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Saunders, William

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William Saunders

Professor Christo Doherty

Does Facebook's interface employ narcissism to maximise usage?

A critical comparison of the 2008 and 2015 Facebook interfaces

A research report submitted in partial fulfilment of the requirements for the degree of Master of Arts in the field of Digital Arts, University of the Witwatersrand, Johannesburg.

02 July 2015

Abstract

Facebook has become a part of over a billion people's daily lives, but the mechanisms used by Facebook to keep people using its service may be playing off negative personality traits, one such being narcissism. Studies up to now have not looked at the design of the interface in relation to narcissism and whether or not Facebook is actively exploiting narcissism for its own ends. This study will analyse whether Facebook is deliberately designing an interface that exploits people's narcissism by reviewing the current research on Facebook and narcissism and then doing a case study that will compare the 2008 interface with the 2015 interface. It will analyse how narcissism is involved in the persuasion strategies employed in each interface by using these four persuasion goals:

1. Create personal profile page
2. Invite friends
3. Respond to other's contributions
4. Return to the site often

The study will compare the features that use design for behavioural change and show whether or not Facebook is continuously designing features that exploit people's narcissism.

Declaration

I declare that this report is my own unaided work. It is submitted for the degree of Master of Arts in the field of Digital Arts by coursework and research at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination at any other university.

William Saunders _____ ____day of _____ 2015

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1.0.Introduction

1.1.Subject of the paper

This paper argues that Facebook has been designing an interface that has over time increasingly exploited narcissism in order to achieve its commercial aims.

1.2.Importance of the research

Throughout the world social networks have become a normal part of many people's daily lives and are used by people to connect with others through online representations of themselves. These representations of the self and the mechanism through which people interact with others are controlled and curated through the interface design of the social network. The largest social network that exercises such social engineering is Facebook which is used by billions of people every month (prnewswire.com). It was created by Mark Zuckerberg in his Harvard dorm room on 4 February 2004 and enjoyed a very high speed of adoption and time spent using the service (Kirkpatrick 36). With such rapid growth came huge running costs and from an early stage Facebook has employed advertising to make money. The uneasy relationship between supplying a free service and the need to make revenue to cover costs and to satisfy stockholders has blurred the lines of Facebook's seemingly good intentions. Exploiting connectivity to create advertising revenue means that Facebook needs immense growth and is thus reliant on being continually used by more and more people. The mechanisms to create an appealing service may not always be benign and so this study will investigate how Facebook could be continually exploiting people's narcissism so that it can continue to grow and drive advertising revenue. A case study will be conducted from an interface design perspective which is unique as studies up to now have

looked at what narcissists do on Facebook but have not looked at how the design of the interface may influence narcissism.

1.3.Methodology

Comparative case study

A qualitative analysis will be done by comparing the 2008 version of the Faceook interface with the 2015 interface. The use of a case study is informed by previous research done by Fogg and Iizawa who used a similar methodology in their 2008 study *Online Persuasion in Facebook and Mixi: A Cross-Cultural Comparison.* The approach of the researcher analyzing the two interfaces is unusual in qualitative studies, but permitted in the context of qualitative research, as Stake states: "As a form of research, case study is defined by interest in individual cases, not by the methods of inquiry used" (1998). There is no data collection because the website screenshots already exist, and analysis will be undertaken by the researcher. The case study will answer the research question: Has the Facebook interface from 2015 increasingly employed narcissism when compared with the interface from 2008?

Boundaries of the case study

The study will be conducted within a concise definition of narcissism based on both cultural and scientific studies. The study will analyze specific interface elements that were used in the Fogg and Iizawa study.

How the study will be performed

The study will be centred on a case study in Chapter 5 that analyses Facebook's interfaces from 2008 and 2015. The preceding chapters will build a foundation for the case study to be performed by investigating social media culture and the monetization goals of social media companies, the persuasive design that social media companies employ and the definition of narcissism in contemporary culture. The study will be done from an effects

model of media theory; even though it is considered an outdated theory, it is relevant to this work because the focus is on the motivations of Facebook using design to achieve a certain behaviour – very much an effect of the design itself. The study will compare the features that use design for behavioural change and show whether or not Facebook is continuously designing features that exploit people's narcissism. It will be structured according to the following chapters:

Chapter 2: Social media, the interface and monetization

Investigating the effects of interactive media within our society and how Facebook's monetization strategy works within the social media paradigm.

Chapter 3: Persuasive design

A review of social network design and behavioural change will form a connection between the design of the interface and Facebook's goal as a social network.

Chapter 4: Investigating the definitions of clinical Narcissism and cultural narcissism

An analysis of the definition of narcissism will be presented to understand what narcissism means in contemporary culture and how this definition has been used in recent research. A review of the scientific and cultural thinking regarding narcissism up to the present will follow in order to develop a definition of narcissism that can be used in the case study. Current scientific papers regarding Facebook and narcissism will be reviewed.

Chapter 5: Case study

A case study will be conducted that compares the interface of 2008 with the interface of 2015 to investigate if the design evolution has been continually and increasingly exploiting narcissism.

Chapter 6: Conclusion

Conclusions based on the case study.

2.0. Social media and the interface

Facebook is an example of the phenomenon of social media, a relatively new form of media that has distinct differences to other earlier digital media such as websites and chat forums. This chapter will look at current media theorists such as Lev Manovich, Lisa Gitelman, danah boyd, Sherry Turkle, and Jose van Dijck to establish an understanding of social media within contemporary culture. Facebook is a public company that needs to create profit for its shareholders, and so the relationship between social media and monetization will be addressed. By analyzing the framework within which Facebook exists and the commercial motives behind the service, the reasons why Facebook is interested in persuading people to use its service as much as possible will be revealed. Because the case study will be analyzing the persuasion goals of Facebook, investigating the motivation behind these goals will help form an understanding of why Facebook may be exploiting narcissism through the interface.

2.1. Definition of Social Network Sites

danah boyd and Nicole Ellison (2007) define a social networking site (SNS) as consisting of three elements that allow an individual to:

1. Construct a public or semi-public profile within a bounded system
2. Articulate a list of other users with whom they share a connection
3. View and traverse their list of connections and those made by others within the system (211).

The authors state that what makes social networking sites unique is how they make people's social networks visible. However, the control people have over online representations of the self is particularly relevant to this study, where the design of the interface can allow and encourage people to manipulate their profiles. Jose van Dijck explains that "in contrast to other mass media, SNS in general— and Facebook in

particular— offer individual users a stage for crafting a self-image and for popularizing this image beyond intimate circles" (51). danah boyd frames social media through what she calls 'networked publics': "Because technology is involved, networked publics have different characteristics than traditional physical public spaces[1]" (236). boyd describes four characteristics that are unique to social media: persistence, visibility, spreadability and searchability. Persistence is the durability of online expressions and content; visibility is the potential audience who can bear witness; spreadability is the ease with which content can be shared; and searchability is the ability to find content. These four characteristics of social media make for a unique place of social interaction and, unlike the real world, a space that is defined by the company that creates the social media service. Of relevance to this study are how the first two characteristics - that people's representations are online and that other people can view them - are manifested in Facebook.

2.2. History of Facebook

2.2.1. Early Social Networks

Mark Zuckerberg created Facebook, or Thefacebook as it was originally called, from his Harvard dorm room on 4 February 2004 (Kirkpatrick 31). The first recognizable social networking site was called Sixdegrees.com and was started in 1997 by Andrew Weinreich. The service, which was visionary for its time, allowed people to create a network of real relationships between individuals using their real names (Kirkpatrick 65). A problem that

[1] Networked publics is a concept danah boyd created to explain the digital spaces that people operate in: "Networked publics are publics both in the special sense and in the sense of an imagined community. They are built on and through social media and other emergent technologies…Networked publics formed through technology serve much the same functions as publics like the mall or the park did for previous generations of teenagers." (213)

many social networks faced at this time was the very limited technology available and so Sixdegrees was painfully slow, using the dial up modems of the day, and lacked photographs since few people had digital cameras (Kirkpatrick, 68). Friendster began in 2002 and was largely conceived as a service to find a romantic partner and thus real identities were very important to the site. People now had the ability to upload photographs of themselves, but the site faced problems with scale and page loads sometimes took 25 minutes (Kirkpatrick, 58). When Facebook launched, MySpace had over 1 million active users (Kirkpatrick 73) and allowed people to create anonymous profiles with full creative freedom to design their pages (Boyd and Ellison: 217).

Facebook's Beginning

Before Facebook, Zuckerberg had created a few Internet services that proved to be very popular with the Harvard student body. The first was Course Match, a service that allowed people to see what courses other people were taking. Zuckerberg's insight into what other students wanted, namely that if a boy or girl that you were interested in was in a particular course then you were more likely to take that course. This first foray into Internet services showed how keenly aware Zuckerberg was of human psychology[2], and in particular student psychology that was largely driven by hormones. His next Internet service tapped into people's desire to be rated and in turn to rate other's attractiveness. The service was called Facemash, and it allowed people to put their photographs up to be rated and in turn to rate other people's photographs. The Harvard newspaper *The Crimson* pointed out that the service was "catering to the worst side of Harvard students" (Kirkpatrick 23). Zuckerberg was accused of violations of the college's code of conduct and he was called in to stop the

[2]Unlike many of the other developers of social media, Zuckerberg studied psychology and not just programming (Forbes.com).

service, but the rapid uptake of Facemash showed how Zuckerberg could use people's desires to create addictive services. Zuckerberg's next and most successful service was originally called Thefacebook.com and was conceived as a replacement for College's Facebooks: paper bound books that displayed student's pictures and biographies. Kirkpatrick states that it was not uncommon for students to scour the book trying to find attractive men or women (27). Again, Zuckerberg had seen students' behaviour and had "…written a program they wanted to use." (20).

2.2.2. Thefacebook.com

Thefacebook.com had a minimalist aesthetic without any form of customization. You could only sign up for an account if you had a valid Harvard.edu email address and you could upload a profile picture and some personal information such as relationship status, contact numbers, emails and favourite books, movies or music. Once a person created a profile they could invite their friends, see their friend network and direct something called a "poke" at people. Included in the first version was Course Match, so students could see who was taking which courses – a useful function that made Thefacebook spread very fast (Kirkpatrick 31 – 32).

Zuckerberg describes the initial aim of Thefacebook:

> Our project just started off as a way to help people share more at Harvard, so people could see more of what's going on at school. I wanted to make it so I could get access to information about anyone, and anyone could share anything that they wanted to. (Kirkpatrick 28)

Use of the service spread fast and by the end of the first week almost half of all Harvard students had an account. (Kirkpatrick 33) Thefacebook was soon opened up to other colleges.

2.2.3. The Wall

The Wall is a feature that was added in September 2004 and made students spend even more time on the service. It allowed people to have their own bulletin board on their page, with other users being able to post comments on their Walls. It was another reason for people to browse other people's pages and became Thefacebook's most popular feature (Kirkpatrick 93). By March 2004 Thefacebook was rolled out to more American colleges.

2.2.4. Photos

Students were initially only allowed one profile picture but they often changed them multiple times a day. The Facebook team (they had now changed the name to Facebook) realised that people wanted to upload more than one picture. A key feature that they copied from the then popular photo-sharing site Flickr, was tagging. Tagging allowed someone to upload a picture and tag other people in the photograph. Those people would then be alerted that they have been tagged (Kirkpatrick 153). The new feature was incredibly popular, perhaps for the wrong reasons: "Now there were two ways on Facebook to demonstrate how popular you were: how many friends you had, and how many times you had been tagged in photos" (Kirkpatrick 155).

2.2.5. Newsfeed

The Newsfeed is a tool that helps users to find any useful information about what their friends were doing. It is composed of a sequential list of information that sits on people's homepages, as well as a smaller version, the Mini-feed, that appears in each person's profile. This innovation came from the observation that people were jumping in and out of their friend's profiles looking for anything that had changed. The Newsfeed was

launched on 5 September 2006 and provoked an immediate negative reaction from users. Despite the initial backlash, the feature increased people's ability to see trends going on around them, ironically evidenced by the rapid growth of anti-Newsfeed groups (people became aware of the groups through their own Newsfeeds). Launched alongside the Newsfeed was the status update box, where users could type in anything that they were thinking and it would be published to their friend's Newsfeeds.

2.2.6. Like Button

On 9 February 2009 Facebook introduced the Like button. It is an easy way to express a positive opinion about content. The 'like' is then published to a person's friend network. According to Kirkpatrick the Like functionality is key to Facebook's viral spread through the Internet and is one of the reason it has become a top driver of traffic to websites (297).

2.2.7. Facebook today and its policies

Currently Facebook is the largest social network in the world with 1.28 billion monthly active users [3] and employs over 6 818 people in their offices in Menlo Park, California, United States of America (investor.fb.com/). The company went public on 1 February 2012 with a record $5 billion Initial Public Offering. The service gains most of its revenue from advertising with mobile accounting for an increasing amount of revenue (investor.fb.com/). However, tensions exist between Zuckerberg's idealism and the commercial goals of the company. Mark Zuckerberg sees Facebook as creating a more open and transparent web:

> The days of you having a different image for your work friends or co-workers and for the other people you know are probably coming to an end pretty quickly...the

[3] As of March 2014

> level of transparency the world has now won't support having two identities for a person. (qtd. in Kirkpatrick 186)

Just before the Initial Public Offering, Zuckerberg wrote an open letter to potential investors in which he outlined the five core values of Facebook. The values at the time were: Focus on Impact, Move Fast, Be Bold, Be Open and Build Social Value. In the 'Be Open' value, Zuckerberg states, "We believe that a more open world is a better world because people with more information can make better decisions and have a greater impact". Likewise, in 'Build Social Value' he says, "Facebook exists to make the world more open and connected, and not just to build a company" (businessweek.com/).

As Facebook's chief operating officer, Sheryl Sandberg said, "Mark really does believe very much in transparency and the vision of an open society and open world, and so he wants to push people that way" (qtd. in Kirkpatrick 195). Zuckerberg's goal may genuinely be for a more open and transparent web but being a public company Facebook has a responsibility to its shareholders to maximize profits and increase growth. Despite the need for increasing profits, Zuckerberg maintains that his goal is growth, not profits (telegraph.co.uk), but Andrew Keen, author of *The Internet is not the answer* (2015), sees Facebook as being packaged as an all transparency tool, while it is in fact a big data service whose goal is to gather as much data about people as possible. Keen states that "rather than fostering a renaissance, it [Facebook] has created a selfie-centered culture of voyeurism and narcissism" (64). Keen views Zuckerberg as having created a cult of sociability and openness that are perfectly aligned with getting people to see and click adverts: "He has appropriated the ideals of openness and transparency to suit Facebook's commercial interests" (1109). Zuckerberg evangelizes non-privacy and openness of data, a policy that is very useful in advertising to specific people, and one that helps in driving revenue to satisfy investors.

However, the need for rapid growth and increasing the advertising revenue has meant that Facebook's service needs to be very engaging. One of the social mechanisms that Facebook may employ is to exploit people's narcissism through the interface.

2.3. The Interface

The website's interface is the primary interaction medium between Facebook and its users with people logging into Facebook through their phone or their computers and seeing a format of information that has been packaged by Facebook's designers. Facebook controls this interface so as to influence its users and steer them in the direction they want. The case study will be used to analyse the Facebook interface and so it is important to unpack what constitutes the interface and its technical environment. Van Dijck's analysis of social media within the technological dimension will be useful in understanding the environment within which the interface exists and how Facebook controls that interface.

2.3.1. Data, algorithms, protocols, interfaces and defaults

Van Dijck uses five concepts to dissect the technological dimension of software: (meta)data, algorithm, protocol, interface, and default.

> Governing protocols provide a set of instructions that users are forced to obey if they want to partake in the mediated flow of interaction. For instance, because Facebook wants you to share information with as many people as possible, the platform scripts actions such as joining lists, groups, and fan pages. Facebook's protocols guide users through its preferred pathways; they impose a hegemonic logic onto a mediated social practice. (31)

Meta(Data)

Van Dijck explains that the basic resources or coding technologies are data and metadata[4] (30). Facebook collects demographic data of its users such as name, gender, date of birth and location by encouraging users to input as much personal information as possible. Beyond demographic information, Facebook also collects as much data about a person as possible, such as which pages they visit within the same browser (Van Dijck 12), which friends' profiles they click on and all the activities they perform within Facebook. Through the Like button, Facebook can also collect information from other websites (technologyreview.com).

Algorithms

> An algorithm, in computer science, is a finite list of well-defined instructions for calculating a function, a step-by-step directive for processing or automatic reasoning that orders the machine to produce a certain output from given input (Van Dijck 30).

[4]Metadata is information about data that makes it easier to locate data within the system, for instance a time stamp on a digital photograph is attached to the code that makes up the image and can be recalled at any time.

Algorithms are often patented, protected by the company from competitors and are a form of intellectual property. Facebook's proprietary algorithm Edgerank is used to determine what friend's posts are displayed in a user's Newsfeed (Van Dijck 49).

Protocols

Protocols are a set of instructions that users are forced to obey in order to interact with the Internet service. One of Facebook's goals is for users to share as much information about themselves as possible, thus the protocols embedded within the Facebook software are optimised for sharing. Facebook forces users to follow certain pathways that are aligned with Facebook's goals (31). Facebook controls this internal interface, but changes made to it do not necessarily show on the visible interface. It is rather a link between software and hardware, the second layer behind the visible interface that communicates with a physical machine or server.

Interfaces

Facebook's interface controls technical features, such as the button for adding a friend, as well as regulatory features, such as the rule that a personal profile is required before entering a site. The features and their design actively steer users between content and people. The visible interface is the link between what people see and the protocols that guide people through Facebook's goals (31). Matthew Fuller explains how protocols are invisible to users and how the interface is the veil behind which the protocols hide:

> Protocols hide behind invisible or visible interfaces. Internal interfaces are concealed from the user, who can only see the front end, or the visible interface. An invisible, internal interface links software to hardware and human users to data sources. (Fuller 149)

Thus there are layers behind what users of Facebook see and interact with that have been designed for certain purposes.

Defaults

Defaults are a way for a social media company to steer people into preferred directions. By placing desired behaviour on default, the user has to make an effort to change it, an effort that the majority of users are unlikely to make (Van Dijck 31). Interfaces are often characterized by defaults. Defaults are like settings that are preset and channel a user to behave in certain ways:

> Defaults are not just technical but also ideological maneuverings; if changing a default takes effort, users are more likely to conform to the site's decision architecture (31).

A controversial default that has caused many privacy issues is Facebook's default to distribute social content to all of a person's friends (Kirkpatrick 208). In this case, it is in Facebook's interest to make 'sharing' a default as it increases the number of interactions between people and hence the value of the social network.

For Van Dijck the decisions a social media company makes regarding algorithms, protocols and defaults, changes the cultural experience people have while using the service (Van Dijck 32). Facebook is in control of the pathways used by people who have a preference for certain actions.

2.4. The Facebook interface changes information

According to Van Dijck's analysis of social media, Facebook is software and is composed of data, algorithms, protocols, the interface and defaults. All these elements are designed with Facebook's prerogatives in mind and it is through the interface that the user interacts with Facebook. But how does the interface influence the user? Jaron Lanier, a renowned computer scientist who has a critical perspective of digital culture, also sees the interaction between human and computer as being shaped by the code and impacting how people behave: "When developers of digital technologies design a program that requires you to interact with a computer as if it were a person, they ask you to accept in some corner of your brain that you might also be conceived as a program" (Lanier 4). Lanier's perspective turns human-computer interaction on its head and claims that people become a little bit like machines when using a computer. Likewise, Turkle sees the simplification, or codification, of social interaction on Facebook as an added pressure: "Social media asks us to represent ourselves in simplified ways. And then, faced with an audience, we feel pressure to conform to these simplifications" (Turkle, 185). Turkle's view echoes Lanier's in that the machine asks people to change because of how it is built. Lev Manovich, author of *The Language of New Media,* says that the information being displayed and shared is changed by the interface itself. He views interfaces as representations that benefit certain types of information over others: "by organizing data in particular ways, they privilege particular models of the world

and the human subject" (16). Manovich asserts that the interface is not a benign tool but "far from being a transparent window into the data inside the computer, the interface brings with it strong messages of its own" (65). By placing the interface as a sort of translator, he introduces the idea that it can change the information being displayed. Van Dijck echoes this view: "a platform is a mediator rather than an intermediary: it shapes the performance of social acts instead of merely facilitating them" (29).

2.5.The commoditization of social connections

Van Dijck goes on to argue that Facebook has hidden agendas behind the interface. She also argues that Facebook exploits connectedness for monetary gain. Facebook markets itself as connecting people and creating an open social web; however, what Van Dijck proposes is that Facebook has actually coded socialness so that it can exploit connectedness:

> Companies tend to stress the first meaning (human connectedness) and minimize the second meaning (automated connectivity). Zuckerberg deploys a sort of newspeak when claiming that technology merely enables or facilitates social activities; however, "making the Web social" in reality means "making sociality technical". Sociality coded by technology renders people's activities formal, manageable, and manipulable, enabling platforms to engineer the sociality in people's everyday routines. (11)

When someone is social on Facebook, it is not in the same sense as when they are social in a face-to-face interaction, but is rather shaped by Facebook's code – the algorithms, protocols and interface that are designed by Facebook with commercial aims in mind. Van Dijck posits that the large corporate or for profit social networks used the early web's (2001 –

2005) spirit of community and free sharing for their own commercial needs. The development of business models that pitted users against profitable strategies proved to be a real challenge for digital media companies (Vukanovic, qtd. in Van Dijck 15). Most free online services have to strike a balance between keeping user trust and engagement and commoditization of the relationships their platforms nurture:

> Commoditizing relationships – turning connectedness into connectivity by means of coding technologies – is exactly what corporate platforms, particularly Google and Facebook, discovered as the golden egg their geese produced. (Van Dijck 15)

Users with high numbers of friends are sought out by marketing firms to promote products: "Seeking out "influencers"— people with a large network of connected followers and friends— to promote products online is now a common marketing strategy" (Van Dijck 40). A pressure against user trust is growth, often driven by investor expectations. Van Dijck sees Facebook as being far from transparent in its monetization of connectedness:

> Moreover, it is far from transparent how Facebook and other platforms utilize their data to influence traffic and monetize engineered streams of information. And yet connectedness is often invoked as the pretense for generating connectivity, even now that data generation has become a primary objective rather than a by-product of online sociality. (12)

Facebook looked to advertising revenue in its early days so that it could rent more server space but has since grown in revenue so that it is very profitable. Van Dijck's point is that there is an agenda behind the code, an agenda that is pertinent to this study, as it shows

that Facebook has other motivations besides connecting people, and that these motivations are built into Facebook's protocols and its interface. One core motivation is growth and the business needs driving that growth.

2.5.1. Business needs driving growth

Growth is very important to Facebook: "Facebook's unique selling point over the years has been its rapidly growing user base, not only in terms of sheer numbers but also in terms of diversity and global reach" (Van Dijck 50). Coupled with this is Facebook's initial public offering (IPO) in May 2012 that signified an important change in ownership status. Facebook's leaders now have to yield power to investors "likely at the expense of users who loathe the growing pressure to increase the site's profitable prospects" (Van Dijck 36). This pressure to grow means that Facebook has to do everything it can in order to keep people using the site and to get new people on the site. The number of people on the site is a social media company's value (van Dijck 36). The economist Erik Clemons pointed out (qtd. in Van Dijck 40) that the business model of a social media site is a delicate balance between users' trust and owner's monetizing intentions. If users feel that they are being exploited they will simply stop using the site and cause the site to fail: "If the world's users decide Facebook has lost its coolness, has sold out your private data, or has yielded to censoring governments, its popularity may dwindle" (Van Dijck 67). In Facebook's case, the hooks to keep people coming back are disguised under a veil of openness and socialness.

The need for monetization shapes the social interaction that Facebook builds with the main driver being to get more users and keep them engaged: "It is important, though, to view monetizing strategies not as static models of exploitation, but as dynamic mediators in the process of shaping sociality and creativity" (Van Dijck, 40). However money hungry Facebook may seem, users are not unaware of the dangers of the service:

> Many users are well aware of a platform's commercial motives and profit-driven strategies, yet they still make calculated decisions whether to utilize it based on how much they will benefit. (Van Dijck 41)

However, the question remains as to whether users are aware of the subtle behaviour changing mechanisms that Facebook employs. The intense media reaction to Facebook's Newsfeed emotion experiments[5] that were conducted, show that when Facebook's power to manipulate emotions and behaviour is revealed it tends to worry people and create waves in the media. In this instance Facebook never officially apologized for its manipulation of users, but said that this type of experiment is just what companies do: "This was part of ongoing research companies do to test different products, and that was what it was" (washingtonpost.com). The sidestepping of responsibility in experiments that are designed to learn more about its users highlights how the company places its values over and above accepted ethical standards for experimentation. In addition, Facebook seems to dictate to its users what it thinks is normal for privacy – namely a more open and social web, as revealed in this statement: "In May 2010, Mark Zuckerberg told Time reporter Dan Fletcher that Facebook's mission was to build a Web where 'the default is social' in order to 'make the world more open and connected'" (Van Dijck 45). An online world where people are less

[5]For one week in January 2012 people from a group of 689,003 users saw either content that contained happy and positive words or content that contained sad words. The findings of the experiment showed that people were influenced by the content that they saw and would post updates that corresponded with the sentiment of their Newsfeed. The findings were published in the *Proceedings of the National Academy of Sciences,* a prestigious social sciences journal, with the media and public soon after criticizing Facebook for unethical behavior. Critics argued that users did not get a chance to consent to the manipulation (Booth, 2014).

worried about privacy and share more about their lives is very much aligned with its business model that exploits connectivity. Although Zuckerberg's ideological belief in transparency as a general social good precedes the monetization of this characteristic (Kirkpatrick 287), the data that is collected from people is very useful in employing targeted advertising strategies. Being more open means people share more and build more social currency that is then translated into value for the social network.

2.5.2. Popularity metrics

Facebook has needed to distil some social behaviours into simple metrics in order to enable and encourage sharing of social activity. In the real world "well connected" people are individuals who have connections that are judged both by their quality and their status within society, but in social media something as complex as people's connections with others are simplified into one number: a friend count or number of followers (Van Dijck, 13). The Like button is an instant popularity counter that distils complex opinions into one metric. Quantifying the number of friends a person has can be seen as a measure of popularity, as Van Dijck explains:

> Popularity as a coded concept thus not only becomes quantifiable but also manipulable: boosting popularity rankings is an important mechanism built into these buttons. People who have many friends or followers are touted as influential, and their social authority or reputation increases as they receive more clicks. (12)

Popularity is closely linked with disclosing information about oneself to a network of friends: "In online environments, people want to show who they are; they have a vested interest in identity construction by sharing pieces of information" (Van Dijck 343). The

friend count is important to people who want to boost their public reputation, or what Van Dijck calls their "individual market value", but it is also valuable to companies who want to use influencers, or people with many connections, to promote their products (62). It is to the social network's advantage to break social interactions into small and manageable numbers that work well with coded technologies. The other advantage for the social network is that these simple numbers are easy to share and spread through the network, increasing the sharing of information and the network's value both to the people who use it and to advertisers. Psychology researchers Emily Christofides, Amy Muise, and Serge Desmarais argue that "identity is a social product created not only by what you share, but also by what others share and say about you. … The people who are most popular are those whose identity construction is most actively participated in by others" (qtd. in Van Dijck 343). With Facebook, popularity is packaged in simple numbers, with simple rules on how to boost your popularity: increase your likes, shares and friends. The simplification of complex human social behaviour works well for the coded technologies with which the network is built and the business models that need to exploit connectedness. Among teenagers, building the largest possible network of contacts is a social badge of honour informed by the popularity principle (Van Dijck 65). By using a Friend count and a Like count, Facebook can give users feedback on their popularity status - teenagers focus more on the metrics rather than the quality of the interactions. Sharing this simplified social activity gives people a sense of connectedness with others while giving them a tool to publish themselves in exchange for likes and shares. Facebook offers a simple way to create an identity and share this identity with friends. Popularity is part of Facebook's business model: "the values of attention, popularity, and connectivity have gradually and carefully been mixed to constitute the basis of Facebook's business model" (Van Dijck 62).

2.6. Conclusion

danah boyd spent over a decade interviewing hundreds of teenagers across the United States so that she could analyse the effects of social media usage on teen's lives. In her book *It's Complicated: The Social Lives of Networked Teens*, boyd recognizes that the interface has a role to play in how teens interact with the world through social media. When discussing how technology does not solve cultural problems, but rather reinforces existing social structures, she says: "This sometimes occurs when designers intentionally build tools in prejudicial ways" (2552). This view echoes Manovich's view that the author of the interface changes the information being received. Although the interface changes information, the interface is the only way that the observer can read the information, thus all information is changed through the interface. However, Facebook controls the interface and so they are in control of the medium of information and the method of communication. This communication is done through an interface that steers the users towards what the social network wants them to do: namely, what aligns with their business model.

3.0. Persuasive design

As we have seen, social networks use their code of algorithms, protocols and their interface, to steer their users in the direction they want:

> For instance, Amazon codes customer's taste preferences and buying behavior, and LinkedIn codes connections between professionals or job seekers and employers; next, both platforms translate these encoded social activities into programmed directives. (Van Dijck 29)

The programmed directives are aligned with the business objectives of the companies concerned, with the mechanism through which they present the encoded information being the interface.

3.1.The interface

The interface of a social media site is designed with behaviour change in mind. Van Dijck discusses how the interface can be used to get people to take certain actions: "interfaces, both internal and visible are an area of control where the meaning of coded information gets translated into directives for specific user actions" (Van Dijck 31). Furthermore, the design of the site changes how people connect, describe themselves and the culture of the site itself: "Comparative studies of platforms have shown how different site's architectures cultivate distinct styles of connectedness, self-presentation, and taste performance (Papacharissi 2009, Luders 2008. qtd. in van Dijck 34). The interface elements and social mechanics of a social media site are distinctly different from site to site, but all have the same common logic. The design and implementation of buttons for sharing, trending following and favouriting are designed to boost user traffic and infiltrate user routines (Van Dijck 41).

Sharing on a social network is a way to show others what people are doing. This is done in a public space so that users can receive social reward for their efforts. Social networks want users to be completely open and share everything in their lives – the more interactions users have with each other, the more valuable the network becomes (Lampe , Ellison and Steinfeld 167). But as Van Dijck points out, the less users know about what Facebook is doing with its knowledge of users and what they are sharing, the less likely they are to raise any objections (47). Thus the designers of the interface need to make the

transactions that occur in the background as invisible as possible. The Like button, a sharing tool that posts content from Facebook and around the web (if the website has installed the Like functionality) into a person's Newsfeed is one such mechanism for sharing that has become ubiquitous across the web. But what actually happens when someone 'Likes' something is often very different to what that person imagines, as Van Dijck explains:

> The visible part of the interface calls attention to user-to-user interaction, suggesting that information stays within the first meaning of sharing. However, invisible algorithms and protocols execute the programmed social task of "liking". Personal data are turned into public connections, as the Like function is ubiquitously dispersed to many items on the Internet. (48)

The interface creates an illusion for the user, making the coded directives visible, understandable and engaging through information and graphic metaphors that translates the coded information into an understandable format. Thus the design of the interface is the translator or medium through which these objectives are visualized. Interface designers at social networks design with these objective in mind: "On the basis of detailed and intimate knowledge of people's desires and likes, platforms develop tools to create and steer specific needs" (Van Dijck 12). Facebook's designers have a goal in mind when designing features, aligned with creating as much data about their users as possible. Vasalou et al. (2010) investigated how designers' intentions, as captured by the Behavior Chain Model, materialized through users' reported practices in Facebook. A total of 423 Facebook users from five countries answered a questionnaire that allowed them to examine how two user characteristics, namely experience with the site and its culture, shape the nature of their commitment with the site. Their findings show that experience with the site and the user's

cultural background have an effect on users' motivations for using Facebook, as well as illustrating how a designer's intention has an impact on a user's behaviour. Central to the study by Vasalou et al., was B. J. Fogg's Behavior Chain Model.

3.2. The Behavior Chain Model

The Behavior Chain Model (BCM) created by B. J Fogg is a best practices model that serves as a guide for designers building social interfaces. Fogg, a leading behavioural psychologist and researcher at Stanford, conducted a study along with Daisuke Iizawa in 2008 that analysed how persuasion takes place in leading social networking sites from two different countries: Facebook in the U.S. and Mixi in Japan. This study will be used as a framework for the case study in Chapter 5 because it analyses Facebook by reviewing the persuasion goals of the social network. The case study will use the Behavior Chain Model to analyse the exploitation of narcissism in Facebook.

Reviewing the current goals of social networking sites, the authors state that: "Social networking sites persuade millions of users each day to adopt specific behaviours" (35). Furthermore, the authors emphasize that persuasion is a core activity of a social network: "The commercial success of Social Networking Services depends on persuading users to perform specific behaviors" (37). Through persuasive design and tools such as The Behavior Chain model, designers can target the desired behaviours of their users and build features that encourage specific actions that lead to increased usage of a service:

> Whether working as a social actor, a tool, or a medium, interactive technologies can change people's attitudes and behaviours using influence strategies established by the social sciences. (Fogg and Eckles 57)

Fogg and Eckles propose that successful adoption strategies for social networks work in a sequential manner, with each strategy persuading the user to meet behavioural goals. The behaviour chain can be represented in a flow chart that has phases that are composed of one or more goals that are called Target Behaviours. Fogg and Eckles call this The Behavior Chain for Online Participation (Fig 1). The Behavior Chain outlines three Phases: Discovery, Superficial Involvement, and True Commitment.

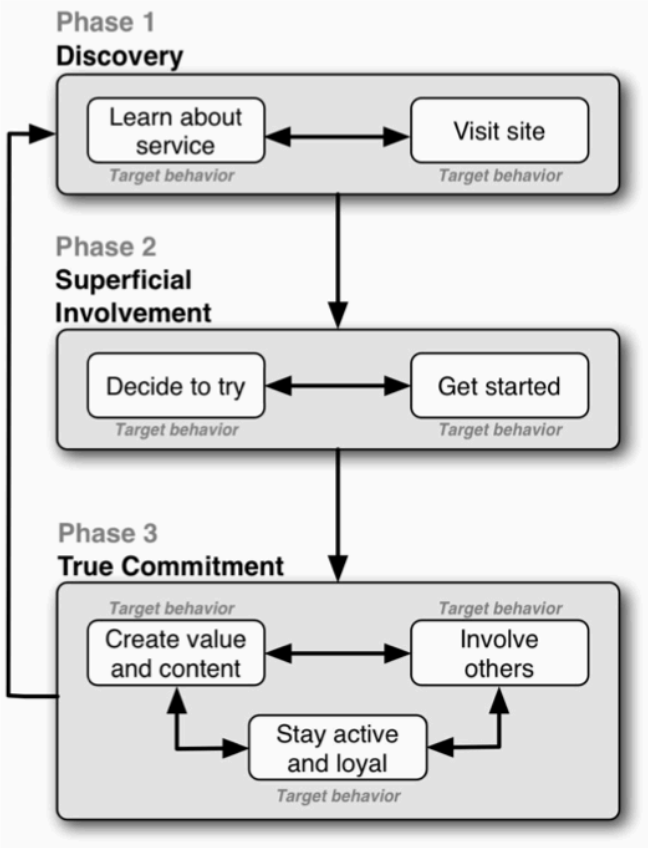

Fig 1. The Behaviour Chain for Online Participation

Just as in the Facebook and Mixi study (2008), only the last phase in the model, True Commitment, is relevant to this paper's case study since it will be looking at how people behave once they are regular users of Facebook. As illustrated in Figure 1, the behaviours are

not necessarily sequential and can start with any target behaviour. The authors explain that there are four generally accepted persuasion goals that map to the target behaviours in the BCM:

1. Create Personal Profile Page

2. Invite friends

3. Respond to others' contributions and

4. Return to the site often. Fogg and Iizawa show how the persuasion goals map to the target behaviours in Fig. 2.

Persuasion Goals for SNS		**Target Behaviors in Behavior Chain**
#1 Create Personal Profile Page	-->	"Create Value and Content"
#2 Invite Friends	-->	"Involve Others"
#3 Respond to Others' Contributions	-->	"Create Value and Content"
#4 Return to Site Often	-->	"Stay Active and Loyal"

Fig. 2. Persuasion goals mapping to target behaviours

The four persuasion goals are considered vital for a social network to succeed. The authors explain that if any of these goals are not attained the social network will likely fail (37). These four persuasion goals would thus be a focus area for a social networking site like Facebook, as they need to increase and retain their users and the amount of time their users spend on the network.

3.2.1. Persuasion goal #1: Create Personal Profile Page

Fogg and Iizawa explain that profile pages "form the core of social networking sites" (37). The experience of the profile pages is directly tied to the overall quality of the experience on the social network and the sites are designed to create engaging profile pages.

Highly personal information is very valuable to Facebook and so the service prompts for data such as religious views, mobile phone number, sexual orientation, and relationship status. The information is displayed in such a way that it does not look as though it is optional to fill it in. Once a person has entered such sensitive information, a trust bond between the individual and Facebook is created (39).

Van Dijck asks: "To what extent are users empowered or constrained by platforms to fashion their unique identity and stylize their self-presentation?" (32). People's self-presentation is the primary control a social media company has over its users with self-expression only occurring once an online persona has been created, a persona that is fashioned through the network's parameters. Facebook enables people to create a self-image through a very controlled environment with clearly defined choices. The profile is composed of blank spaces for the user to complete and constant updates of the profile are encouraged with 'edit' buttons visible next to every field. The designer's intention for people to update their profile often is visualized in the prominent display of the edit button on the profile. Fogg and Iizawa explain the purpose of the prominent display of the edit button: "This visual prominence serves two functions. First, the interface reduces the barrier for adding information. Next, the design implies that a profile page can and should be updated frequently" (39).

The profile outlines a user's life for them to reflect on in a very visually gratifying format. The visualization of the profile is important for the social network because it has the potential to boost the user's own self-image and encourage behaviours that further increase sharing of social activity. With this study's focus on narcissism, the reflection of the self through the profile is similar to people gazing into a mirror and admiring themselves: "The narrative presentation gives each member's page the look and feel of a magazine — a slick

publication, with you as the protagonist" (Van Dijck 55). Hardly ever in a person's real world behaviour would they need to define such intimate things about themselves to everyone they have ever met. However, because of the social network's goals, people now feel pressure to present themselves in an attractive manner. With the profile being presented in a visually attractive manner and with many fields to input, the designers of the interface are consciously steering people in a desired direction.

3.2.2. Persuasion goal #2: Invite friends

Without people's connections with other people they know, a social network would not function, as Fogg and Iizawa explain: "Inviting and connecting friends is an essential behavior for making a SNS successful" (39). Facebook has designed an interface that persuades people to invite as many of their friends as possible, in what is known as a 'bulk invite'. A bulk invite allows a user to login into their email account securely through Facebook and invite all of their contacts in one operation. Another incentive to Facebook users to perform the bulk invite is to gain as many friends as possible, as Fogg and Iizawa state: "The bulk invitation tool allows new users to have hundreds of Facebook friends quickly – a strong incentive in Facebook's culture where having friends is a mark of status" (39).

3.2.3. Persuasion goal #3: Respond to others' contributions

Facebook users are encouraged to post content and this activity in itself is enjoyable, but perhaps even more enjoyable is receiving feedback about the content that they have posted (Fogg and Iizawa 42). Receiving feedback about user generated content is what sets social networks apart from traditional media and websites. When someone posts content, they can 'tag' their friends in the post, thereby notifying them of new content. Alternatively, people can browse their Newsfeed, a sequential list of new content from friends and news sources, to find the content, and then comment, like or share the post. Facebook also sends an

email when someone creates a new comment on the content that was posted. In this manner, Facebook encourages people to post content in order to get feedback from their social network. A feedback loop[6] is created that rewards both the content producer (feel good about their content) as well as the content consumer (sees more content from friends). Andrew Chen is a writer and entrepreneur focused on mobile products, metrics, and user growth. He believes that there are three main feedback loops that can drive user engagement. The feedback loops are:

1. A feedback loop that rewards content posters when they push new content into the network
2. A feedback loop that rewards passive content consumers with relevant and valuable content
3. A feedback loop that rewards (and culls) connections within the network. (andrewchen.com)

He explains that when all three feedback loops are working well, the users and content creators are happy:

> As users act within each feedback loop, everyone's happy, and the players in the ecosystem produce and consume valuable content for the network. When this happens on a daily or hourly basis, it creates habitual usage within your product - driving engagement and retention. (andrewchen.com)

Facebook's feedback loops work to encourage people to create content in order to receive comments, likes and shares, thereby supplying passive consumers with a stream of content from people they know.

[6] Wiener explains in his book *The Human Use of Human Beings* (1988) that machines have feedback systems in order for their performances to be altered or evaluated in accordance with results (33).

3.2.4. Persuasion goal #4: Return to the site often

Fogg and Iizawa state, "a goal of all social networking services is to persuade users to return often" (43). When users return to a social network, they make the site more active and engaging for other users through interacting with content or creating content of their own. Facebook persuades people to return to the site through emails that are sent whenever the following actions occur: when users are tagged in a posted content item, have comments posted about them, have comments posted subsequent to their own, receive a message on Facebook, are added as a friend, or are requested to join a group. Thus, people could receive many emails in one day, all persuading the user to visit Facebook. Facebook's Newsfeed[7] is a stream of friend's activities in chronological order and is the main focus of the site – it is the home page and first contact a person has with their social network. Nir Eyal, author of *Hooked: How to build habit forming products* (2014), explains the psychology behind the Newsfeed: drawing off research done by the psychologist B. F. Skinner in the 1950s, Eyal explains that people have evolved to get rewards for searching for things and finding objects of value (99). Often posts are irrelevant or boring, but every now and again an interesting story or piece of content is found. Through variable reward, Eyal sees social networks tapping into millennia of evolution that rewards people for hunting (2014).

The Newsfeed is integral in the feedback cycle as it is where people discover new content, and where they can leave feedback such as comments, likes and shares.

[7] Before the Newsfeed was introduced in 2006, the focus was on people's customizable profile. With the advent of the Newsfeed, the focus turned to what people's friends were doing.

3.2.5. Conclusion

The four persuasion goals used in Fogg and Iizawa's research will form the basis for the case study. Because their study looked at how Facebook influences users through interface design, it is a suitable framework for studying how Facebook may be using narcissism to influence users.

4.0. Investigating the definitions of clinical Narcissism and cultural narcissism

Narcissism[8] has become part of the modern lexicon but its meaning, both in a clinical sense and in a cultural sense, is still being debated today. Central to this debate is how narcissism impacts society and how it is expressed and possibly encouraged on social media, with sites such as Facebook and Twitter being examined critically by sociologists and cultural critics. The definition of narcissism has changed over time, moving from a clinical to a cultural usage, so it is important to determine what the past and present understanding of narcissism is in developing the argument of this paper. This chapter will look at the origins of narcissism, how narcissism is used as a cultural term and how studies are critically examining narcissism within Facebook. By understanding how the term is being used in the three contexts of clinical practice, cultural critique and sociological studies, a definition that is useful for the case study will be presented.

[8]In this paper, where narcissism is being discussed in a clinical sense, a capital N will be used, thus: Narcissism, and if it is in a cultural sense a lower case n will be used, thus: narcissism.

4.1. Beginnings of our understanding of narcissism

4.1.1. Freud's narcissism

According to The Encyclopaedia Britannica, the word narcissism stems from the Greek myth of Narcissus, who caught his reflection in a pond and kept staring at himself until he died on the banks of the pond (global.britannica.com). The first recorded use of the word narcissism in the English language was by Samuel Taylor Coleridge in 1822 and was used as an expression of excessive self-love or vanity, self-admiration or self-centeredness (Oxford English Dictionary). The word was hardly used in public discourse however (Lunbeck 1), and only became more common when Freud started using it in his psychological research of the human psyche.

Freud introduced the concept of Narcissism in a clinical context in 1914 in his landmark essay "On Narcissism: An Introduction". In this seminal work Freud paved the way for a change in how the field of psychoanalysis saw the self (Freud et al. 1). Freud expanded upon the existing concept of autoeroticism, or self-love: "Loving oneself," Freud argues, is the "libidinal complement to the egoism of the instinct of self-preservation" (74). In other words, our impulse to protect ourselves is bound up with our sexual desires. Freud's definition was only used in psychoanalytic discourse up until the 1970s, until psychoanalysts and social critics revisited the concept (Lunbeck 1).

4.1.2.Kohut and Kernberg – bringing clinical narcissism to the public

The psychoanalysts Heinz Kohut and Otto Kernberg brought narcissism to the cultural fore in America in the 1970s through a series of controversial papers in which the

characteristics of a narcissist were defined, enabling critics to discuss this new type of person (Lunbeck 37). Heinz Kohut and his followers shifted the emphasis from intra-psychic conflict, as in Freud's theories, that focus on the whole self and people's relations with others. Freud's theories were based on a time line, a series of events that happen at certain stages in a person's life, with instinctual drives shaping the structure of the ego, super-ego and the id. Kohut challenged this and focused instead on how a person forms a sense of self, and how that self is shaped by relationships with others. He used narcissism as a model to investigate how we develop this sense of self, and turning his attention to the debates on narcissism in American society, proposed that people weren't narcissistic enough and that only through self gratification could people build up their sense of self.

Kernberg and Kohut took Freud's concept of narcissism and created a distinctly recognizable figure – the narcissist - and thus placed the narcissist within a society that both created and sustained the pathologies of self-centeredness (Lunbeck 4). The definition of a narcissist that Kernberg and Kohut described was seized upon by cultural critics such as Christopher Lasch and resulted in the label 'narcissist' becoming a widely understood pejorative concept in American culture.

4.1.3. Narcissism as a cultural label based on the clinical definition

The term narcissism as a cultural phenomenon rather than as a pathology of the mind was born out of the writings of American cultural critics during the 1970's. Kernberg, Kohut and Lasch all played a part in bringing narcissism into popular culture, but their respective views were significantly different. Kernberg and Kohut were psychoanalysts and developed a definition of narcissism from a clinical point of view. Lasch, however, worked from this psychoanalytic definition and used the basis of the pathology to describe a social state of being. The reason narcissism became so well known as a concept was because Lasch changed

the meaning of the word from an obscure clinical pathological term into an understandable cultural label. Because of this shift, it is important to understand the differences between Kohut's clinical term and Lasch's cultural meaning of narcissism.

4.1.4.Lasch and Kohut – opposites in the narcissism debates

Lasch was a historian and a professor at the University of Rochester and was arguably the most influential writer in bringing an understanding of narcissism to the public. He convincingly used the psychoanalytic concept of narcissism to describe all the shortcomings of a consumerist and self-centred society in his seminal 1979 book *The Culture of Narcissism: American Life in an Age of Diminishing Expectations*. Lasch used a historical critique based on psychoanalytic principles to show how the bureaucracy created by major public and private institutions was eroding the moral fibre and independence of people and the family unit. He used narcissism as a label to describe what he saw as a self-centred society in the midst of rampant consumerism. Kohut maintained that there was a "normal" narcissism that helped in maintaining a healthy sense of self, creativity and eroticism. It was not the "normal" narcissism that was an issue, but pathological narcissism. Kohut's idea that too much self-esteem, or "healthy narcissism", could transform into pathological narcissism was contrary to Lasch's theories that saw self-esteem as being unrelated to narcissism (Lunbeck 4). Lasch saw narcissism as a defence against the modern way of life and in this respect he agrees with Kohut (Lasch 50). However Lasch also saw narcissism as a cause of the problems of modern life, such as the loss of independence and the disintegration of the family unit. In contrast, Kohut saw narcissism as a natural evolution of the human psyche, one that is perfectly attuned to the needs of the fast paced modern lifestyle (Lunbeck 4). Lasch viewed the emptiness of the narcissist's inner life as a form of self-preservation. To this end he is highly critical of any form of self-help that is based on new age dogma, that

does not deal with the real undercurrent of society: “The ideology of personal growth, superficially optimistic, radiates a profound despair and resignation” (Lasch 51). According to Lasch, critics such as Kohut who focus on the humanistic and existential angle of narcissism fail to explore how the clinical traits are evident in people’s everyday lives (32).

> They fail to explore any of the character traits associated with pathological narcissism, which in less extreme form appear in such profusion in the everyday life of our age: dependence on the vicarious warmth provided by others combined with a fear of dependence, a sense of inner emptiness, boundless repressed rage, and unsatisfied oral cravings. (33)

Lasch was deeply critical of Kohut’s notion of the positive narcissist and was more in line with Freud, whereas Kohut’s theories were a reaction to Freud’s ideas of narcissism as pathology. Lasch did still use the figure of the narcissist that Kohut helped to create and used the narcissist as a target of his social criticisms in his highly influential book *The Culture of Narcissism*, establishing the cultural idea of the narcissist. The implications of this disagreement between Kohut and Lasch for our understanding of narcissism, still exist today.

4.3. Narcissism and social media

Although social media on the Internet did not exist in Lasch’s day, his cultural criticism of the media and advertising of the 1970’s is arguably even more relevant when looking at more modern forms of media. This section will examine how Lasch and more modern critics such as Twenge have analysed narcissism and its relationship to media.

4.3.1. Narcissism in the media

For Lasch the recorded image plays an important part in how the undercurrent of narcissism is expressed in the day-to-day interactions of people:

> Modern life is so thoroughly mediated by electronic images that we cannot help responding to others as if their actions— and our own— were being recorded and simultaneously transmitted to an unseen audience or stored up for close scrutiny at some later time. (47)

Lasch observed how the recorded image could change our behaviour as we see ourselves through the camera lens. Lasch's observation can be compared with how today's camera phones and the instant publication of images and videos on social media sites have changed how people behave, most evident in the phenomena of selfies[9]. Self-publication is a new phenomenon that has been enabled by the Internet and social media platforms but Lasch's comments on writers' changing styles during the 1970's are still relevant today. Writers started to focus more on their own experiences than on creating an engaging narrative:

> Instead of working through their memories, many writers now rely on mere self-disclosure to keep the reader interested, appealing not to his understanding but to his salacious curiosity about the private lives of famous people. (16)

[9] 'Selfies' was the 2013 Oxford Dictionaries word of the year, because of a 17 000% increase in usage and is defined as: "A photographic self-portrait; *esp.* one taken with a smartphone or webcam and shared via social media." (OED.com).

Modern social media allows everyone to become their own self-publicist. Lasch's point of the new writing style, where the self is the focus of the story, has become a modern norm with celebrities turning to Twitter or Instagram to publish the minutiae of their everyday lives. A person posting what they had for breakfast on Instagram (a popular photo-sharing site) or creating a Facebook status update about their party on the weekend, is a form of self-disclosure that has connection with the fascination of celebrity and reality television shows, as Lasch observed. He continues to explain how the media, and the obsession with celebrity, is damaging American society:

> The mass media, with their cult of celebrity and their attempt to surround it with glamour and excitement, have made Americans a nation of fans, moviegoers. The media give substance to and thus intensify narcissistic dreams of fame and glory, encourage the common man to identify himself with the stars and to hate the "herd," and make it more and more difficult for him to accept the banality of everyday existence. (21)

Lasch criticizes the media for focusing on celebrity and causing people to feel as though they are not successful unless they too have hoards of adoring fans, or in the contemporary situation, many Facebook friends. The trend of the media focusing on celebrity and self-fulfilment through fame is still present today, in a heightened form since media is so easily accessed and almost impossible to avoid.

4.3.2. Today's writings on cultural narcissism

Jean Twenge and Keith Campbell co-authored a book entitled *The Narcissism Epidemic* that uses changes in the results of surveys, such as the Narcissistic Personality

Index, over 30 years and can be seen as a scientific extension of Lasch's work. Twenge developed a technique of tracking social surveys done over time and calls it cross-temporal meta-analysis. The study itself is discussed later in this chapter, but their book, published in 2010, follows in the path of Lasch, where the pathology of narcissism is extended as a social critique. Their book uses the analogy of a disease that has spread out of control but that can be prevented. The causes of the epidemic are: "self-admiration; child centered parenting; celebrity glorification and media encouragement; attention seeking on the Internet; and easy credit" (4392). Lasch's *The Culture of Narcissism,* was presented in a similarly inflammatory manner, where narcissism was described as prevalent among the general population[10]. Just as Lasch did, the authors distinguish between clinical Narcissism and what they term "normal" narcissism:

> Narcissism is an attention-getting term, and we do not use it lightly. We discuss some research on NPD [Narcissism Personality Disorder], but primarily concentrate on narcissistic personality traits among the normal population—behavior and attitudes that don't go far enough to merit a clinical diagnosis but that can nevertheless be destructive to the individual and other people. (96)

The authors continue to say that being highly narcissistic is not the same as having Narcissistic Personality Disorder (NPD), a serious illness that needs to be diagnosed by a registered clinician. Lasch sees the pathology of narcissism as an extreme example of the norm, and similarly to Twenge and Campbell, he distinguishes between the clinical and the "normal" forms of narcissism:

[10]The Oxford English Dictionary describes an epidemic as: "Prevalent among a people or a community at a special time, and produced by some special causes not generally present in the affected locality" (OED).

> On the principle that pathology represents a heightened version of normality, the "pathological narcissism" found in character disorders of this type should tell us something about narcissism as a social phenomenon. (Lasch 38)

Similarly to Lasch, Twenge and Campbell focus on what they see as the shift to greater narcissism and self-admiration in shared cultural values, but through their analysis of quantifiable data they introduce the question as to why there are rising numbers of narcissists (398). The authors of *The Narcissism Epidemic* agree with Lasch in that they attribute the increase in narcissism to a greater amount of focus on the self.

Twenge and Campbell come to the conclusion that leaders in corporations are more likely to be narcissists: "Despite the iffy performance record of narcissists in leadership roles, narcissists are more likely than others to emerge as leaders in an organization" (751). Lasch arrived at a similar conclusion, where the traits such as self-centeredness and the constant need for attention, help narcissists to rise in the corporate environment (43). Lasch sees the narcissistic individual being rewarded through the inherent traits of narcissism – a feedback loop is created. Similarly, Twenge and Campbell observe that in social media (Web 2.0 technologies), an attention giving feedback loop exists:

> Web 2.0 and cultural narcissism work as a feedback loop, with narcissistic people seeking out ways to promote themselves on the Web and those same websites encouraging narcissism even among the more humble. (1783)

The core difference between the two approaches, is that for Lasch the main cause behind the rise in narcissism was the bureaucracy created by corporate America and consumer culture. For Twenge and Campbell, the two main cultural causes are that self-admiration is very important in modern American culture and that self-expression is needed to establish one's own identity (4753). Perhaps the differences are due to the advancement of self-publishing tools today, such as the Internet and mobile phones, and also because ideas planted in the 1970's, such as the need for high-self esteem, have only matured now.

Scientific analysis of data is integral in Twenge and Campbell's argument, and through presenting hard evidence of people's behaviour the authors hope to present a convincing argument to demonstrate the rise in narcissism over time. Facebook is a convenient subject for social science studies because social data is quantified, people's demographic information is readily available and the method of interaction is easily observable, and this is what also makes it attractive to advertisers. Although Lasch based his study on what was then the latest social science research on narcissism from scholars such as Freud, Kohut and Kernberg, more recent research cannot be ignored in this study. Many of the studies that Twenge and Campbell use in their book lend legitimacy to an argument that at times comes across as opinionated. Although their account does lean towards self-help, with bits of practical advice on how to raise your child in a non-narcissistic fashion, the studies that they draw their argument from are an important source and need to be analysed.

However, according to Jeffrey Jensen Arnett, a professor of psychology at Clark University, the data that Twenge and Campbell used is flawed. According to Arnett et al., Twenge and Campbell's study is unsound in two respects: 1. Their use of the NPI (Narcissistic Personality Index) which is an ambiguous index because it asks questions such

as: does agreement with statements such as “I am assertive” or “I wish I were more assertive” measure narcissism, self-esteem, or leadership? (2013). Arnett et al. state that the NPD data set that Twenge and Campbell uses is on the surface more promising, but is also flawed because it compares the scores of 18 year-old subjects’ with those of people over 60. The older subjects were asked to remember their behaviours when they were 18 – he supplies evidence that data from memory is unreliable. Arnett sees the stereotype that Twenge is creating as damaging to young adults:

> If Twenge is right in her characterization of today’s emerging adults, then we should be grateful to her for sounding the alarm, and we should seek to change their corrupt values and alter the perilous path on which they are headed. However, if she is wrong, then her errors are deeply unfair and damaging to young people, reinforcing the worst negative stereotypes that adults have about them and encouraging adults to vilify them rather than supporting them. We believe she is wrong. (17)

Twenge’s argument is based on data collected from surveys done by people not trained in psychology (17). As with Lasch, Twenge uses narcissism to drive an agenda – that young people are more selfish than before. She also gives advice at the end of each chapter, highlighting the correct way to raise a child so that it does not become a narcissist. On the whole, Twenge is on the extreme side and seems to fit the data into her argument, rather than driving the argument from the data itself.

4.3.3. Persuasive design and narcissism

Nir Eyal is an American author, educator and entrepreneur who published the best selling book[11] *Hooked: How to Build Habit-Forming Products* (2014). This book introduces the "Hook Model", a four steps process companies can use to build customer habits and it claims that it is a guide to "building products people can't put down" (amazon.com). The four steps in the Hook Model are: Trigger, Action, Variable Reward and Investment. Eyal claims that these four steps are embedded into the products of many successful companies to subtly encourage customer behaviour. He uses evidence from behavioural economics and design for behaviour change, to build a guide for building products that create habits for people. The first "hook" cycle is the Trigger (39). Eyal explains that internal triggers are powerful motivators to get people to the next hook cycle: Action (getting people to open an app or click through from an email link). Eyal explains that negative emotions are often powerful triggers to take action:

> Emotions, particularly negative ones, are powerful internal triggers and greatly influence our daily routines. Feelings of boredom, loneliness, frustration, confusion, and indecisiveness often instigate a slight pain or irritation and prompt an almost instantaneous and often mindless action to quell the negative sensation. (48)

Nowhere in this chapter, or elsewhere in the book, does Eyal mention narcissism as being a powerful trigger to instigate a desired response from a user. Much recent research and

[11] Wall Street Journal business bestseller list. Named one of the best business books of the year by Goodreads and the best marketing book of the year by Goodreads.

media attention on narcissism in Facebook exists, yet an author who is writing a guide to building successful products does not mention narcissism at all. A counter-argument to those of Lasch and Twenge is that narcissism has become a hyped phenomenon based on alarmist cultural writings and sensationalist reporting in the media. If Facebook and other social products can be built by satisfying pain points such as boredom and loneliness, then perhaps the concern over narcissism makes for good headlines rather than the real motivation for what drives people to use these services. However, the author of Hooked may have motivations that would make excluding this information necessary. Nir Eyal's book is written for start-up companies that want a guide on how to build products with the same kind of success that Facebook has enjoyed. If Eyal had to delve into the negative side of these seemingly innocuous (yet highly valuable) companies, perhaps the reviews for his book would not be as complimentary. Kirkpatrick quotes Amelia Lester, a writer for the Harvard University newspaper, who, on 17 February 2004, a mere 10 days after Facebook's launch, wrote:

> While Thefacebook.com isn't explicitly about bringing people together in romantic unions, there are plenty of other primal instincts evident at work here: an element of wanting to belong, a dash of vanity and more than a little voyeurism. (33)

In using Facebook, it is almost common sense that Facebook allows certain activities such as voyeurism that real life does not allow, and is therefore a service that people will use. Eyal explains that emotions such as loneliness are drivers to use sites such as Facebook, but he stops at this level of analysis and does not go any deeper, where more sinister psychological drivers may be found.

4.4. Recent research on Facebook and narcissism

Twenge and Campbell see narcissists flourishing on social networking sites such as Facebook:

> Narcissists thrive on social networking sites like MySpace and Facebook. The structure of the sites rewards the skills of the narcissist, such as self-promotion, selecting flattering photographs of one, and having the most friends. (1828)

As seen when Facebook first launched at Harvard, students would spend significant time each day making their profiles attractive to people who might view them (Kirkpatrick 92). Looking at studies that focus on Facebook and narcissism will inform how the case study will be carried out.

4.4.1. Current research on Facebook

The studies that are reviewed were selected because they all focus on the interface elements of Facebook, rather than looking at the overall trends of narcissism in relation to Facebook. Since this study examines aspects of the Facebook interface, the elements used in these studies will be helpful in understanding what the focus of the case study is. Although these are not the only studies that analyse Facebook and narcissism, they do focus on researching specific interface elements. They are also highly cited and are used in Twenge and Campbell's book. The studies reviewed are:

1. "Narcissism and social networking sites" by Laura E. Buffardi and Keith W.Campbell

2. Millennials, narcissism, and social networking: What narcissists do on social networking sites and why – Shawn M. Bergman, Matthew E. Fearrington, Shaun W. Davenport and Jacqueline Z. Bergman

3. Self-Presentation 2.0: Narcissism and Self-Esteem on Facebook – Soraya Mehdizadeh

Narcissism and social networking websites - Buffardi and Campbell

Buffardi and Campbell (2008) look broadly at how "normal" narcissism (not clinical Narcissism) manifests on social networking sites and ask the following questions: "Does narcissism predict overall activity in a web community? Is narcissism apparent in the content of the Web page, and if so, how? Finally, can the narcissism of a page owner be gleaned from the content of the web page?" (1303). The study is quantitative and looks at 128 undergraduate students who use Facebook. The authors look closely at the existing social science literature regarding narcissism and point out that Facebook is an especially fertile ground for narcissists because it:

> …offer[s] a gateway for self-promotion via self-descriptions, vanity via photos, and large numbers of shallow relationships (friends are counted – sometimes reaching the thousands – and in some cases ranked), each of which is potentially linked to trait narcissism. (1303)

They look at how narcissists operate in social networking sites and point out that they do well in the context of shallow (as opposed to emotionally deep and committed) relationships and that the sites are highly controlled environments that allow their owners complete control over their self-presentation to others (1304).

The study uses the following sections to analyse narcissism: (a) the content of the About Me section, (b) the content of the Quotes section, (c) the main profile photograph, and (d) the 20 pictures on the page linked to View Photos of Me. The study finds that as they predicted, higher narcissistic impression ratings[12] are related to higher quantities of social interaction on Facebook and higher quantities of information posted about the self. A notable finding included in the research was that Facebook users used in the study could judge a user's narcissism fairly accurately and that "the expression of narcissism on social networking Web sites is very similar to its expression in other social domains" (1310).

Millennials, narcissism, and social networking: What narcissists do on social networking sites and why - Shawn M. Bergman, Matthew E. Fearrington, Shaun W. Davenport and Jacqueline Z. Bergman

The rise in narcissism appears to be associated with the advent of social networks, but a study done by Bergman et al. (2011) claims that the time Millennial's spend on social networking sites is related to narcissism in the activities they perform (706)[13]. The study had 374 undergraduate students complete the Narcissistic Personality Inventory. They were then asked questions regarding which social networks they used, how many friends they were connected to, why they used the sites, how often they updated their status, how often they posted pictures of themselves, how often they read what their friends were doing as opposed to what people had written on their Wall, and questions regarding their profile picture. Their findings show that narcissists in the millennial generation do not use social networking sites

[12] The subjects narcissism scores were calculated using the Narcissistic Personality Inventory. The NPI is a 40-item forced-choice format personality questionnaire designed for use on a normal population (Baffardi & Campbell, 1306).

[13]This kind of observation, where people's behavior is observed to change because of technological or political systems, is what Lasch based his critique on and it would have been seen as a highly significant symptom of social pathology

more than non-narcissists, however, the study did show that they use them for different reasons such as staying connected and communication with people. Their findings indicates that degrees of narcissism predicted reasons why Millennials use SNSs, such as having as many SNS friends as possible, wanting their SNS friends to know what they were doing, believing their SNS friends were interested in what the are doing, and having their SNS profiles project a positive image.

Self-Presentation 2.0: Narcissism and Self-Esteem on Facebook – Soraya Mehdizadeh

Soraya Mehdizadeh looked at a topic similar to that of Buffardi and Campbell (2008): how narcissism and self-esteem are manifested on Facebook. The study found that individuals with higher levels of narcissism and lower in self-esteem were inclined to show greater online activity as well as some self-promotional content. The study used 100 college students from Yale University and out of five hypotheses[14], the following two that were relevant to my study: H1: Individuals with high narcissism scores will be correlated with a greater amount of Facebook activity and H2: Individuals with high narcissism scores will use more self-promoting content on Facebook, in the following areas: About Me section, Main Photo, 20 pictures on the View Photos of Me section, Notes section and Status Updates. The findings for these two hypotheses are both positive. A significantly positive correlation was

[14]H1: Individuals with high narcissism scores will be correlated with a greater amount of Facebook activity.

H2: Individuals with high narcissism scores will use more self-promoting content on Facebook.

H3: Males with high narcissism scores will display descriptive self-promotion, while females with high narcissism scores will display superficial self-promotion.

H4: Individuals with low self-esteem will be correlated with a greater amount of Facebook activity.

H5: Individuals with low self-esteem scores will use more self-promoting content on Facebook.

found between a high NPI score and higher Facebook activity. Likewise, a significantly positive correlation for more self-promoting content on four of the Facebook sections was also found, except for the About Me description. The sections that the study focuses on are similar to the sections that the Buffardi and Campbell (2008) study used, with exception of the Status Updates section. The use of these sections highlights the features that may appeal to narcissists and by implication the normal and healthy narcissism of most people.

4.4.2. Definition of narcissism

Cultural accounts of narcissism such as *The Culture of Narcissism* and *The Narcissism Epidemic*, although based on a clinical definition and important in the cultural understanding of narcissism, are difficult to use in a study that looks at specific interface elements of Facebook. For the purpose of this study an empirically focused definition of narcissism needs to be found. The study, by implication of the subject matter, deals with societal issues surrounding social media, but it does not attempt to make overarching claims about the rate of narcissism in society. It also does not claim that a service such as Facebook increases or decreases narcissism in the general public, but rather that Facebook's interface design has increasingly exploited narcissism over time.

From the analyses of Freud, Kohut, Lasch and other current sociological research, the definition of "normal" narcissism is informed by the clinical definition, but is not considered a serious illness. The attributes of a clinical Narcissist are seen in a "normal" narcissist and can also be called sub-clinical narcissism and has similar characteristics to clinical Narcissism but to a lesser degree (Bergman et al. 706). The characteristics of clinical Narcissism (and hence sub-clinical narcissism) are used to inform this research paper's case study and can be found in the *Diagnostic and Statistical Manual 5 (DSM5)*. The DSM5 is

published by the American Psychiatric Association and is used to diagnose psychiatric illnesses and describes the symptoms of illnesses as well as providing information such as age of onset and likely demographic profiles. Jeffrey Kluger explains the definition of narcissism found in the DSM in his book *The Narcissist Next Door: Understanding the Monster in Your Family, in Your Office, in Your Bed, in Your World:*

> [The DSM] defines the condition as, in effect, three conditions: a toxic mash-up of grandiosity, an unquenchable thirst for admiration and a near-total blindness to how other people see you. (13)

Although these are the attributes of narcissism, according to Kluger they exist on a spectrum, where a person who may be lower on the scale would be classed as a sub-clinical narcissist. It is important to note that everyone exists somewhere on the scale:

> Not every case of narcissism is in the clinical, capital-N kind. Like all personality disorders, it exists on a sort of continuum, with people with ordinary self-esteem at one end, the floridly narcissistic at the other and uncounted little graduations in between. (14)

The three research papers covered earlier in this chapter use the sub-clinical definition of narcissism, however the definitions that are used vary in focus on different aspects of narcissism[15]. Fig. 3 shows a matrix of the characteristics of narcissism in the definitions

[15]The reason for the variation of definitions is unclear, but perhaps shows the interpretive nature of social science research.

which are mapped out to see which definition is the most inclusive of all the aspects of narcissism.

	Mehdizadeh	Bergman et al.	Buffardi& Campbell
Inflated self-image / Grandiosity	X	x	X
Believe they are special and unique	X	x	X
Seek out empty, superficial relationships	X	x	
Positive and inflated views of agentic traits such as intelligence, power & physical attractiveness	X		X
Looking excessively to others for the regulation of self esteem without giving back	X	x	x

Fig. 3 Matrix of Narcissism characteristics[16]

The most comprehensive definition that includes all the facets is Mehdizadeh's (2010):

> Narcissism is a pervasive pattern of grandiosity, need for admiration, and an exaggerated sense of self-importance. It is associated with positive self-views of agentic traits, including intelligence, physical attractiveness, and power. Central to most theoretical models of narcissism, the use of social relationships is employed in order to regulate narcissistic esteem. However, narcissists do not focus on interpersonal intimacy, warmth, or other positive aspects of relational outcomes.

[16]For the characteristic: 'Believe they are special and unique', in Mehdizadeh's (2010) study, it is stated that narcissists have "an exaggerated sense of self-importance" (358). This is combined into the characteristic 'Believe they are unique or special' because the former is a precursor of the latter, with the meanings being very similar.

> Instead, they use relationships to appear popular and successful, and they seek attractive, high status individuals as romantic partners. Despite their tendency to seek out many superficial, empty relationships, narcissists rarely pursue these commitments for long periods of time. Relationships are solely pursued when an opportunity for public glory presents itself. (358)

This definition in Mehdizadeh's paper deals with the extreme form of "normal" narcissism and not with clinical Narcissism.

Defintion of narcissism for this study

As Kluger states, narcissism exists on a scale ranging between normal, or sub-clinical narcissism and clinical Narcissism. According to Bergman, this "normal" narcissism has the saem characteristics of clinical Narcissism, but to a lesser degree. These characteristics taken from the current research are:

- Inflated self-image / Grandiosity
- Believe they are special and unique
- Seek out empty, superficial relationships
- Positive and inflated views of agentic traits such as intelligence, power & physical attractiveness
- Looking excessively to others for the regulation of self esteem without giving back

This is not the definiton of a narcissist but rather a defintion of how narcissism presents itself, ranging on a scale from "normal" narcissism up to clinical Narcissism.

4.5. Conclusion

This chapter presents the origins of both our clinical and cultural understanding of narcissism so as to underpin and define what narcissism means in common discourse. An account of Lasch's critique of American culture during the 1970's is used to illustrate how the clinical definition of narcissism came to be transformed into a commonly used word and concept. This common concept is analysed against the background of this study – social media. Because the case study in Chapter 5 handles elements of the Facebook interface, three recent studies which examine narcissism and Facebook are reviewed in this chapter. Having reviewed the history of narcissism from a cultural and sociological point of view, a definition of narcissism that is relevant to the case study is proposed.

Narcissism has become a well accepted and understood concept. Based on the number of media reports and research papers published on the subject, it is important as social networks have become a common part of people's everyday lives. Lasch and other social critics use the term narcissism as a label in a broad social critique – as a symptom of a problematic society. Although it is important to review this literature to frame how narcissism lies in the Facebook context, the definition of narcissism that Lasch and others give has a motivation of social critique. The boundary between Lasch's use of narcissism and the use of narcissism in social studies is fairly close. Although Lasch uses narcissism to critique American culture, the definition he uses is based in the social research of the time. If we follow in a similar fashion in this study, we can use the social research definition of narcissism to analyse Facebook's interface.

5.0. Case Study: Comparison between Facebook interfaces of 2008 and 2015

The core question of this study is whether Facebook continually exploits narcissism in its interface to further its business goals. To answer this question the paper uses the approach that Fogg and Iizawa used in their case study of Facebook and Mixi.

Fogg and Iizawa's study which analyses Facebook's interface and compares it with the Japanese social network Mixi, was conducted in 2008. This case study will use the 2008 interface that Fogg and Iizawa analysed, comparing it with the 2015 interface and thereby analyzing how narcissism is involved in the persuasion strategies employed in each interface. By comparing the interface over time, the change in the exploitation of narcissism will be revealed, to show whether Facebook is indeed increasingly exploiting narcissism by furthering its persuasion goals to achieve its business goals. The 2008 interface and the 2015 interface will be discussed in a similar fashion to that used in Fogg and Iizawa's study, using the four persuasion goals:

1. Create personal profile page
2. Invite friends
3. Respond to other contributions
4. Return to the site often

The application of each persuasion goal in Facebook is discussed in Chapter 2, and so the case study focuses on changes to the interface over time with an analysis of the ways in which user narcissism seems to have been exploited.

In this study, the author does not claim that Facebook's designers are intentionally targeting narcissism in their designs, but rather that it is a by-product of their goals to increase engagement and drive growth.

5.1. Persuasion goal #1: Create personal profile page

Profiles form the core of the social network with the amount of information building value both for the owner of the profile and for users who browse other people's profiles. A person's information is contained in the About Me section, in a well laid out list of personal information and preferences. Facebook needs people to fill in as much personal information as possible to make peoples' profiles interesting to others as well as to create valuable data for advertising companies to target. Once a profile is filled in, it is the author's view that a bond of trust is created between Facebook and the user. This trust bond is very important in retaining users as well as building authentic profiles with highly personal information such as sexual orientation. Because this information is so valuable to Facebook, the designers have created an interface that makes it very easy for people to input their information and that also encourages people to update their information.

The transparent, and in Zuckerberg's view more authentic nature of Facebook's profiles, means that people are less likely to lie about themselves in the About Me section. Because other people know that person in real life, they are less likely to lie about themselves (Mehdizadeh 363). When a person fills in their profile it is as if they are writing a biography within Facebook's parameters, a base of background information that a narrative can be built around through their activities in Facebook. Thus the profile is an opportunity for people to present a better version of themselves than perhaps exists in real life. Facebook is in control of what information people can input as well as which section is presented first and therefore more likely to filled in, as well as being more likely to be viewed by other people. Thus, the information sections and the order in which they are presented can reveal what behaviour Facebook's designers are trying to influence.



Fig. 4. 2008 – About Me

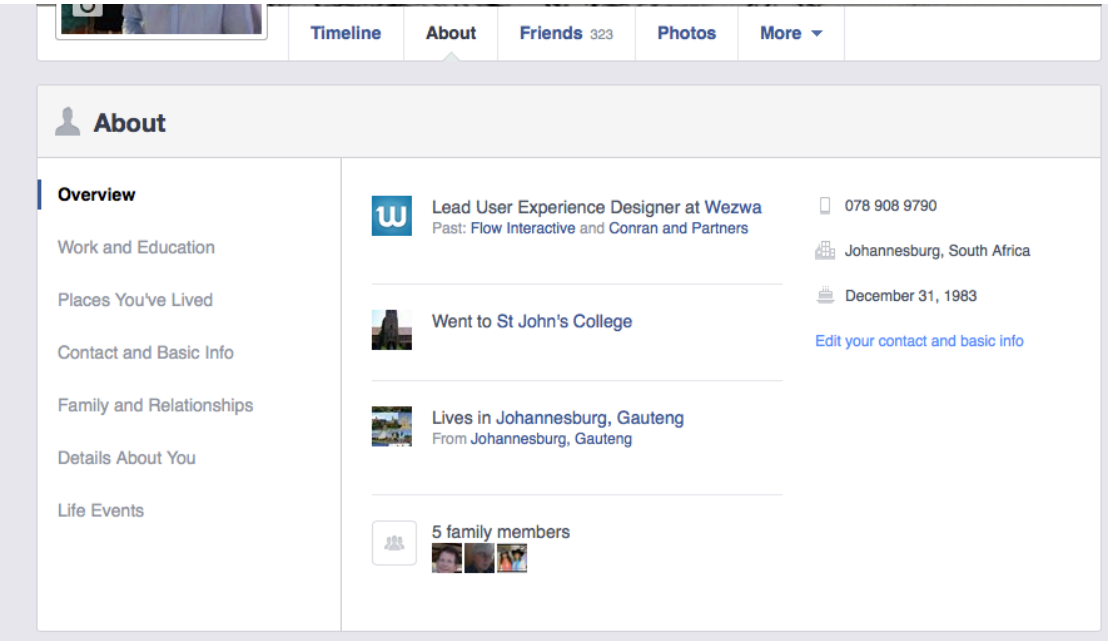

Fig. 5. 2015 – About Me

Analysis of the two interfaces

Besides the change from a tab-based navigation to a vertical side navigation, the order of the sections has been changed. The order of the sections in the 2008 interface is as follows: Basic, Contact, Relationships, Personal, Education, Work, Picture and Layout. The 2015

interface order is: Overview, Work and Education, Places You've Lived, Contact and Basic Information, Family and Relationships, Details About You and Life Events. From 2008 to 2015, Basic and Contact Information have been combined and moved down three positions, with Work and Education also combined and moved up three positions. Since Facebook's goal is to prioritize the most interesting content by presenting it first, we can say that the order of the section is hierarchical, with what Facebook sees as the most important being first in the order and the least important last. In the 2008 interface Contact Information is the most important information whereas in the 2015 interface, Work and Education are seen to be the most important. Since the profile is a reflection of a person's personality and life, the change shows that Facebook designs the interface based on what they think is most important for people to boast about to other people. The author believes that the change in the most important information is based on the changing demographic of users from 2008 to 2015. People who used Facebook during 2008 were mostly in high school and tertiary education since Facebook had only been open to the general public for two years. Thus people were more concerned about getting in touch with people, perhaps teenagers who had left their high school for different colleges (Kirkpatrick 150). In contrast, the 2015 user growth has been predominantly more mature, with the highest growth in above 55 year olds and with many teenagers and people in their early twenties dropping off the site (ibtimes.com). The user base in Facebook is now graduate professionals with their educational background and careers being signifiers of status. This can be seen in the prominent prompt to update information about education that appears at the top of the home screen of Facebook (Fig 6)

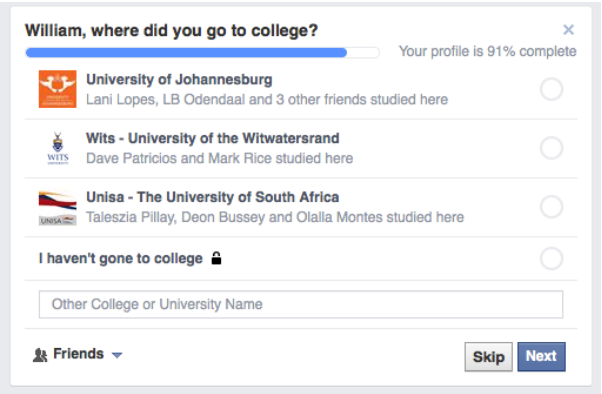

Fig 6. Prompt to complete the education section of About Me

Perhaps also the current trend of companies researching potential candidates for positions looking at their Facebook profiles has had an influence on this change. School and work background are a strong representation of who someone is, and whether that person will get along with others.

As shown in the Buffardi and Campbell study (2008), narcissism predicts more self-promoting content in several aspects of the social networking Web pages. Furthermore, Mehdizadeh proposes that the About Me section allows people to convey desirable information about themselves and enables them to promote self-views of positive agentic traits (358). Facebook has optimized the About Me section, adapting to the changing demographics of its users. This has been done deliberately so that people's most desirable traits, the ones they want other people to see, are displayed first. Facebook's interface in the About Me section encourages people to display more self-promoting content to their friends, content that their friends are more likely to be interested in, and has thus increasingly exploited narcissism.

5.2. Persuasion Goal #2: Invite Friends

Once a person's profile has been completed, the next vital step in the Facebook social network is to connect with people that the user knows (Fogg and Iizawa 39). A count of the number of friends a person has connected with is displayed on the person's profile page. Having only a few friends seems to be a marker of low status in Facebook and so Facebook users have a natural drive to connect with as many friends as possible (Fogg and Iizawa 39).

By quantifying a person's social network into one number, Facebook has given the user a clear goal – get the number up to seem more popular. Having a greater number of friends also means that more people are likely to view any activity that the user takes part in via their friends' Newsfeeds. In addition, there is value to Facebook in growing the number of likes, status updates and photographs that are seen in each person's Newsfeed because the greater number of social objects in the network, the more likely people are to come back and spend time on the site consuming them. Facebook encourages people to add as many friends to their social network as possible, evidenced in the 'people you may know' prompt on the right-hand side of the Newsfeed.

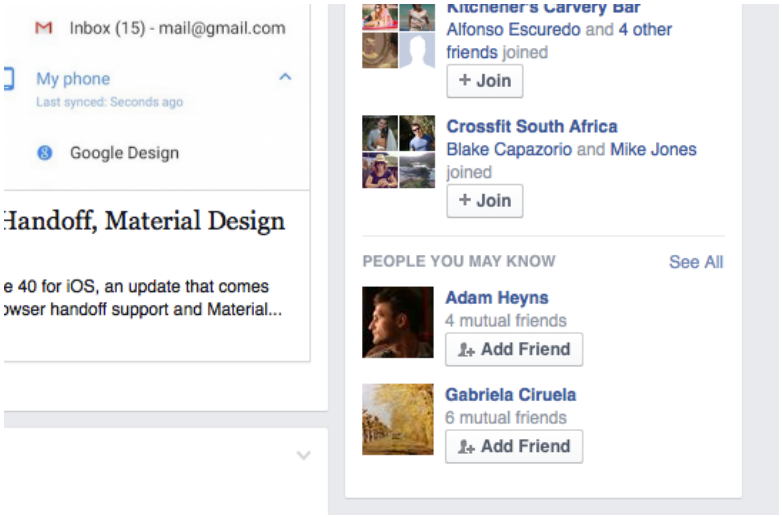

Fig 9. People you may know

Facebook has used the protocols of the system to display something that people are not normally aware of – the number of friends, or rather the number of weak tie relationships, they have. The Friend Count illustrates how Facebook can use the underlying architecture of their social network to engineer behaviour that encourages people to increase the number of their friends, and thus the value of the social network. However, it is the author's view that the Friend Count is completely arbitrary. In real life it matters little how many acquaintances people have, but rather whether a person has formed close ties with other people, or is seen as an influential person. Would a politician be elected based on the number of weak ties he or she has? Or would they be elected because of their influence over people with power and their ability to to get things done? Undoubtedly it is the latter, but in the world of Facebook the number of weak ties is what has become a symbol of popularity and worth. The designers of Facebook have prioritized a metric that has little value in society; yet in an environment that allows one's connections to be displayed in the Friend Count, it has value and adds status to users.

In the Buffardi and Campbell study (2008) it was found that narcissism is related to a measure of website activity derived from the number of friends a user has (1310). In addition, Bergman states that social network sites are an ideal outlet for narcissists because there is ample opportunity to receive attention from a large number of "weak tie" connections (707). The Friend Count could be seen as a perfect measure for a narcissist, and thus would be a useful persuasion point to get people to use Facebook. For narcissists, the Friend Count gives them an inflated self-image because the higher the number, the greater the representation of popularity. A higher number also means that there is the possibility of more feedback through shares, likes and comments, and therefore a greater possibility of inflated grandiosity. The Friend Count also encourages people to add as many people as possible, even loose

connections from friends of friends. Facebook thus encourages empty and superficial relationships by creating a metric that is visible to everyone in the social network.

Analysis of the two interfaces



Fig 7. 2008 interface – Friend count

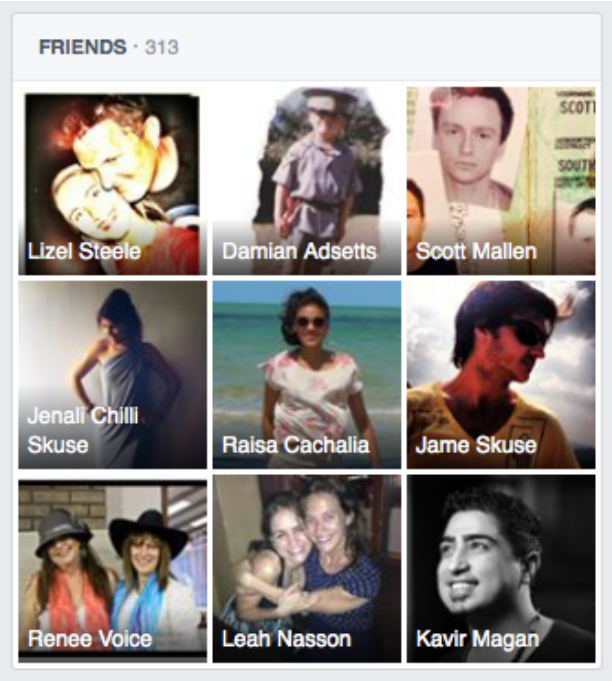

Fig. 8 2015 Interface – Friend count

When we compare the interface from 2008 to the 2015 interface, the most marked change is that in 2008 the Friend Count is categorized into different networks, while in 2015 it is combined into one count. Initially, Facebook was only accessed within a specific university network – you had to have a Harvard email address to create a Facebook account. When Facebook opened up to people outside the university networks and anyone could create an account, people were still automatically placed into a network, with the number of people within that network displayed next to the network's name. This was to open up the network so that anyone from the Stanford network for example, could view other profiles in the network (unless users adjusted their privacy settings, the default was that anyone from within the network could view other profiles). In 2009 Facebook eliminated regional networks, possibly to limit the number of people who could view non-connected people's profiles. This may have been done in anticipation of privacy concerns, but it had the side effect of creating one friend count metric, rather than multiple counts. Because the number of weak ties is correlated to narcissism (Buffardi and Campbell 2008), combining a fragmented metric to a single metric and thus simplifying and increasing the number of friends, therefore represents an increase in the exploitation of narcissism in the interface.

5.3. Persuasion Goal #3: Respond to other's contributions

Social contributions are essential for Facebook because it is the variable reward of seeing social formation in people's Newsfeed that keeps people interested and 'hooked' (Eyal 99). People using social networks post content in the hope that people in their social network will provide positive feedback. Fogg and Iizawa state that "people gain satisfaction from posting content online, but they likely get more satisfaction from seeing others responding positively to what they have posted"(42). The authors continue to explain that social interaction over user-generated content is what makes social networking services different

from other types of media. Facebook needs people to create user generated content, content that friends will see and respond to and so their design motivates users to give feedback on friends' content through carefully placed prompts. It is the author's view that not only has Facebook built a highly structured feedback mechanism via likes, shares and comments, so that people create content with positive rewards in mind, but the system also rewards narcissists, people who rely on others to validate their self-worth. This means it is biased towards popular content, content that has the highest likelihood of receiving positive feedback, and that people are more likely to view the positive aspects of other people's lives, and not form a balanced view of their social world. It also means that there is an easy way for narcissists to gain the praise and attention they need in an environment that does not judge their boasts and praise seeking activities. Similarly, the Friend Count on Facebook has created an environment that has made an activity that would most likely be perceived as anti-social, completely acceptable and entertaining to others. If a person at a party showed a photograph of his trip to the Seychelles to everyone asking if they liked it or if they have any comments about it, the behaviour would not be seen as socially acceptable. However, in Facebook, narcissistic activity is acceptable and encouraged, allowing narcissists to broadcast their views and content to large numbers of people in an easy to use interface. Indeed, Mehdizadeh's study suggests a strong correlation between narcissism and self-promotion via status updates (360). In the study by Bergman et al., the authors explain that social network users can be the 'stars' of their own profiles and let other people know what they are doing and thinking by updating their status (707). This study found that narcissism was positively correlated with the users' (Millennials) belief that people are interested in what they are doing (710). Self promotion through status updates has been enabled through Facebook's interface, and has introduced a behaviour that is accepted as normal while at the same time allowing narcissistic behaviour.

Analysis of the two interfaces



Fig 10. 2008 interface - Comment box



Fig 11. 2015 Interface – Comment, like and share box.

In comparing the 2008 feedback interface to the 2015 feedback interface, commenting is still present in the 2015 interface and the user is encouraged to comment on content, but in the 2015 interface the addition of Liking has made getting feedback from people easier. This is because in one click people can express a positive sentiment towards content, rather than writing a comment, which takes more effort and thought. The Like function is an important feedback mechanism for Facebook as it has enabled Facebook to reach outside of the Facebook interface into websites through their Application Programming Interface (API).

The API allows a website to use certain Facebook functionality and allows content from outside of Facebook to be fed into the social network. However, the liking and sharing functionality also serves as a popularity metric, as Van Dijck explains:

> Popularity as a coded concept thus not only becomes quantifiable but also manipulable: boosting popularity rankings is an important mechanism built into these buttons. (13)

Van Dijck states that Facebook has created a button that has become part of everyday life and has instilled one simple action and metric in people's minds. The Like button creates social currency and therefore the currency of Facebook itself (46). The Like button and the Share button have created a metric of popularity and feedback that is very powerful in its simplicity, and by adding these feedback mechanisms that are simpler and easier to perform than commenting, Facebook has increased the intensity of the content creation feedback loop. The Like button is designed to be an easy action, far easier than writing a comment; however, it has the drawback that it is more emotionally detached (Mehdizadeh 358). Compared to the 2008 interface, the 2015 interface has the addition of the Like button - a more superficial feedback mechanism that is easy to use. Adding the Like button is an increase in Facebook's exploitation of narcissism because receiving feedback from one's posts has become far easier as well as far shallower.

5.4. Persuasion Goal #4: Return to the site often

Driving return visits is vital for the survival of a social network because time spent on the site by users and the number of people visiting the site is what is valuable to advertisers. Central to Facebook's strategy to drive repeat visits is the Newsfeed where people can

efficiently discover what their friends have been doing (Fogg & Iizawa 44). It is the author's view that Facebook's invention of the Newsfeed has changed the way people interact with the web and how they consume social information. The Newsfeed leverages variable reward (Eyal 99) where people 'hunt' for exciting social information, and are in a constant state of expectation of reward. However, content needs to be created for people to continuously return to read it and so Facebook makes it easy for people to create content and consequently, for any social network, the provision of feedback is a priority.

Analysis of the two interfaces



http://blog.grovo.com/2013/01/Facebook-news-feed-years/

Fig 11. 2008 Interface: Newsfeed

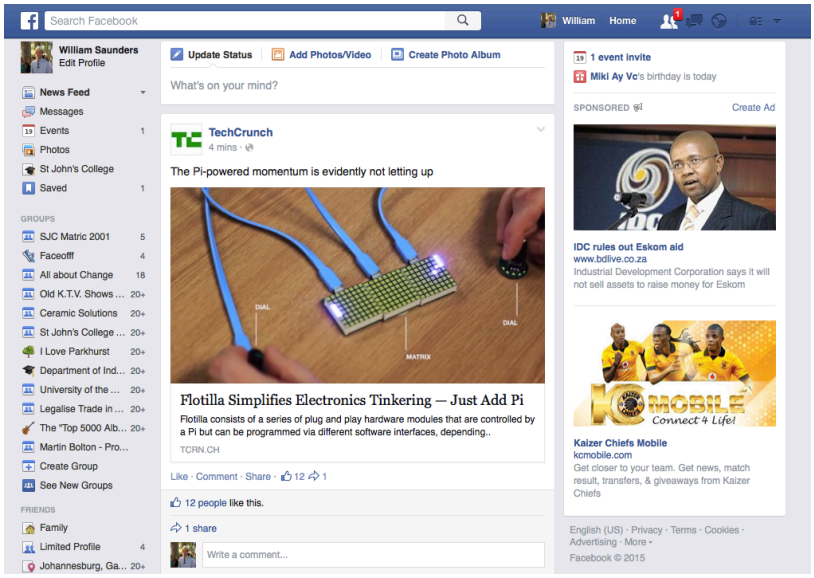

Fig. 12 - 2015 interface: Newsfeed

The 2008 Newsfeed displayed status updates, birthdays, relationship updates, profile changes and events. It was a general list of actions that friends had made on the site. In 2015, Facebook has focused on the personalisation of the feed, offering users the ability to choose the type of content they see. The most recent update was in 2013 and the Newsfeed is now a real-time, personalised feed of your friends' actions, status updates, comments on content and friends of friends public actions. Facebook's Edgerank algorithm works to show people as much relevant and interesting content as possible (Van Dijck 49) so that people return as often as possible.

Status update is top of the page

As can be seen in Fig. 12, the ability to post content takes prime position at the top of the page in the 2015 interface. The 2008 interface was simply a list of events and did not encourage a user to publish new content – instead the status update was found on the user's profile. Mehdizadeh, Buffardi and Campbell found that narcissism was positively correlated with posting self-promoting content and so this change that places the content posting tools at

the top of the screen, means that Facebook has increased the likelihood of someone posting self-promotional content. Content posting is vital to Facebook and it makes sense that they would build an interface that makes content creation as easy as possible, but a by product of this optimization is that it is now easier than before to post self-promoting content and thus Facebook is increasingly leveraging narcissism to further the use of the service.

Feedback mechanisms are with the content

The 2008 interface displayed a list of events with the user having to click through to the content to leave feedback by leaving a comment. The 2015 interface has the ability to comment, like and share content directly underneath the content thus reducing the barriers to leaving feedback. By placing the feedback mechanisms in a more convenient position for content consumers, Facebook is increasing the likelihood and frequency of people leaving feedback on content produced by friends. The more feedback, the more content people will post in anticipation of yet more feedback. Facebook is encouraging self-promotional content and thus narcissism with this change.

5.5. Conclusion

The changes to the Facebook interface from 2008 to 2015 that target the four persuasion goals have been shown to increase the exploitation of narcissism. Highly cited and recognized research has shown that the behaviours that the four interface elements target are positively correlated with narcissism, and this study has shown that Facebook has increasingly amplified the persuasion through the design of the interface over time.

6.0.Conclusions

6.1.The study

This paper argues that Facebook has designed an interface over time that has increasingly exploited narcissism and that this is in line with its commercial aims. Studies up until now did not examine the relationship between Facebook and narcissism by analyzing the interface, but rather from the point of view of behavioural studies. The interface is the primary link between Facebook and its users and so can offer insights into the mechanics behind the social network.

6.2.Purpose and objectives

By analyzing narcissism and the Facebook interface, this study seeks to uncover evidence that Facebook is exploiting narcissism. The study also looks at the issues surrounding social networks and culture, how social networks use persuasion design to grow their user base, and the current understanding of narcissism in modern culture. The study uses Fogg's Behavior Chain Model to analyse the Facebook interface, furthering its usefulness in this type of analysis.

6.3.Methods and key results

The study builds an understanding of social media theory, design for behaviour change and narcissism in culture. Chapter 1 introduces social media and the interface as well as the background to Facebook and the environment within which Facebook exists. Chapter 2 introduces social media and shows how Facebook's business model of growth means that it needs to constantly re-design its interface to influence behaviour change and keep users

coming back often. Chapter 3 introduces design for behavioural change and B. J. Fogg's framework for persuasive design showing how companies such as Facebook can target behavioural change to increase the adoption and retention of users. Chapter 4 explores the definition of narcissism and examines a selection of case studies to better understand the cultural background to narcissism, and the current research into narcissism and Facebook. Thus the motivation and business needs driving Facebook are covered, how Facebook has influences people to continue this growth and what narcissism means in the context of Facebook's interface.

This understanding is used as a foundation for the case study. An earlier case study by Fogg and Iizawa is used as a reference for this paper's case study, with the focus on narcissism within Facebook. The four persuasion goals derived from Fogg's Behavior Chain Model that are used in the Fogg and Iizawa study are employed as a framework.
The persuasion goals are: 1. Create Personal Profile Page, 2. Invite friends, 3. Respond to others' contributions, and 4. Return to the site often. The finding is that according to all four persuasion goals, Facebook has indeed been increasingly using the exploitation of narcissism between 2008 and 2015.

6.3.1.Create Personal Profile Page

Facebook promotes the sharing of relevant personal information based on what people want to promote about themselves. In this case Education and Employment are prioritized in the 2015 interface.

6.3.2.Invite friends

The friend count changed from a fragmented metric in 2008 to a single metric in 2015. The simplification to one number shows an increase in the exploitation of narcissism in the interface.

6.3.3.Respond to others' contributions

Facebook introduced the Like and Share buttons between 2008 and 2015. These buttons have simplified and increased the feedback from self-promoting content and so have increased the exploitation of narcissism by creating more superficial feedback mechanisms that are easier to use.

6.3.4.Return to the site often

In the 2015 interface, Facebook has placed the content publishing tools in the centre of the page above the Newsfeed, increasing the likelihood of people posting self-promoting content. Facebook has also placed the Like, Share and Comment tools directly underneath content, thus increasing the likelihood of people getting feedback on their content. These two changes encourage the publication of self-promotional content and thus also narcissism. Facebook has obligations to its shareholders to grow rapidly, and if their tests reveal that placing the Comment and Like functions below content increases usage and sharing, they are obliged to implement the change. However, Facebook should be aware of the effects these changes have on its users, if only so that they can look at possible alternatives and safeguards against exploiting narcissism.

6.4.Recommendations

This case study has shown that Facebook is increasingly using interface design to exploit narcissism. Further quantitative studies should be carried out to analyse the specific features that are discussed in this case study. For instance, a study using a NPD index could measure the narcissism scores for a number of status updates using the 2008 interface and a number of status updates using the 2015 interface. Technically this may be very difficult, as

the 2008 interface no longer exists, but perhaps a working prototype could be created for the purposes of this test.

7.0. Works cited

Arnett, Jeffrey Jensen, Kali H. Trzesniewski, and M. Brent Donnellan. "The Dangers of Generational Myth-Making Rejoinder to Twenge." *Emerging Adulthood* 1.1 (2013): 17–20. *eax.sagepub.com*. Web. 2 Feb. 2015.

Bergman, Shawn M. et al. "Millennials, Narcissism, and Social Networking: What Narcissists Do on Social Networking Sites and Why." *Personality and Individual Differences* 50.5 (2011): 706–711. *ScienceDirect*. Web. 19 May 2014.

Booth, Robert. "Facebook Reveals News Feed Experiment to Control Emotions." *The Guardian*. N.p., n.d. Web. 19 Nov. 2014.

Boyd, Danah. *It's Complicated: The Social Lives of Networked Teens*. Yale University Press, 2014. Print.

Boyd, Danah M., and Nicole B. Ellison. "Social Network Sites: Definition, History, and Scholarship." *Journal of Computer-Mediated Communication* 13.1 (2007): 210–230. *Wiley Online Library*. Web. 25 July 2014.

Buffardi, Laura E., and W. Keith Campbell. "Narcissism and Social Networking Web Sites." *Personality and Social Psychology Bulletin* 34.10 (2008): 1303–1314. *psp.sagepub.com*. Web. 19 May 2014.

Carpenter, Christopher J. "Narcissism on Facebook: Self-Promotional and Anti-Social Behavior." *Personality and Individual Differences* 52.4 (2012): 482–486. *ScienceDirect*. Web. 19 May 2014.

Chilana, Parmit et al. "Designing for a Billion Users: A Case Study of Facebook." *CHI '12 Extended Abstracts on Human Factors in Computing Systems*. New York, NY, USA: ACM, 2012. 419–432. *ACM Digital Library*. Web. 17 Sept. 2014.

Dietrich, Gini. *Spin Sucks: Communication and Reputation Management in the Digital Age*. 1 edition. Indianapolis, Indiana, USA: Que Publishing, 2014. Print.

"Everything We Know About Facebook's Secret Mood Manipulation Experiment." Web.

Eyal, Nir. *Hooked: How to Build Habit-Forming Products*. Portfolio, 2014. Print.

"Facebook Gets Older: Demographic Report Shows 3 Million Teens Left Social Network In 3 Years." *International Business Times*. N.p., 16 Jan. 2014. Web. 28 Feb. 2015.

"Facebook's Priority Is Growth Not Profit." 9 Oct. 2008. *www.telegraph.co.uk*. Web. 27 July 2014.

Fogg, B. J. "A Behavior Model for Persuasive Design." *Proceedings of the 4th International Conference on Persuasive Technology*. Claremont, California: ACM, 2009. 1–7. Print.

Fogg, B. J., and Dean Eckles. "The Behavior Chain for Online Participation: How Successful Web Services Structure Persuasion." *Persuasive Technology*. Ed. Yvonne de Kort et al. Vol. 4744. Springer Berlin Heidelberg, 2007. 199–209. Web. Lecture Notes in Computer Science.

Fogg, B. J., and Daisuke Iizawa. "Online Persuasion in Facebook and Mixi: A Cross-Cultural Comparison." *Persuasive Technology*. Ed. Harri Oinas-Kukkonen et al. Springer Berlin Heidelberg, 2008. 35–46. *0-link.springer.com.innopac.wits.ac.za*. Web. 20 May 2014. Lecture Notes in Computer Science 5033.

Freud, Sigmund et al. *Freud's" On Narcissism--an Introduction."* Yale University Press, 1991. Print.

Fuller, Matthew. *Software Studies: A Lexicon*. Mit Press, 2008. Print.

"Hooked: How to Build Habit-Forming Products" 30 Dec. 2013. *www.amazon.com*. Web. 27 July 2014.

"How to Design Successful Social Products with 3 Habit-Forming Feedback Loops." *@andrewchen*. N.p., n.d. Web. 30 Jan. 2015.

"Facebook Gets Older: Demographic Report Shows 3 Million Teens Left Social Network In 3 Years." *International Business Times*. N.p., 16 Jan. 2014. Web. 28 Feb. 2015.

Keen, Andrew. *The Internet Is Not the Answer*. Atlantic Monthly Press, 2015. Print.

Kirkpatrick, David. *The Facebook Effect: The inside Story of the Company That Is Connecting the World*. Simon and Schuster, 2011. Print.

Kluger, Jeffrey. *The Narcissist Next Door: Understanding the Monster in Your Family, in Your Office, in Your Bed-in Your World*. Penguin, 2014. Print.

Lanier, Jaron. "Jaron Lanier - You Are Not a Gadget."

---. *You Are Not a Gadget*. Random House LLC, 2010. Print.

Lasch, Christopher. *The Culture of Narcissism: American Life in an Age of Diminishing Expectations*. WW Norton & Company, 1978. Reprint 1991.

Lunbeck, Elizabeth. *The Americanization of Narcissism*. Harvard University Press, 2014. Print.

Mehdizadeh, Soraya. "Self-Presentation 2.0: Narcissism and Self-Esteem on Facebook." *CyberPsychology, Behavior & Social Networking* 13.4 (2010): 357–364. *EBSCOhost*. Web. 19 May 2014.

"Narcissism, N." *OED Online*. *Oxford English Dictionary*. Web. 18 Dec. 2014.

"Narcissism (psychology) -- Britannica Online Encyclopedia." N.p., n.d. Web. 9 June 2014.

Ong, Eileen Y. L. et al. "Narcissism, Extraversion and Adolescents' Self-Presentation on Facebook." *Personality and Individual Differences* 50.2 (2011): 180–185. *ScienceDirect*. Web. 19 May 2014.

"Facebook Reports Fourth Quarter and Full Year 2013 Results." N.p., 22 June 2014. Web. 15 January 2015.

"Sheryl Sandberg Not Sorry for Facebook Mood Manipulation Study." *Washington Post*. N.p., 3 July 2014. Web.22 January 2015.

Simonite, Tom. “What Facebook Knows.” *MIT Technology Review*. N.p., 13 June 2012. Web. 1 Feb. 2015.

“The Outrage Over Facebook’s ‘Creepy’ Experiment Is Out-Of-Bounds -- And This Study Proves It.” *Forbes*. N.p., 1 July 2014. Web. 22 July 2014.

Stake, Robert. (1998). “Case Studies” in: Norman Denzin & Yvonna Lincoln. (eds.): *Strategies of Qualitative Inquiry*. Thousand Oaks, London, New Delhi: Sage

Turkle, Sherry. *Alone Together: Why We Expect More from Technology and Less from Each Other*. Basic books, 2012. Print.

Twenge, Jean M., and W. Keith Campbell. *The Narcissism Epidemic: Living in the Age of Entitlement*. Simon and Schuster, 2009. Print.

Van Dijck, Jose. *The Culture of Connectivity: A Critical History of Social Media*. Oxford University Press, 2013. Print.

Vasalou, Asimina, Adam N. Joinson, and Delphine Courvoisier. “Cultural Differences, Experience with Social Networks and the Nature of ‘true Commitment’ in Facebook.” *International Journal of Human-Computer Studies* 68.10 (2010): 719–728. *ScienceDirect*. Web. 19 May 2014.

Wright, Aidan GC et al. “Conceptions of Narcissism and the DSM-5 Pathological Personality Traits.” *Assessment* (2013). Print.