

Phubbing: Communication in the Attention Economy

William Stanley Pendergrass
william.pendergrass@mycampus.apus.edu
School of Science, Technology, Engineering and Mathematics
American Public University System
Charles Town, WV 25414, USA

Abstract

Communication is a means to reach out to another. Language, a form of communication, was developed by humans to better connect with others and share abstract concepts and information. Electronic communication has evolved through today's use of the Smartphone. Smartphone use has exploded since it was introduced in the form of the iPhone in 2007. Within one device rest any number of devices which used to be separate in form and function. However, this modern form of communication has its down side. Some people use their smartphone in manners which suggest addictive behavior. Phone snubbing, or phubbing, has entered our lexicon because of phubbing's ubiquitous presence in modern communication. In addition to smartphone misuse comes corporate desire to keep you on the phone as long as they can. This paper examines the evolution of communication through language and electronic use and the rise of the Attention Economy which is designed to keep you on your smartphone.

Keywords: Phubbing, P-Phubbing, Attention Economy, Displacement Theory, Communications, Social Media, Smartphones

1. INTRODUCTION

Ten years ago, the smartphone was first introduced. It came from Apple in the form of the iPhone. It was introduced as by Steve Jobs as "a wide-screen iPod with touch controls, a phone and an internet communicator" (Merchant, 2017, p. 162). Apps, other than the ones the iPhone was shipped with, did not exist. Neither did the App Store. That all seems quaint today, because if you fast forward ten years, examine the landscape of smartphones and apps available now, we are no where remotely near the initial concept of the iPhone. Today, nearly everyone has a smartphone and nearly everyone is interconnected with the world at large. On any number of devices available, people can download the latest apps, send pictures and friend requests to Facebook, read Tweets from the hundreds if not thousands of those they are following on Twitter, check email, surf the Internet and so on and so on and so on. The

world of the smartphone reaches out to all parts of the Internet, yet, instead of expanding our universe, it seems to have contracted it into a world behind a screen, only.

People have become so enmeshed in their digital universes that they frequently ignore the real universe around them. (Chotpitayasunondh & Douglas, 2016, p. 10) People are drawn into their devices to such an extent that a new lexicon has been developed to describe this phenomenon; phone snubbing or phubbing. Social interchanges just ten years ago were much more personal and face-to-face. People talked, they went out to meet others, they shopped in malls and were aware of their surroundings. Today, there is quite frequently some story on the news or on YouTube showing someone falling into a hole or tumbling into a fountain because they were walking and looking at their smartphone and not at the road ahead of them. It's become so ubiquitous that it

doesn't even faze us anymore. Why are people so interactive with their smartphones and not with the person sitting across the table from them? What is the draw and why is it there? This paper will examine communication in several forms to draw a conclusion on why this phenomenon exists, why it exists and what might be done to diminish it.

2. LANGUAGE AS COMMUNICATION

Most every animal species communicates. Some do it by scent (ants), some by sight (bird plumage), some by sound (apes), and some by movement (bees). (Flack, 2012, p. 967; Hill, 2015, p. 1046) A dog will bark to show excitement or to ward off an intruder but is that communication? More importantly, is it language? What exactly constitutes language? Hockett (1960) proposed eighteen features which could be used to define language. The four most important which make up genuine verbal language are: 1. Referential (sounds refer to objects that exist), 2. Syntactical (there is a structure to it), 3. Non-iconic (words do not resemble what is being referred to), and 4. Learned (not instinctive). (Dunbar, 1996, p. 50) When an animal communicates, it is instinctively alerting others of an object or threat. When humans communicate, they use language to convey conceptual information to one another and about one another and their environment. In fact, "our language evolved as a way of gossiping" (Harari, 2015, p. 22).

It is not enough for individual men and women to know the whereabouts of lions and bison. It's much more important for them to know who in their band hates whom, who is sleeping with whom, who is honest, and who is a cheat. (Harari, 2015, pp. 22-23)

Language can also be thought of as a form of grooming. Monkeys and apes will groom one another's fur to remove insects and inspect each other for abnormalities. To accept a grooming involves trusting the groomer. Grooming is a pleasant experience. When humans first appeared on earth as a species, no doubt they groomed one another just as monkeys and apes did. However grooming takes time and removes one from active hunting and gathering. As the human brain evolved and its energy demands grew, language evolved as a form of verbal grooming.

Language does have two key features that would allow it to function [as verbal grooming]. One is that we can talk to several people at the same time, thereby increasing the rate at which we interact with them... A second is that language allows us to exchange information over a wider network of individuals than is possible for monkeys and apes. (Dunbar, 1996, p. 78)

Language is also different from non-human communication in that it involves the abstract, across time and internally. Language allows us to create stories, to relate to one another ideas of existence which have not occurred. Language allowed us to think and plan, to conceptualize the hunt and provide each member of the hunting party his or her place in the future events which would be occurring. Language allowed us to put into word and form abstract forms which may hold dominion over us. Language allowed for religion. "[Language] allows us to exchange knowledge amongst ourselves so that the whole community becomes wrapped up in the same set of beliefs" (Dunbar, 1996, p. 105). Language thus allowed for communication, community, common beliefs which held the community together and cooperation.

Through humans' use of language and the development of civilizations, conceptual information traveled around the globe. Bands of humans populated the earth bringing differing concepts of theology, morality, relationships, history, art, culture and social norms. Language bound tribes and nations together just as it bound together individuals.

3. TECHNOLOGY AS COMMUNICATION

"The smartphone first arrived ten years ago in the form of the iPhone" (Morris, 2017, p.1). "Sometime around 2011 or 2012, it suddenly became very easy to predict what people would be doing in public places: Most would be looking down at their phones" (Twenge, 2017a, p. 1). That was when people the number of people who owned a smartphone reached 50% of the population. (Twenge, 2017b, p. 1)

When Apple's smartphone went on sale on June 29, 2007, the world was dominated by flip phones and Blackberrys with tiny keyboards. People carried iPods for music, Palm Pilots for calendars, and compact cameras for

photography. Putting all those things into a rectangle that fit in your pocket seemed crazy. Doing it without a keyboard was even crazier. (Kelly & Regan, 2017, p. 1)

The smartphone quickly eclipsed all other forms of electronic communication. In one hand you had communication in the form of a phone as well as text and with the opening up of applications, there was communication via other means as well. Humans have very few items that they carry with them all the time; clothes, perhaps glasses and now a phone, in the form of a smartphone.

This is the new normal: Instead of calling someone, you text them. Instead of getting together for dinner with friends to tell them about your recent vacation, you post the pictures to Facebook. It's convenient, but it cuts out some of the face-to-face interactions that, as social animals, we crave. (Twenge, 2017a, p. 1)

Studies have shown that the interconnected world that smartphones propel us into does not make us feel better, it makes us feel worse. (Primack, Shensa, Sidani, Whaite, Lin, Rosen, Colditz, Radovic & Miller, 2017, p. 7; Angeluci & Huang, 2015, p. 173) One study examined the impact of smartphones on our relationships. It found that people whose partners were more frequently distracted by their phones were less satisfied with their relationships, and thus were more likely to feel depressed about it. (Roberts & David, 2016, p. 1) Another study asked college students to note their moods five times a day. It found that the more they used Facebook, the less happy they reported they were. "However, feeling unhappy didn't lead to more Facebook use, which suggests that Facebook was causing unhappiness, not vice versa" (Twenge, 2017a, p. 1). A recent study found that "people who visited social media platforms most frequently, 58 visits per week or more, had more than three times the odds of perceived social isolation than those who visited fewer than nine times per week" (Hobson, 2017, p. 1).

Overwhelmed by the volume and velocity of our lives, we turn to technology to help us find time. But technology makes us busier than ever and ever more in search of retreat. Gradually, we come to

see our online life as life itself. (Turkle, 2011, p.17)

Another study asked frequent smartphone users to put their smartphones face down on a table and walk away from them. The participants noted they grew more and more anxious over time. (Chever, Rosen, Carrier & Chavez, 2014, p. 290). "With constant connection comes new anxieties of disconnection, a kind of panic" (Turkle, 2011, p. 16).

Our neurochemical response to every ping and ring tone seems to be the one elicited by the "seeking" drive, a deep motivation of the human psyche. Connectivity becomes a craving; when we receive a text or an e-mail, our nervous system responds by giving us a shot of dopamine. We are stimulated by connectivity itself. We learn to require it, even as it depletes us. (Turkle, 2011, p. 227)

The rapid rise and increasing availability and decreasing cost of smartphones over the 2000s and 2010s created a divide between millennials who grew up before the introduction of smartphones and those who grew up with them all their lives.

Psychologically, however, [those who grew up in a world where there was always an iPhone, or the iGen] are more vulnerable than Millennials were: Rates of teen depression and suicide have skyrocketed since 2011. It's not an exaggeration to describe iGen as being on the brink of the worst mental-health crisis in decades. Much of this deterioration can be traced to their phones. (Twenge, 2017b, p. 1)

Many wonder whether those who have never not known a world without smartphones so ubiquitous in their lives might suffer from a lack of face to face communications. One study of Sixth graders who attended a smartphone-free camp for just five days improved their skills at reading emotions on others' faces much more than those who spent those five days with their normal high level of smartphone use. (Uhls, Michikyan, Morris, Garcia, Small, Zgourou & Greenfield, 2014, p. 387)

The iPhone and other brands of smartphones now permeate our lives for good or ill. It seems inconceivable of a future without instant

communication and immediate access to every person on the globe. While instant communication and inter-connectedness may be appealing to many, it has its risks in the form of demanding your immediate attention 24 hours a day. Smartphones may facilitate forms of communication, however they also facilitate forms of non-communication.

4. TECHNOLOGY AS NON-COMMUNICATION

The word phubbing “a portmanteau of two words: Phone and snubbing” has its origin in Australia (Roberts, 2016, p. 50; Roberts & David, 2016, p. 1).

It's a term coined by a group of lexicographers, poets and authors during a consortium convened by the [advertising agency McCann Melbourne] at the University of Sydney [in May of 2013] to describe the phenomenon of ignoring people in front of you in favor of paying attention to your phone. (Pathak, 2013, p. 1)

“Macquarie Dictionary of Australia was behind the [Public Relations campaign], part of a movement to get people to understand the importance of words to explain social phenomena-and the importance of having an updated dictionary that captures those words” (Pathak, 2013, p.1). Macquarie Dictionary was a printed edition. The thought was that people would buy a print dictionary if they thought it would contain new words expressing current social trends. McCann Melbourne ran the Public Relations campaign to introduce the word around the world. They set up a Facebook Page (@StopPhubbing), created YouTube videos and quietly seeded the word around the world. While the term probably did little to promote print dictionaries over Internet word searches, the term actually took hold and flourished, more than likely because of the growing ubiquity of smartphone use, and abuse and the phenomenon that people immediately recognized which was invading their lives.

Quickly spreading around the world and attracting the attention of over 300 million people, the campaign has prompted global conversations on the subject mobile phone etiquette, by identifying a truth - many of us are frustrated by the behaviour (sic) (caused by the proliferation of smartphones), but

without a term, it has gone unchecked. (Brockington, 2013, p. 1)

Eventually, the term took on a life of its own and further expanded to include other aspects of the snubbing. “In January [2014], the Journal Computers in Human Behavior published an article on ‘partner phubbing,’ or ‘p-phubbing’ for short. And in May, Oxford Dictionaries announced that an entry for phubbing would be included in their latest online update” (Zimmer, 2016).

P-phubbing merely indicates a close relationship between the Phubber and phubbee. “Partner phubbing...can be best understood as the extent to which an individual uses or is distracted by his or her cell phone while in the company of his or her relationship partner” (Roberts, 2016, p. 63).

The abuse of smart phones has placed people at the risk of impaired social interactions. When it comes to smartphones, tablets and other mobile delights, many of the adults have the unfortunate tendency to behave like children: prodding and poling their shiny toys to the exclusion of anyone and anything else. People would rather communicate via text instead of talking face-to-face. (Ugar & Koc, 2015, p. 1023)

In a recent study it was found that Internet addiction was positively related to phubbing activity. (Karadag, Tosuntas, Erzen, Duru, Bostan, Sahin, Culha, & Babadag, 2015, p. 1). “It is therefore reasonable to suggest that problematic Internet use would be associated with problematic smartphone use, which in turn may predict phubbing behavior” (Chotpitayasunondh & Douglas, 2016, p. 10). The Displacement Hypothesis has also been used to explain another reason for the draw of the smartphone’s universe (Valkenburg & Peter, 2007, p. 1169). “The ‘Displacement Hypothesis’ suggests that time spent on smartphones displaces (or reduces) more meaningful interactions with your lover, weakening the relationship” (Roberts, 2016b, p.1). Negative consequences of heavy use of Social Networking Sites include a decrease in real-life social participations and academic achievement as well as relationship problems. (Kuss & Griffiths, 2011, p. 3528)

Another explanation for the draw of the smartphone is the Fear Of Missing Out (FOMO).

FOMO is "a pervasive apprehension that others might be having rewarding experiences from which one is absent" and "a desire to stay continually connected with what others are doing" (Przybylski, Murayama, DeHaan, & Gladwell, 2013, p.1841). However, that continual connection has its price. In a recent study of adolescents higher use of social media was triggered by different emotions; in boys it was by feelings of anxiety and in girls it was depression. (Oberst, Wegmann, Stodt, Brand, & Chamarro, 2016, p. 50)

Phubbing and p-phubbing are seemingly unnoticed by the person with the smartphone in their hand, totally oblivious to the world around them, intent on accessing every app, every text, every Facebook post and Instagram communication. While for the other person, without a smartphone, without the electronic distraction just inches away from their face, the snub is real and the emotions it continually brings are hurtful. (Chotpitayasunondh & Douglas, 2016, p. 10) Feeling rejected and ignored in favor of a bit of electronic Tweet or text creates and maintains real negativity and pain. (Oberst, Wegmann, Stodt, Brand & Chamarro, 2016, p. 51) It would be seemingly easy to acknowledge and reverse. However, it may not be that easy to just put the smartphone down and leave it down. There are forces both internal and external which make it harder and harder to "just stop." Both inside the mind and manufactured into the devices are powerful draws to the smartphone users' attentions.

5. THE ATTENTION ECONOMY

The smartphone demands attention! People check their smartphones about 150 times a day on average. (Stern, 2013, p.1) This electronic device is a hard thing to put down, put away and stay down and away. There is always an update to check, a friend request to agree to, a Tweet that needs to be delivered to your followers. It is a 24 hour a day, 365 day a year worldwide attention-demander. It would seem to be an easy thing to do, to just set the device down and walk away and stay away, yet for a good many users, that is asking for too much. Why is that? Why do so many people find it so difficult to put their phone away and pay attention to their partner and the world around them?

Social Media employs numerous means to capture your attention and keep it. Much like operating a Slot machine, there is an action (checking your smart phone constantly) and a

reward (receiving Facebook "Likes," LinkedIn recommendations, Snapchat redlines or Instagram hearts for example). That Slot machine is operating to provide the player with an intermittent variable reward. Social Media also tricks your brain into continued and sometimes continuous interaction, losing track of time, reality and others around you. Snapchat's redline for example communicates visually just how long since two individuals interacted. The goal for many is to keep the redline going which begs the question, what is the draw of the feature? Is it enjoyment or addiction? (Morgans, 2017, p. 1) "As an experience evolves, it becomes an irresistible weaponized version of the experience it once was. In 2004, Facebook was fun; in 2016, it's addictive" (Alter, 2017, p. 5). A 2013 study found that those "who spent more time on Facebook had higher levels of activity in the nucleus accumbens – the brain's reward center" (Mariani, 2016, p. 88).

Human behavior is driven in part by a succession of reflexive cost-benefit calculations that determine whether an act will be performed once, twice, a hundred times, or not at all. When the benefits overwhelm the costs, it's hard not to perform the act over and over again, particularly when it strikes just the right neurological notes. (Alter, 2017, p. 5)

While the brain derives pleasure from the continual reward of electronic communications, that is not the only draw in these devices. The websites and apps themselves are setup to create the demand. They are designed to facilitate the almost constant interaction that draws the complete attention of the user. Why? There's money to be made in this attention economy.

"The attention economy" is a relatively new term. It describes the supply and demand of a person's attention, which is the commodity traded on the internet. The business model is simple: The more attention a platform can pull, the more effective its advertising space becomes, allowing it to charge advertisers more. (Morgans, 2017, p. 1)

This draw of the user's attention is designed into the software and into the app. There are deliberate actions which not only demand attention but deliver it as well.

You know when you open Instagram or Twitter and it takes a few moments to load updates? That's no accident. Again, the expectation is part of what makes intermittent variable rewards so addictive. This is because, without that three-second delay, Instagram wouldn't feel variable. There's no sense of will I win? because (sic) you'd know instantly. So the delay isn't the app loading. It's the cogs spinning on the slot machine. (Morgans, 2017, p. 1)

Rewards engineered into the software of apps create a powerful draw on a person's attention, thus increasing the amount of time spent on a device which in turn boosts the value of the app to advertisers and furthers profits to the app makers. People are addicted to their smartphones because the brain tells them what they are doing is important, so important that the rest of the world around them just melts away. They are also addicted to their smartphones because the addiction has been wired into the device.

6. FURTHER RESEARCH

This subject deals with a number of scientific disciplines: psychology, sociology, communication theory, to name a few. There is research possible in understanding generational differences in smartphone use and abuse as well as cultural differences. Smartphone use among new users verses those who have grown up with the devices should be examined for differences in use rates and types of apps used. Finally, depression and anxiety in age and gender should be better understood. As this subject is essentially ten years old, there is much which should be examined.

7. CONCLUSIONS

Smartphones are not going away. As service providers make smartphone service plans more affordable to a larger percentage of the population, more and more people will have access to them. Their use and abuse should not be ignored. Depression and anxiety associated with smartphone use should be examined at the earliest opportunity, especially for the more vulnerable youth population. Just like alcohol or drug addiction, addictive technology use should be better understood. While completely cutting yourself off from the Internet may not be an option, compartmentalizing smartphone use

might allow one to promote good behaviors and diminish bad ones.

8. REFERENCES

- Alter, A. (2017). *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked*. New York: Penguin Press.
- Angeluci, A. & Huang, G. (2015). Rethinking media displacement: the tensions between mobile media and face-to-face interaction. *Porto Alegre*, 22(4), 173-190.
- Brockington, T. (2013, October 9). How McCann invented the word 'Phubbing' for Macquarie Dictionary 'A Word is Born' campaign. *Campaign Brief*. Retrieved from <http://www.campaignbrief.com/2013/10/mc-cann-australia-documents-how.html>
- Cheever, N., Rosen, L., Carrier, L. & Chavez, A. (2014, August). Out of sight is not out of mind: The impact of restricting wireless mobile device use on anxiety levels among low, moderate and high users. *Computers in Human Behavior*, 37, 290-297.
- Chotpitayasunondh, V. & Douglas, K. (2016, May 13). How "phubbing" becomes the norm: The antecedents and consequences of snubbing via smartphone. *Computers in Human Behavior*, 63, 9-18.
- Dunbar, R. (1996). *Grooming, Gossip, and the Evolution of Language*. Cambridge, MA: Harvard University Press.
- Flack, J. (2013, November 4). Animal communication: hidden complexity. *Current Biology*, 23(21), 967-969.
- Harari, Y. (2015). *Sapiens: A Brief History of Humankind*. New York: HarperCollins.
- Hill, P. (2015, November 2). Animal communications: he's giving me good vibrations. *Current Biology*, 25(21), 1046-1047.
- Hobson, K. (2017, March 6). Feeling lonely? Too much time on social media may be why. NPR. Retrieved from <http://www.npr.org/sections/health-shots/2017/03/06/518362255/feeling-lonely-too-much-time-on-social-media-may-be-why>

- Hockett, C. (1960). Logical considerations in the study of animal communication. In: W. Lanyon and W. Tavolga (eds.), *Animal Sounds and Communication*, 392-430. American Institute of Biological Sciences, Washington.
- Karadag, E., Tosuntas, S., Erzen, E., Duru, P., Bostan, N., Sahin, B. Culha, I., & Babadag, B. (2015, May 27). Determinants of phubbing, which is the sum of many virtual addictions: a structural equation model. *Journal of Behavioral Addictions*. 4(2), 60-74.
- Kelly, H. & Regan, J. (2017, June 27). Inside Apple: how the iPhone almost never happened. *CNN*. Retrieved from <http://money.cnn.com/2017/06/27/technology/gadgets/creation-iphone-history/index.html>
- Kuss, D. & Griffiths, M. (2011, September). Online social networking and addiction – A review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8(9), 3528-3552.
- Mariani, M. (2016, September/October). The antisocial network. *Psychology Today*.
- Merchant, B. (2017). *The One Device: The Secret History of the iPhone*. New York: Little, Brown and Company.
- Morgans, J. (2017, May 19). Your addiction to social media is no accident. *Vice*. Retrieved from https://www.vice.com/en_us/article/vv5jkb/the-secret-ways-social-media-is-built-for-addiction
- Morris, B. (2017, January 11). The next big thing in smartphones? The software. *Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/the-next-big-thing-in-smartphones-the-software-1484139602>
- Oberst, U., Wegmann, E., Stodt, B., Brand, M. & Chamarro, (2016, December 19). Negative consequences from heavy social networking in adolescents: the mediation role of fear of missing out. *Journal of Adolescence*, 55, 51-60.
- Pathak, S. (2013, October 7). McCann Melbourne made up a word to sell a print dictionary. *Advertising Age*. Retrieved from <http://adage.com/article/news/mccann-melbourne-made-a-word-sell-a-dictionary/244595/>
- Primack, B., Shensa, A., Sidani, J., Whaitte, E., Lin, L., Rosen, D., Colditz, J., Radovic, A. & Miller, E. (2017). Social media use and perceived social isolation among young adults in the U.S. *American Journal of Preventive Medicine*, 53(1), 1-8.
- Przybylski, A., Murayama, K., DeHaan, C., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29, 1841-1848.
- Roberts, J. (2016). *Too Much of a Good Thing: Are You Addicted to Your Smartphone?* Austin: Sentia Publishing.
- Roberts, J. (2016b, December 14). Is 'phubbing' ruining your relationship? *CNN*. Retrieved from <http://www.cnn.com/2016/12/14/health/phubbing-phones-relationships/index.html>
- Roberts, J. & David, M. (2016, January). My life has become a major distraction from my cell phone: Partner phubbing and relationship satisfaction among romantic partners. *Computers in Human Behavior*, 54, 134-141. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0747563215300704#articles>
- Stern, J. (2013, May 29). Cellphone users check phones 150x/day and other Internet fun facts. *ABC News*. Retrieved from <http://abcnews.go.com/blogs/technology/2013/05/cellphone-users-check-phones-150xday-and-other-internet-fun-facts/>
- Turkle, S. (2011). *Alone Together: Why We Expect More from Technology and Less from Each Other*. New York: Basic Books.
- Twenge, J. (2017a, July 1). Steve Jobs, Apple and social anxiety> the iPhone's birthday is nothing to celebrate. *Newsweek*. Retrieved from <http://www.newsweek.com/steve-jobs-apple-and-social-anxiety-iphones-birthday-nothing-celebrate-630416>

- Twenge, J. (2017b, September). Have smartphones destroyed a generation? *The Atlantic*. Retrieved from <https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/>
- Ugar, N., & Koc, T. (2015). Time for digital detox: misuse of mobile technology and phubbing. *Procedia - Social and Behavioral Sciences*, 195, 1022-1031.
- Uhs, Y., Michikyan, M., Morris, J., Garcia, D., Small, G., Zgourou, E. & Greenfield, P. (2014, October). Five days at outdoor education camp without screens improves preteen skills with nonverbal emotion cues. *Computers in Human Behavior*, 39, 387-392.
- Valkenburg, P. & Peter, J. (2007). Online communication and adolescent well-being: testing the stimulation verses the displacement hypothesis. *Journal of Computer-Mediated Communication*. 12, 1169-1182.
- Zimmer, B. (2016, December 22). A new word, 'phubbing,' catches on, thanks to a plot. *Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/a-new-word-phubbing-catches-on-thanks-to-a-plot-1482437806>