined definition of anonymity and pseudonymity, a few of the many different mediums with which to communicate anonymously can be discussed in the proper context.

Chat Rooms/Forums

Chat rooms are a specific arena of the Internet which provide a forum for individuals to share thoughts, ideas, stories, support, and much more. It is a particular outlet that people use to interact with others anonymously. Yet even with chat room "nicknames" to represent themselves, everyone participating in these chat rooms is wearing a mask, and they are interacting with a sea of masks. The anonymous aspect provides the users with privacy, "but it can also enable certain participants to become much more aggressive or mean-spirited than they would be without the promise of anonymity" (Pollick, 2011). Users can have pseudonyms on chat sites that are different every time they log on, or they can retain their history and persona, creating an "avatar" whose personality is ascribed to, but not applied directly to, the user him or herself.

The use of a mask that derives from a pseudonym removes the user from direct connection to their words. This lack of accountability for one's words creates a sense of courage to replace "the original topic of discussion... with personal insults, obscene responses, and ... attacks" and reflects a more antagonistic version of one's personal opinion than anything he or she would say in a face-to-face interaction (Pollick, 2011). Certain personalities feel so empowered by the freedom to express their true selves and honest opinions in chat rooms that they can lose control and "express the darker sides of their personalities in ways that would be unthinkable in real life" (Pollick, 2011).

However, people can also utilize the anonymity of chat rooms in a positive manner that often gets overlooked when compared with Internet "trolls," members who simply add non-constructive, negative commentary to the discussion. For example, there are many support groups that employ chat rooms on websites for alcoholics, drug abusers, victims of abuse, and people suffering from various diseases, both of the body and and the mind. With chat rooms, people are no longer limited to finding others who are nearby or only during specified meeting times. These people can find help and support from others all over the world, at any hour, protected by the mask that their chat room pseudonym affords them. The technology enables people to connect with others privately who are similar to them despite geographic and linguistic barriers. Whenever they need someone to lean on, they can freely express their feelings and emotions without judgment or fear.

Sometimes people may be prohibited from even entering these chat rooms based on their location. For these people, they may be able to communicate using Proxy Servers.

Proxy Servers

Proxy servers, such as The Onion Router (TOR), create one of the most effective methods for sending and receiving information anonymously on the Internet today. There are quite a few other methods that use similar techniques to proxy servers, such as Freenet or I2P, but none of them have been able to achieve the saturation that TOR has. Roger Dingledine explained recently in his talk at Crypto 2011 on August 17th, "anonymity loves company." What his comment means is that if there is a small portion of users using a specific anonymity client, then no matter how effective it is, the users can be identified by the sparseness of application. To be successfully anonymous, the chosen medium of the user must be commonly used by others for a multitude of reasons.

Dingledine repeatedly demonstrates sharp rises in TOR network usage as indications of reactions against oppressive regimes. He has a graph of TOR usage during June of 2009 which demonstrates this phenomenon. In the days before June 4th, there is a clear rise in number of daily users from approximately 8,000 to 11,000 users. He identifies June 4th as the anniversary of the protests and deaths at Tienanmen Square, an event that involves much controversy in the Chinese government and is targeted by "The Great Firewall" of China (Dingledine, 2011).

Additionally, in June of 2009, there was a social networking site that operated outside of Iran but had many Iranian users who expressed themselves in ways that were prohibited in the country. The site documented that 10% of its users from Iran came from TOR while 90% came from Amazon Web Services (AWS) proxies (Dingledine, 2011). Dingledine did not offer an explanation for this, but it appears that much of Iran may have been fulfilling Dingledine's earlier statement of "anonymity loves company." These users were just a small portion of other citizens of Iran using Amazon.com for allowed purposes according to the government of Iran. By tunneling through Amazon.com, it was almost impossible to block these users from accessing AWS, and equally impossible to identify which of the users connecting to Amazon are then routing

to this social networking site. While Amazon.com continues to provide visible support to the government of Iran, as negatively discussed in a letter to Jeffery Bezos from the Pro Democracy Movement of Iran (PDMI), by maintaining access to Iranian citizens, Amazon.com is able to also maintain cover for thousands of Iranians who use their servers to mask their activities online (Pro Democracy Movement of Iran, 2011).

Conversations that involve TOR often involve some of the negative aspects of anonymity including terrorism and child pornography. Roger Dingledine is quick to point out that even without TOR, "bad guys are doing great on the Internet." He describes how the anonymity that "bad guys" want is often only required for short term applications. For example, the technique used by the 9/11 hijackers was a common Gmail login used to write drafted e-mails. A member of another cell would log in to the same Gmail account another cell had used and view the saved draft. The e-mail would never travel outside of Google's servers, and Google had no inclination to scan its servers for such grave e-mail drafts.

While perfect for a small group of terrorists, this technique offers no assistance to citizens under a repressive government trying to communicate with members outside their community, so the TOR project feels that concentrating on the needs of "the good" far outweigh the negative uses by "the bad." As Roger Dingledine says: "If you want to make bad people disappear from the Internet, that seems like a hard thing to do" (Dingledine, 2011).

There is, however, a mode of communication that most people do not initially identify with anonymity–text messaging. Indeed, because of the delay of response, and the increasing methods of sending a text message, many of the reasons and applications that people have to send anonymous messages present themselves in text messaging.

Text Messaging

Text messaging, or "texting," is a form of communication in which people send short messages through cell phones. Although common for people to know who they are sending and receiving text messages from, there are aspects of how people use anonymity observed in the act of sending text messages.

Texting permits visual anonymity and its asynchronous nature allows for editing and self reflection. Texters may feel at greater ease being their 'real-self' through a text message reducing the potential repercussions that may otherwise take place in a traditional face-to- face or telephone encounter. Texting may offer Texters more control over their interactions with others by affording them visual anonymity and asynchronous communication. As such... [cell phones] may become more a matter of identity than a simple communication tool (Reid and Reid, 2004).

"Visual anonymity" is itself a mask, one which gives texters more control over their actions. It provides them with a misplaced sense of confidence in which they will act in a manner differently than if their actions or words were being given and received face-to-face. Asynchronous communication is communication that allows "time for composition and reflection, and the opportunity to manage the way users construct and present themselves in their messages" (Reid and Reid, 2004). The incorporated lag in the conversation inherent in the medium removes texters' emotional connection to the words being transmitted, contributing to a different response than what would normally occur. "The more lonely and socially anxious a person is, the more likely they are to be

a texter and to locate their real-self through text" since they have time, due to the asynchronous communication, to think about their response before sending it (Reid and Reid, 2004). Parallels can be drawn to e-mail, Facebook, and other communications where the message is stored for a length of time between the sender and the receiver.

The removal of emotions while sending a text message does not take away the emotions that come with receiving a text message. The nature of texting provides texters with the mask of their phone while talking to an exposed person who receives a personal message. According to one study, 42% of people said they would write something they would not say in person in a text message (Bryant et al., 2006). What people actually choose to say can be positive or negative in meaning, yet studies show that people are utilizing the anonymity they find in text messaging to act unethically (Bryant et al., 2006).

Bullying has always been an issue with adolescents as they grow up. With the advent of text messaging, employing the anonymity associated with it as a medium for bullying has become widespread, incessant, and cruel due to the anonymity attached to it. "Text bullies are often much meaner because they don't have to see their victims" (Bullying Statistics, 2009). By removing the victim from the equation, and the repercussions of the senders' cruelty, text messaging removes the emotional triggers of right and wrong for many teens. In other words, hiding behind the mask of their cell phones and the asynchronous communicative distance between the sender and the receiver gives the sender the courage to transmit a text message with the malicious intent of harming the receiver.

The victims of text bullying feel blatantly attacked through the messages received since they are the ones exposed. They feel the opposite of the protection that anonymity is supposed to afford them through their cell phones. The victims feel vulnerable and susceptible to verbal abuse through the texts that they receive, easily accessible at all times to attack from another. Since the majority of people admit to writing a text that they would not say in person, and the content of what people are sending via text message seems to be increasingly malicious, rude, and inconsiderate, is the medium providing a mask, or has text messaging lifted the polite mask that people wear in public to show their true judgmental selves (Bullying Statistics, 2009)?

Conclusion

When discussing anonymity, it is important to note that there are always two sides to every anonymous act—the actor, and the person or group the actor wishes to remain anonymous from. This can be broken down further to identify when the actor wishes to remain anonymous to deceive or to avoid repercussion. In today's society, anonymity and pseudonymity have negative connotations, but it is hard to attach an outright ethical bias towards applications of anonymity without truly considering both sides. For every executioner behind a mask, there are one hundred members of a group under an oppressive government fighting for change. For every criminal searching for child pornography, there are a thousand people in China finding uncensored articles on Tienanmen Square for the first time. And for every terrorist who skulks in the corners of the Internet waiting for the directive to do violence, there are thousands of anonymous donors willing to give so much of themselves but embarrassed for friends and family to know exactly how much they care.

Anonymity is judged negatively because the well known occurrences of it are where anonymity failed or where agents of the government attempted to intervene. The FBI is not going to spend

resources trying to track down the widow who wanted to donate \$10 million to UNICEF without her friends knowing exactly how much her husband left her. However, the FBI will use many agents from multiple states for an investigation lasting years to shut down a child pornography ring or catch a sleeper cell of terrorists. It is the latter situation that makes the papers and leads to the negative association people have with the word anonymous.

If anonymity is not looked at as where bad people hide, but instead viewed as multiple mediums that allow communication, people can begin to take each situation on a case by case basis before categorizing the use of anonymity as good or bad. In the end, making laws that attempt to ban or oversee anonymous communications hurts those that anonymity can do the most good for, while having little or no effect on the predators targeted by judicial intervention.

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