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INM348 Essay: The Ethical Issues of the Two Polluted Info-hemispheres

**Introduction**

**Polluted Infosphere: The Two Hemispheres**

The “polluted infosphere,” a term coined by Luciano Floridi, the Oxford University Philosopher of Information, describes the on-line, digital version of the Earth’s polluted atmosphere. The 57% of the Earth’s population who are internet users are subject to a number of mal-effects of the polluted infosphere. These mal-effects are not to be taken lightly as they impact the social, political, physical, and intellectual body.

Under the umbrella of “Polluted Infosphere,” are two actual hemispheres. The first is what I call the “Traditional Polluted Info-hemisphere.” This sphere fits within Floridi’s definition and includes widespread disinformation, fake news, on-line bullying, hate speech, et cetera, all produced and witnessed through our ICT’s (Information and Communication Technologies). To say these are inadvertent mal-effects of the infosphere would be misleading. These mal-effects are due to a combination of free speech, lax regulation, social alienation and malicious intent. They have found in a fecund breeding ground in the internet of countries like the US, attracting ne’er do wells and trolls, at a government, institutional, and personal level. One of the main ethical conundrums is how to keep the internet open in 2020 while minimizing the vulnerabilities attractive to those who are motivated by ill intent.

| Traditional Polluted Info-hemisphere   | Detrimental by Design Info-hemisphere  |
|--|--|
| <ul style="list-style-type: none"><li>● <b>Hate Speech &amp; Cyber-Bullying</b></li><li>● Fake News/Propaganda</li><li>● Extreme Content</li></ul> | <ul style="list-style-type: none"><li>● <b>Designed to instill addiction</b></li><li>● <b>Mal-Effects: Depression, Anxiety, Social Isolation, Insomnia</b></li></ul> |

The other sphere is something I refer to as the “Detrimental by Design Info-hemisphere” and refers to the design and development of application and website interfaces that instill addiction. This latter sphere also includes the mal-effects related to overuse of these interfaces on ICT’s: depression, anxiety, social isolation, even insomnia (Burke, 2018). Again the ethical issue here is that this is not an accident but a planned manipulation to get users hooked; these social media interfaces share similarities to the games at your local casino. As one Ex-Google

executive and technology expert notes again in the essay: “Every time we’re checking our phone, we are playing our slot machine” (Harris, 2017).

In this essay, I will start by defining essential terms, elaborate more on some of the mal-effects, and then make a distinction between the two info-hemispheres of the polluted infosphere. A portion of this essay will explore two examples of popular ideas, one a social media application doing good in the world and the other, a legislative body guiding the way on ethics for companies. This essay will focus on hate speech and bullying as two examples of the “Traditional Polluted Info-hemisphere” followed by examples on the “Detrimental by Design Info-hemisphere.” I posit that while much of the news has covered the ill effects of the “Traditional Polluted Info-hemisphere” (although news outlets may be ignorant of the terminology), *that* sphere is on equal footing with the “Detrimental by Design Info-hemisphere” when it comes to ill effects.

### **Traditional Polluted Info-hemisphere Hate & Bullying**

While the internet has brought the human race much in the way of progress over the last thirty years, certain vulnerabilities on the network have been weaponized within the last ten or so years. A culture of antipathy, in particular, is one of the larger problems of the “Traditional Polluted Info-hemisphere”. This includes everything from hate speech, on-line bullying, revenge porn, rumour-spreading, death threats, and even doxing, when one’s personal, residential information is leaked to online forums. Hate, here, is the basic ingredient. While poor social cohesion and perceived discrimination are starting points for alienated individuals, it is social media that is often the fuel for these individuals to find one another, gather into groups, recruit more members, and then broadcast their beliefs (Tremblay, 2019).

Private companies, of course, have their own protocols, driven by shareholder concerns, user feedback, and boycotts. When these fall short, governments can take a more muscular approach. Different countries have different internet standards when addressing hate speech. The United States has been very laissez-faire approach and a robust First Amendment protecting free speech while a country like China is on the opposite end with banned websites and active internet user monitoring (New York Times Editorial Board, 2018). Europe finds itself in the middle taking, in my view, a very skilled approach. The EU, to its credit, having learned from the atrocities on the mid-20th century, began crafting online hate speech legislation in 2002 (Scheeres, J., 2002) while still maintaining a rather open internet. The EU, because of its market size, has set the precedent for all user protections on the internet (Zerlang, 2017) with the recent introduction of the GDPR (General Data Protection Regulation). This is an attempt to notify internet users how their data may be used with each website they visit. Companies, mostly based in the U.S. have had to be compliant.

As for hate speech, the EU is attempting more strong-arm diplomacy rather than punitive action. According to one research team, “social media providers and video-sharing platforms such as YouTube, Facebook, and Twitter have developed internal policies for HS regulation, and they also signed a Code of Conduct agreement with the European Commission” (Ullman and Tomalin, 2019). Internet companies, at the EU’s prompting, vow to take down incendiary

material within 24 hours, hire and train staff to locate and remove hate speech on their platforms and share “best practices” with their peers (European Commission, 2016).

In the US, the onus falls on the individual companies to craft their own hate speech policies, which (see above) they have done at the EU Commission’s legislative prompting. Using algorithmic intelligence, one researcher found that quarantining individual users or smaller hate groups is a more valuable method than wholesale banning of larger hate groups. “In particular, the method of *quarantining* is recommended as a particularly effective way of avoiding the problematical extremes of entirely unregulated free speech or coercively authoritarian censorship.” (Ullman and Tomalin Quarantining). This idea of quarantining is another example of how the polluted infosphere is starting to *finally* be treated like a public health issue in some quarters of the United States.

Cyber bullying is another matter that is no less serious, even if it seems confined to the victim, perpetrator, and a handful of witnesses. Cyber bullying can come out of hate but often there is a complex of emotions and actions involved like boredom, insecurity, and popularity status amongst middle-schoolers and high schoolers who typically make up the vast share of the victims and perpetrators (Kowalski, Limber, Agatston, 2008). Primary reasons for boys to bully others include a need or desire to express dominance, finding satisfaction in causing suffering to others, and possibly being rewarded for their behaviour, like acquiring money or cigarettes from the victim (Kowalski, Limber, Agatston, 2008).

The online version, or Cyber Bullying, takes bullying to a whole new level. Words may dissipate in the school yard, but on-line, insults can remain infinitum. In 2020, ICTs (information and communication technologies) are here to stay; children and teenagers today would be socially isolated without them. A world without ICTs would likely leaves these teenagers’ parents unemployed as well. As Floridi notes, 70% of the GDP in the markets of the G7 countries are no longer materials-related, but information-related, depending on intangible goods (Floridi, 2014). These would be, another term that Floridi has coined, *hyperhistorical* societies, ones in which these societies cannot divorce themselves from ICTs without causing a complete market meltdown.

Just like the industrial revolution brought many people into the anonymity of cities where one could afford to be a bit crueller, the same thing is happening with the darkness of the internet. Kids and teenagers are on the front lines of this development with a phenomenon called *disinhibition*, or people saying things online because they believe their identity will be obscured. Thus there is little accountability for their words or actions (Kowalski, Limber, Agatston, 2008).

“The anonymity afforded by electronic communications is a much bigger factor than one might think at first blush, and may be responsible for cyber bullying having such a strong intimidation factor associated with it. In a survey that we conducted examining the incidence of cyber bullying among over 3,700 middle school children, close to 50% of the individuals did not know the identity of the perpetrator” (Kowalski, Limber, Agatston, 2008, p. 65).

There is much that children, parents, and educators can do. Interventions include educators having class lessons on bullying and parents notifying one another when instances of bullying surface (Kowalski, Limber, Agatston, 2008). It is also important to allow children to be the experts on this matter by showing the adults the popular sites where kids hang out and the social contexts of the online classroom.

### **Detrimental by Design Sphere Current Interface Designs**

Another aspect of the infosphere speaks not to its level of pollution but its tendency to manipulate users when completing certain tasks. This is what I call the “Detrimental by Design Info-hemisphere” and includes the interfaces themselves on some of the most popular apps and social media sites. Many of these features encourages addictiveness and short-term thinking. Intel Instructional Designer, Mauricio Rojas (2019), said a lot of these companies:

“create features in the apps and websites that have some sort of dopamine reward and positive reinforcement when users interacting with different elements of the application. That also is referred to as behavioural engineering, you are modifying behaviour of user by engineering how you want them to respond. Some of these features include likes, hearts, pings and dings and sounds, scroll down, they are basically like little slot machines, re-engineering behaviours of user. With the interface, the colours, the position of icons, changing shapes, it’s all very manipulative” (Rojas, 2019).

Tristan Harris, former Google employee and founder of the non-profit organization *Time Well Spent* warned about such a phenomenon in a much heralded video:

“the premise in the war for attention is that it’s going to get better and better at steering us toward *its* goals, not *ours*. We might enjoy the thing it persuades us to do, which makes us feel like we made the choice ourselves. For example, we forget if the next video loaded and we were happy about the video we watched. But, in fact, we were hijacked in that moment. All those people who are working to give you the next perfect thing on YouTube don’t know that it’s 2 am and you might also want to sleep” (Thompson, 2017).

These are not just supercomputers in our pockets but slot machines. “Every time we’re checking our phone, we are playing our slot machine to see “What did I get?” (Harris, 2017, minute 3:36). Some of the most successful companies (Snapchat, Facebook, YouTube, Tinder, Twitter) all take a page from the casino playbook and design their products appropriately around what Harris calls a “variable schedule of rewards.” This variable schedule of rewards is something by design, meant to increase addictiveness in the user by supplying a pay-off at random variables. One of the best schools in the US, considered the “West Coast Ivy School,” Stanford University, actually has a department called the Stanford Persuasive Technology Lab where many Silicon Valley entrepreneurs learned the secrets of the trade. As Harris explains: “Slot machines make more money in the United States from baseball, movies, and theme parks combined” (Harris, 2017, minute 3:02)

Hardware innovations can also play a part in the user's compulsion to seek information and approval. Harris claims "With the scroll wheel on a mouse, your hand never had to leave its resting position, you just scroll to see the next thing," making it easy to survey Facebook's news feed or Apple's news feed and therefore absorbing new streams of information. Nick Thompson, writer for WIRED Magazine, interviewed Harris, who is also the founder of the nonprofit organization, *Time Well Spent*. Harris:

"If we're talking about just your phone, then we're talking about Apple and Google because they design the operating systems, the phone itself, and the software in the phone. And if we're talking about where people spend their time on the phone, then we're talking about Facebook, YouTube, Snapchat and Instagram because that's where people spend their time" (Thompson, 2017).

### **Two Good Examples: The EU Commission & Meet-Up**

As Floridi warns, there is too much blame on the infosphere and not enough responsibility. We are still at the start, possibly middle, of what I believe is a wild-west phenomenon of a deregulated ICT market of monopolies. This type of economy is based on what Andrew Beer, University of York Professor of Sociology, calls "neoliberal rationality, where a kind of model of the market is rolled out into the social world" (Beer, 2018). Facebook, in my opinion, is the main perpetrator; in the past few years they have had to apologize for data security violations, for treating their users like guinea pigs (sad news experiment) and for allowing disinformation and hate speech to flourish on its platform.

There are companies, jurisdictions, websites and task forces, however, that are doing important work in cleaning up the traditional polluted infosphere. Case in point: the EU's GDPR, which was a total game changer in how users are notified about things like data sharing and cookies.

Information overload is not considered part of the polluted infosphere but it is still a side-effect of addiction and it manifests when a user lingers too long on social media. The best websites and apps for users, in my humble opinion, are those that connect a user with their peers face-to-face or within a group setting, thus producing a communal effect. For this I give accolades to "Meet Up" (<https://www.meetup.com/>). Meet Up has a simple interface in which a user can search for "gathering" by groups, events, dates, cities, or hobby keywords. A user is able to "message" other participants before or after an event but the main thrust of Meet Up is its analogue equivalent. In other words, the magic of Meet Up is the act of getting together off-line and in the flesh.

Meet-Up takes a "triangulating" approach (Bawden and Robinson, 2012): a bit of on-line maintenance for introductions and interface organization and then individuals meeting face-to-face in the real world. On Meet-Up, people log in on-line and scope out groups and participants before making the jump to meet in person. It's an elegant blend of digital and analogue. It is do-gooder and pro-social. Meet-Up is successful because it requires a can-do approach and a bit of social courage. Unfortunately, in a hasty business move, Meet-Up was acquired by the troubled WeWork in 2017. The future viability of Meet Up is in question.

## **Conclusion**

### **User Remedies**

Donna Freitas who wrote *The Happiness Effect: How Social Media is Driving a Generation to Appear Perfect at Any Cost* has a list of eight virtues based on Aristotle's *Nicomachean Ethics* that any user of social media can employ for balance in their lives (Freitas, 2017). Her last virtue is, I believe, the most applicable in a buyer-beware, unregulated, social media market. Called *The Virtue of Quitting: Why Giving Up can Be Empowering*, Freitas writes:

“The students who quit are not only standing up for themselves but also serve as examples of the importance of drawing boundaries, of acknowledging limits, of being able to step back and step away, and the benefits of doing so. Even a temporary respite can help empower us to gain a new perspective, critical distance, emotional repair, and a kind of freedom in living apart as opposed to desperately treading water or remaining in a place that makes us feel like we are out of control” (Freitas, 2017, p. 264).

Researchers, as far back as 1998, have linked increased internet use with higher levels of depression and loneliness (Kowalski, Limber, Agatston, 2008, p. 65). It is important to remember as well that it is not only social media companies that have learned the secrets of slot machine success. Entertainment sites like Netflix, YouTube, Apple News also take advantage of dazzling features especially the scroll-down and scroll-across tools. E-Commerce companies like Amazon and Etsy also have catching items like the heart icons and cataloguing functions which make interacting with their interfaces rewarding for the brain. The dark side, which I have barely discussed, is that all of these companies collect and store data on the user for purposes unknown

Internet company managers and executives only care about numbers: engaging a certain number of users overall and assessing how and why those numbers fluctuate month-to-month. Tristan Harris, Ex-Google employee, thinks the first step for ICT engagement reform is individual self-awareness and that our evolutionary biology, millions of years old, is no match “against thousands of engineers and the most personalized data on exactly how we work on the other end” (Thompson, 2017). In an unregulated market, there is little incentive for these companies to have a conscience. In the U.S., public health officials are woefully behind the curve. There have been dozens of high-profile studies, for instance, connecting Facebook usage with depression (Karlis, 2019). Facebook is not alone. One metastudy found strong correlations between depressive symptoms and time spent on social media sites (Yoon, et al, 2019).

The best thing to do with social media sites and one's phone in general is to log off, turn off, and stay off. Researchers at Stanford University and New York University launched a Facebook user study and found that there was small but significant improvements in mental health that lasts for weeks when someone deactivates their Facebook account (Karlis, N., 2019). Refraining from Facebook, researchers found, also had a catalyst effect in that participants in the study spent less time on-line and more time socializing with friends and family

(Karlis, N., 2019). Curbing one's engagement with and on social media or abstaining altogether is the best way to protect oneself from behavioural engineering.

As for the "Traditional Polluted Info-hemisphere," no solo effort can eliminate the less savory elements of the infosphere. A real change is when companies, individual users and governments work together. As Luciano Floridi explained in a recent interview:

"For this, three areas need to come together: education, corporate responsibility, and government. If it were only about personal education, the message becomes that 'it's all your fault'. The corporates' excuse is 'we just provide what people want'. And government can hide behind the mantra 'we allow and enable the free market'. Each of these views pushes the blame elsewhere. We need long-term coordination and commitment" (Runciman, 2018).

As a species, we are slowly coming to terms with the ethical issues of technology and ICT's. There needs to be a lot more education amongst all parties and an eye towards an investment in the future. Time and attention, is precious, I believe; wasting it on-line fighting trolls is not the best way to spend it.

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