

Self-regulation, teenagers and social media use: Inquiry into online behaviour and the influence of digital architecture

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ABSTRACT

Legal pluralism has long advocated the recognition of non-state legal orders and normativity in communities. The advent of the internet and the subsequent revolution in the ways in which people can interact, organise and empower themselves online combined with the regulatory infancy of the internet reaffirms the importance of understanding the ways in which online groups regulate their own behaviour. In 2004 the launch of the social networking site 'Facebook' marked the mass movement of teenagers starting to socialise and support friendships online, bringing with them new expectations, practices and a valuable understanding of each other's online behaviour. This dissertation seeks to take seriously the self-regulation of teenagers on Facebook and explores the role of digital architecture in the development of these practices.

By understanding digital architecture as something through which behaviour is mediated, its regulatory potential will be addressed by examining both the nature of architecture and the possibilities it creates. Thereafter, the role of architecture in the normative development of teenagers (aged 16-18) using Facebook will be analysed. By using participant responses from research conducted at a large boarding school in the United Kingdom, an empirical grounding to the claim that architectural influence plays a role in the emergence of norms is provided.

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INTRODUCTION

The only way of approaching a legal discourse and doing justice to it is by having an account of the participants themselves as to what it is they do when entering that discourse and why.¹

The whole community learns, there's this unwritten etiquette of Facebook that's just developed through time through existing friends like evolution. So you see what your friends are doing, if you're a new user, then you feel comfortable doing it and adapt it.
– Gregory, *Participant*

The aim of this dissertation is to explore the interplay between digital architecture and the normative practices of social media users, taking the experiences of teenagers using the social networking site Facebook as a case study. By situating this discussion within both the literature of cyberlaw and of legal pluralism, the role of digital architecture as a regulatory force will be addressed and demonstrated to be an influence which cannot be ignored in any discussion of internet governance.

By looking at the ways in which architecture structures online experiences I endeavour to explore the role of architecture as something which may communicate values, constrain, enable or in other ways influence behaviour. Moreover, by undertaking a qualitative analysis of user experiences, I will emphasise the importance of taking seriously teenagers' ability to negotiate and interpret the architecture that forms the environment in which they interact. By doing so, the interface between architecture and normativity can be explored in a way which recognises the relationship between technological change and societal change.

In chapter one, I take the four topics of the internet, self-regulation, teenagers and Facebook and bring them together to determine the value of a project which incorporates each one. In this chapter, particular focus will be paid to the difficulties which current governance literature faces in addition to the signals available from recent case law and theory to support the role of self-regulation online. Following this, chapter two will develop an idea of the role that digital architecture has in constructing online experiences. Dividing architecture into two categories

¹ Melissaris, E (2004, 75)

(macro and micro), the qualities of the internet associated with its technical nature will be explored in relation to user experience, in addition to the way in which the structural qualities of individual websites engage with the emergence of norms.

In chapter three I will present the findings of fieldwork conducted by using teenagers' experiences as a lens through which to discuss the process of community building on Facebook, as well as the role of Facebook as a medium through which content is aggregated, and exposure to other's behaviour regulated. Following this, chapter four will detail the norms and practices described by participants, including those which govern day to day interactions (e.g. consideration, observation) and those which enable users to feel confident in their interactions and verify the identity of others (e.g. connection checking and expectations of shared information).

1. Methodology

The empirical research conducted for the purpose of this dissertation took the form of participant interviews. These were semi-structured in nature and performed by the author, enabling a balance between guided conversations to ensure that research objectives were met as well as allowing the interviewee to discuss what they felt was relevant. Additionally, this format provided the flexibility of structure required for participants to be able to interact with the interviewer for the purposes of forming a narrative within their reply.

Participants were selected from a large state boarding school in the United Kingdom (16 – 18 in age)². A total of 12 single participant interviews were conducted, from 30 to 60 minutes in duration. Additionally, 2 group interviews were conducted in order to compare group dialogue to that of the single participant interviews. These consisted of 6 and 4 participants, both being of approximately 60 minutes in duration. In total, 22 participants were interviewed during May 2013 of which 13 were male, 9 were female. Selection was made in conjunction with the Head of Sixth Form studies in order to ensure a suitable number of students could take part in the interviews without disrupting their timetabled activities. Informed consent was obtained from all participants, after having been provided with a written and verbal explanation of research aims, procedure and ethics considerations. Confirmation was attained from the school that parental permission need not be sought by the researcher.

² Participants were approximately equally divided between boarders and non-boarders.

Both group and single participant interviews were held within the boarding school's grounds. Notes were taken throughout the interview process, which were audio recorded and transcribed in part by the researcher³ following completion of the fieldwork. Due to the sensitive nature and vulnerabilities associated with research participants of this age, care was taken to comply with all requests from the school with regards to procedure, and all participants have been given pseudonyms for the purpose of writing this dissertation.

Discussions sought to achieve responses which engaged with the questions of normativity and of past experiences with architecture to which this dissertation is addressed. There was a particular focus on how participants perceived various regulatory influences on past experiences, with notable themes forming part of the substantive line of inquiry in subsequent interviews in order to compare responses and ascertain some understanding of group experience⁴.

I. SETTING THE SCENE

In this introductory chapter, the dissertation's thesis will be located within the literature and fields in which it sits.

Firstly, a brief overview of the work on cyberlaw will be made. In doing so, I will look at the ways in which the internet is treated as something which must be subject to special provisions and thus distinct from other areas which traditional law makers seek to govern. Additionally, I will remark upon the ways in which certain approaches to internet governance are incompatible with the goals of this dissertation. Secondly, I will determine the relevance of legal pluralist literature to internet governance, and identify aspects of the internet which call for a departure from a traditional state-centric legal order. In the third and fourth sections I will turn to the social media site Facebook and the associated activities of teenagers to determine what might be learnt from concentrating the focus of this dissertation towards these two subjects.

³ Full transcriptions were not made of all audio recordings.

⁴ In order to contextualise experiences some basic information was sought. Participants were asked to estimate the number of Facebook "Friends" they had to the nearest 100, how long they had been a member of the site and how frequently they would use the site.

1. Understanding the internet, cyberspace and cyberlaw

The once nascent status of the field of cyberlaw, cyberspace regulation or internet law is best characterised by the variety of names under which it may be found. What was once a subject regarded as niche - a subset of law targeting a technology in its infancy – can now be seen as having blossomed into the forefront of both academic and popular discourse.

Internet governance, a term which I favour for the reasons to follow, is often ensnared in language that seeks to determine its subject as something of the exceptional. Thus, “cyberlaw” has the effect of appearing to separate issues of law and governance, instead creating new issues of cyber law and cyber governance.

This will be a familiar point of contention for anyone who has taken more than a passing interest in this developing field in recent years. The frequently cited and poignant sentiment of Judge Frank Easterbrook in 1996 presented under the title ‘Cyberspace and the Law of the Horse’ addressed this issue at its heart and put forward a challenge to all cyberspace thinkers to legitimise their chosen focus. In what was a scathing critique of early cyberlaw studies, Easterbrook, at the time a United States Court of Appeal Judge and Senior Lecturer at The University of Chicago, delivered the following warning at a conference entitled ‘The Law of Cyberspace’:

Beliefs lawyers hold about computers, and predictions they make about new technology, are highly likely to be false. This should make us hesitate to prescribe legal adaptations for cyberspace. The blind are not good trailblazers.⁵

This, and the preceding assertion that legal study should be ‘limited to subjects which could illuminate the entire law’⁶ were not claims which were likely to be received positively by their audience. In the most noteworthy reply to Easterbrook, Lessig defends the importance of cyberspace studies but falls short in defending the dilettantism with which Easterbrook sought to label the scholarship. Instead, Lessig emphasises the importance of looking at the unique characteristics of the internet.

We see something when we think about the regulation of cyberspace that other areas would not show us.⁷

⁵ Easterbrook, F H (1996, 207)

⁶ *ibid*

⁷ Lessig, L (1999b, 502)

The value of what we can observe and learn from focussed investigation of the internet is a theme that will run throughout this dissertation. Lessig introduces his defence against Judge Easterbrook's claims with two examples of characteristics present in cyberspace which would not, and could not, manifest in the real world⁸. First, Lessig claims that 'zoning'⁹ (the practice of using the design of the real world to form barriers and restrictions, later developed in *Code and Other Laws of Cyberspace*¹⁰) is inhibited by the way in which the default position of cyberspace is to conceal age, physical characteristics and other identifying features. For example, while in the offline world a person's age is open to all (even if not accurately, it may be judged to a certain degree of accuracy) cyberspace protects this information due to an architectural propensity for anonymity.

Conversely, Lessig's second example describes a situation whereby private information is inherently more susceptible to being revealed and utilised in cyberspace than the real world¹¹. While his discussion precludes any mention of state regulation governing this area, it is rightly identified that architecturally the collection of user data does not require the user to either know or acknowledge that this is happening (this introduces the notion of instability which will be discussed in a forthcoming section).

Qualities such as these have led scholars to recognise that the internet presents a challenge to what would previously have been considered fundamental concepts (indeed, fundamental *constants* and *constraints*) of regulation. Factors such as data archiving, ease of reproduction, lack of definable borders, accessibility and a certain resistance to regulation have all provoked lively and divisive discussion, one which continually demonstrates the value of legal scholarship in relation to the internet. Not only do these qualities affect the efficacy of existing legislative measures when transposed to the internet, they present equal challenges to the creation of new law from traditional state mechanisms. For instance, expectations that legislative items are frequently built upon (many of which are related to physicality) present complex difficulties. As such, in his conversations with Glyn Daly, philosopher Slavoj Žižek states that cyberspace is amongst those subjects which sees us 'confronted more and more often

⁸ Given the technological innovations in the time since Lessig wrote his defence it could well be the case that basic principles of law taught to deal with the character of the internet are to become more generally applicable to law universally. For example, the introduction of consumer grade 3D printing machines brings the ease of replication so often associated with online piracy to the offline world.

⁹ Lessig, L (1999b, 510)

¹⁰ Lessig, L (1999a)

¹¹ Lessig, L (1999b, 502)

with philosophical problems at an everyday level'¹². In this sense, qualities of the internet resist both our attempts to understand it and attempts to apply conventional practices. The question that follows is to what extent these qualities are in the minds of those making decisions about their online behaviour as they react to and interpret the digital environment.

More contemporary entrants to the internet governance discussion, such as that of James Grimmelmann's 2004 piece 'Virtual Worlds as Comparative Law' which advances the hypothesis that communities formed on the internet can be taken as 'genuinely new societies'¹³, also orient themselves around the question of what value can be had by studying the regulatory mechanisms of virtual worlds.

The uncertainty of an approach which claims only that there may be some advantage to studying the field of internet law should not serve to denigrate the attempt. All too often accounts from those who wish to argue against the idea of cyberlaw suffer from the myopic nature of their work. For example, Sommer in his piece entitled *Against Cyberlaw* claims (amongst other loosely formed analogies¹⁴) that existing bodies of law are capable of dealing with the issues that the internet presents¹⁵. While this is a legitimate (and frequent) traditionalist argument, there is a reluctance to engage with the idea that the "issues" presented may emerge from the shortfalls of a traditional conception of regulation.

1a. The problem with "cyberspace"

Bijker and Law introduce their discussion of technology and society by claiming a 'linguistic inertia'¹⁶ is present in the way in which we discuss technology. Technology, they argue, cannot be presented for discussion as something wholly separate from what is social. Instead, 'social and technical change come together'¹⁷, making one impossible to understand without the other.

¹² Daly, G and Žižek, S. *Conversations with Žižek by Slavoj Žižek and Glyn Daly* (Cambridge: Polity Press, 2004) 54

¹³ Grimmelmann, J (2004, 147)

¹⁴ 'It makes perhaps even less sense to classify fields of law by their associated technologies than it does to classify fruit by their color. At least some fruits have a unique color. But few bodies of law are associated with only one technology, and few technologies are associated with only one body of law.' Sommer, J (2000)

¹⁵ *ibid*

¹⁶ Bijker, W E and Law, J (1992, 4)

¹⁷ *ibid* 11

Though in this dissertation I intend to sustain a focus both on the social behaviour of teenagers on Facebook as well as the technological environment (architecture), there exists a persistent tradition of approaching this topic in a divisive way. For example, use of the term “cyberspace” and the derived “cyberlaw” – which is generally avoided herein – is representative of an approach towards the internet and its involvement in people’s lives as wholly separate. As Grimmelmann notes in his introduction to *Internet Law: Cases and Problems*, the term cyberspace is one which does not come without ‘baggage’¹⁸. Noting that the term ‘cyberspace’ is one first presented by the author William Gibson in his 1984 novel *Neuromancer* to denote what he called a new ‘place’,¹⁹ the use of the term cyberlaw in legal theory marks the continuation of an approach to law and the internet which relegates it to that of the dilettantism of which Judge Easterbrook spoke.

This attempt – if only linguistic – to confine the contents of the internet to something which might be “found” has significant importance when considering the application and development of regulation. The attempt to define (or rather confine) in this way gives a misleading impression of coherence to what is otherwise an unstructured and unclearly marked set of experiences. Moreover, to do so is to give the impression that cyberspace might be something that can be entered or left at will, and that it is a wholly separate “reality”.

This “fallacy” of the cyberspace analogy is highlighted by Goldsmith. Including it in his list of three persistent fallacies within internet governance literature he asserts that ‘the Net is not a separate place, and Net users are not removed from our world’²⁰.

Similarly, in an early text on the topic, Wellman and Gulia issue a criticism of the early work on virtual communities.

Much of the analysis is parochial. It almost always treats the internet as an isolated social phenomenon without taking into account how interactions on the net fit together with other aspects of people’s lives.²¹

¹⁸ Grimmelman, J (2011, 8)

¹⁹ *ibid*

²⁰ Goldsmith, J (1998, 1121)

²¹ Wellman, B and Gulia, M (1999, 170)

Despite what the attempts at separating “cyberspace” from the real world might suggest, a person does not appear on the internet with an identity completely separate²² to that of their offline one, nor is the internet as a technological phenomenon separable from the offline world. Claiming that ‘the web cannot be defined without connection to the human social realm’²³, Raffl *et al* describe an approach which recognises the co-operation of technology and society, an idea that will be explored in greater depth in the forthcoming analysis.

When one approaches study of the internet in a way which neglects the co-operation of technology and society it leads to an inherently detached approach, treating online interactions as separate to offline interactions. Evidence of this can be found in the type of studies conducted to this point. As Agre notes, there is a tendency to focus research on those communities that are ‘intentionally disconnected’²⁴ from reality (such as fantasy and role play) and not take seriously the idea of the internet integrating into our social practices.

This approach is, *prima facie*, relatively understandable. The internet presents itself as both a new medium as well as one which does not come with a readily understandable user manual. While there are issues of technical understanding, there are wider and arguably more important issues of interpretation. These problems become evident when efforts are made to explain, in simple terms, the nature of the internet. For example, the BBC ‘WebWise’ website notes that ‘as the postal service enables people to send one another envelopes containing messages, the internet enables computers to send one another small packets of digital data’²⁵. This is of course, in a very important way, true. However, explanations such as these which are principally based on analogical reasoning mask certain nuances of the internet which render it entirely distinct from the analogy with which they wish to make. In this instance, the comparison to traditional post encourages one to think that packets of data are sent in a controlled and consented manner, which is not always the case²⁶.

²² The issue of separation and influence is a complex one. Suler claims that ‘when people have the opportunity to separate their actions from their real world and identity, they feel less vulnerable about opening up’. The poignant question is to what extent the internet makes possible this “separation”. Suler, J (2004, 322).

²³ Raffl, C *et al* (2009, 606)

²⁴ Agre, P (1999)

²⁵ ‘What is the internet?’ (BBC, 10th October 2012) <<http://www.bbc.co.uk/webwise/guides/what-is-the-internet>> last accessed 06/11/2012

²⁶ Packets of data are more often sent and received unknowingly to the user both to maintain connections and also to enhance parts of the user experience people may not be aware of e.g. targeted advertising.

While the extension of these analogies may seem relatively harmless even within academic texts, there are clear instances in which one can see the negative consequences of this approach. The imperfect application of law²⁷ as a result of unchallenged assumptions can be demonstrated by looking in brief at the attempt to define cyberspace as a geographical community when dealing with the case of Robert and Carleen Thomas (*United States v. Thomas*²⁸). The Thomas', being involved in the online distribution of pornographic material, found themselves caught in the middle of a legal argument regarding which 'community standard' the distributed material should be judged against in an attempted application of the United States' obscenity laws which prohibit the distribution of obscene material as judged to be 'obscene' by the local community standard.

The problem was that the material was distributed across communities by way of its publication on the internet. However, instead of presenting the argument that one community need be chosen, the advocates in question presented the idea that cyberspace should be treated as much as a community as the sender's community or the recipient's community²⁹. Although unsuccessful, the counsel's argument presents an interesting example of early litigation involving the internet where analogous to non-cyber experiences are being drawn in order to 'plug' a leak within the law.

This treatment of the internet as a 'space' to be acted upon is unsurprising given that the internet is something only readily understood by analogy and is a theme littered throughout our involvement with the internet. As Holmes points out, we often see the internet as something which traverses even the location of information in 'bringing close what is far away'³⁰. Moreover, even the term 'website' has some root in the idea of position.

1b. Becoming social

As the internet and technologies which facilitate it have evolved, it has rapidly become clear that contrary to growing apart from real world interaction, the internet has only grown closer and in some ways integrated itself into these interactions. Shirky, noted theorist and professor at New York University notes that the biggest impact of the internet is unarguably the incredible

²⁷ Or the application of imperfect law, depending on your stance.

²⁸ *United States v. Thomas* (1996) 74 F.3d 701

²⁹ Mayer-Schönberger, V (2002, 643)

³⁰ Holmes, D (1997, 28)

surge in expressive capability is has brought³¹. The internet has structurally altered the way in which people come together to communicate and in doing so has changed the impact which this communication has.

Shirky writes that the internet has brought us ‘tools that are flexible enough to match our social capabilities’³². The importance of the word ‘tools’ here is worth more than a cursory mention as it reflects the detachment which so curses the study of internet technologies. Therefore, a question must be asked as to whether technologies such as Facebook, Twitter and other social media landscapes are in fact viewed as tools or as sites of social activity. Consideration of this idea engages us with the question as to what extent a user of social media ‘sees’ the site upon which their activities are based, to what extent these tools are noticed and to what extent the nature of that environment affects a person’s behaviour while using it.

Speaking at a TED conference in 2009, Shirky presents the idea that innovations in communication have been made possible both by the increase in number of these technological ‘tools’ in addition to the fact that they have now become mundane and uninteresting.³³ In ‘The Ethnography of Infrastructure’, Star describes his work as a ‘call to study boring things’ noting that ‘many aspects of infrastructure are singularly unexciting’³⁴. This transition from a technical interest in a website such as Facebook, to the mundane use of it as part of everyday life (arguably the denial of its status as a ‘tool’) has facilitated a level of social interaction that we have not encountered before, yet the role of digital architecture is overlooked as a way in which this interaction is guided. Citing the native capability of the internet to support and enable group conversation, Shirky explains many of the expanding uses of the internet but this does not address the extent to which these groups of users engage with the purportedly mundane aspects of the internet. In the chapter that follows, aspects of digital architecture which would share this characterisation will be detailed.

³¹ Shirky, C. ‘Does the Internet Make You Smarter?’ (*The Wall Street Journal*, 4th June 2010)
<<http://online.wsj.com/article/SB10001424052748704025304575284973472694334.html>> last accessed 27/09/13

³² Shirky, C (2009, 231)

³³ Shirky, C. (*Ted*, June 2010) ‘How cognitive surplus will change the world’
<http://www.ted.com/talks/clay_shirky_how_cognitive_surplus_will_change_the_world.html> last accessed 10/09/13

³⁴ Star, L S (1999, 377)

2. Legal pluralism, self-regulation and the internet

Theoretical approaches to internet governance were initiated and fuelled by a group Murray calls the ‘cyber-libertarian’³⁵ which sought to distinguish the world of cyberspace from existing regulatory landscapes by determining that features such as the lack of physical territories made it ungovernable in a traditional way.

Claiming the subversion of the present system of law making and application, Johnson and Post writing in 1996 claim the degradation of an ability to empower, legitimise and even give notice of rules on the internet³⁶. This approach continues throughout the literature in what Mayer-Schönberger classifies as the ‘Cyber-Separatist’ discourse. These analysts see cyberspace as an entirely new phenomenon with its own methods of operation and own virtues to be had. The now infamous ‘A Declaration of the Independence of Cyberspace’ written by John Perry Barlow, founder of the Electronic Frontier Foundation (and, somewhat more unusually, ex-lyricist for the American rock band ‘Grateful Dead’) surmises what over time has come to be considered a somewhat extreme position of separatism.

Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.³⁷

While possibly not achieving the constitution-making moment Barlow may have been looking for, the declaration of independence embodies the idea of the internet as a self-regulating entity.

You claim there are problems among us that you need to solve...where there are real conflicts, where there are wrongs, we will identify them and address them by our means.³⁸

Barlow claims an internal capacity to resolve those problems by a collective means. The ideological advantages of this kind of self-rule are strong, and seek to address the problems of legitimacy and practicality addressed by Johnson and Post. In a world where forming even basic definitions are difficult to determine and sustain (for example, the definition of a

³⁵ Murray, A (2007, 7)

³⁶ Johnson, D R and Post, D (1996, 1370)

³⁷ Barlow, J P (1996)

³⁸ Barlow, J P (1996)

“computer” has changed radically over the last ten years and must now surely include a wide range of devices) self-regulation offers an organic, flexible alternative to the state-centric top down methods of a traditionalist approach to regulating the internet.

Moreover, the language of community used in Barlow’s declaration is indicative of a social attitude towards the internet. Similar in type to that of Shirky’s claim that the internet’s fundamental function is the bringing together of groups and the new methods of discourse and collective ways to exercise freedoms within those groups, Barlow denies the relevance of traditional state governance but appreciates that the internet is not something which can or should be regulation free. Mirroring the sentiments of Mayer-Schönberger when he claims that ‘[where] there are social interactions...conflicts will arise and will have to be resolved’³⁹, the role of people as regulators is brought into focus.

2a. People as regulators

All too often debates on the topic of internet governance, particularly those in popular discourse, orient around questions of whether the internet should be regulated, whether it can be regulated, and in what form that regulation should come.⁴⁰ These discussions are not without merit, but come with the hidden premise that the internet is currently without regulation. What scholars like to think of as regulation is all too frequently a discussion of the absence of traditional regulatory mechanisms, principally those in the form of a state exercised power such as law making⁴¹.

This state-centric approach exists even within the legal pluralism literature with which this thesis is concerned. Regarded as having conceptual grounding in Griffiths’ ‘What is legal pluralism?’⁴², the promise of legal pluralism remains both controversial and itself subject to multiple definitions⁴³. Though prominent accounts can often be reduced to an agreeable definition (see for example Merry, ‘a situation in which two or more legal systems coexist in

³⁹ Mayer-Schönberger, V (2002, 619)

⁴⁰ More recently this question is being played out in the language of competing interests, with the problem of who should be able to regulate becoming more important.

⁴¹ See for example Lessig’s definition of regulability as the ‘capacity of a government to regulate behaviour within its proper reach’. Lessig, L (1999, 19)

⁴² Griffiths, J (1986)

⁴³ Kleinmans, M and Macdonald, R (1997, 29-30)

the same social field'⁴⁴), Tamanaha begins his critique of the concept of legal pluralism by identifying the use of the word "legal" in these definitions. While legal pluralism advocates the idea that non-state models of law exist, and coexist, declaring these forms of non-state law as "law" or "legal" associates not only law with the operation of normative orders, but confounds the attempt to separate what is a "legal" system and what is not. Tamanaha declares that in these cases 'so generous a view of what law is slippery slides to the conclusion that all forms of social control are law'⁴⁵.

The practical implications of this in relation to my study are identified by Melissaris in his discussion of 'empirical-positivistic' approaches in legal pluralism. Endorsing Merry's attempt to assert law as a 'system of thought'⁴⁶ rather than a set of structured rules, he criticises the 'grave fallacy' of finding evidence of 'law' within self-regulating communities by seeking to identify only those components which are consistent with a model of law determined by our interaction and experiences with state law. To 'impose externally a meaning'⁴⁷ in this way is to undermine the core principle of legal pluralism.

A second implication derived from misguided approaches to legal pluralism can be found in Kleinhans and Macdonald's account of a *critical* legal pluralism. Kleinhans and Macdonald suggest that pluralism 'fails to discuss fundamental questions about how legal subjects understand themselves and the law'⁴⁸ therefore undermining the agency of the subject and consequently overlooking their role as producers and transformers of regulation. In this sense, a *critical* legal pluralism is one which develops an idea of the person's role in 'generating normativity'⁴⁹. In this dissertation, efforts will be directed to discussing how subjects understand the regulatory environment in which they find themselves, with particular emphasis on their understanding of their relationship to digital architecture and the extent to which this influences the emergence of norms.

⁴⁴ Merry, S E (1988, 870)

⁴⁵ Tamanaha, B (1993, 193)

⁴⁶ Merry, S E (1988, 889) cited in Melissaris, E (2004, 61)

⁴⁷ Melissaris suggests that only 'when the legal commitment of clubbers who queue patiently at a bouncer's orders is treated as seriously as the legal commitment of communities with religious or other moral bonds will the pluralistic study of the law be able to move away from the essentially positivistic study of groups to the study of legal discourse'. Melissaris, E (2004, 68, 75)

⁴⁸ Kleinhans, M and Macdonald, R (1997, 35-36)

⁴⁹ *ibid* 38

That normativity as a form of regulation is self-generative is a claim explored by autopoietic scholars. Suggested as better described as a ‘theoretical paradigm’ by its proponents⁵⁰, autopoietic systems are those where ‘components are composed to interact with each other in such a way as to continually produce and maintain them and the relationships between them’⁵¹. As both producer and product⁵², autopoietic systems connote the type of independence of which Barlow claimed of the internet. The interaction between these ‘components’ is a concurrent theme in this thesis, where the role of digital architecture and the way in which it influences, constrains and enables behaviours will be explored. McAdams suggests that it is ‘fruitful for legal theory to focus on the more elemental question’⁵³ of *how* norms arise, therefore the work in this thesis seeks to go beyond mere description of normative orders in the chosen community by implicating architecture as a regulatory force.

2b. Signals from existing literature

The inherent value in much of the discourse surrounding internet governance to this point is that this discussion of what it means *to be regulated* has not been left unattended. One of the earliest and consistently influential discussions of this comes from Lessig and his writing in *Code: And Other Laws of Cyberspace*⁵⁴.

In *Code*, Lessig begins by looking at the idea of regulation through those forces acting on a “dot”. Describing his idea of the 4 modalities of regulation; law, norms, the market and architecture, he supposes that “regulation” is the ‘sum of these four constraints’⁵⁵. The importance of architecture within this list is of great importance to the shape of this study, and will be returned to in a following chapter. The significance of Lessig at this stage is to introduce the need to reawaken discussion about forms of effective regulation in an environment that is capable (by virtue of the characteristics discussed) of resisting a traditional model of regulation.

Recognising the interplay between these modalities and the role that each can play as stimulus for one another, Lessig continues to state that the question law-makers face is which means

⁵⁰ King, M (1993, 218)

⁵¹ Pamkowska, M (2008, 36)

⁵² *ibid*

⁵³ McAdams, R H (1997, 352)

⁵⁴ Lessig, L (1999a)

⁵⁵ Lessig, L (1999a, 121) states that ‘I want to think about it from the perspective of someone who is regulated’. There is an important observation to make at this point that Lessig refers to his dot as the *subject* of regulation.

‘best advances the regulator’s goal, subject to the constraints (whether normative or material) that the regulators must recognize’⁵⁶. The encouragement of this “responsible” method of law making requires an understanding of the purpose which each modality serves.

While this might read convincingly as a reason for an exploration of the role of each of these elements, we find ourselves once again removing the discussion of how these modalities *are* regulating and seek to find a model of regulation where there is a determinable regulator. This is problematic as the characteristics of the internet which have led to discussions of the nature of regulation (the simplest example being the global, borderless nature of the internet) are those characteristics which resonate with decentralised models of regulation.

At this point our focus returns to the idea of self-regulation. Taxonomies of self-regulation on the internet have been attempted within a number of frameworks, the most convincing of which are explored under the questions of *how* law should regulate and what it *means* to be regulated such as the task undertaken by Bonnici in her book *Self-Regulation in Cyberspace*. Addressing a salient question as to the ‘actual function of self-regulation in the regulation of Internet activities’⁵⁷, Bonnici begins her exploration with the recognition that people are regulated by a ‘variety of rules of the social groups they belong to’⁵⁸ in addition to that operated by the state.

However, Bonnici, like so many others excludes any investigation into informal modes of self-regulation. Choosing carefully her selected areas of study, Bonnici accepts the potential role of self-regulation as a precursor to law ‘acknowledged by states’⁵⁹ but focuses solely on formal and systematic methods of self-regulation with no sustained focus on online communities and the potential value of “informal” norms and their regulatory operation.

This analysis of formal self-regulation is not without value; for example we can find evidence of consideration of children within the arrangement of such organisations as the Internet Watch Foundation (IWF) and in large public reports such as the ‘Safer Children in a Digital World’ report of the Byron Review in 2008 in which self-regulation is proposed as one of many methods of gain in the UK’s national strategy⁶⁰ for children’s online safety which recognise the importance of self-regulation in a proposed form of governance. However, claims such as

⁵⁶ Lessig, L (1999a, 93)

⁵⁷ Bonnici, J P M (2008, 4)

⁵⁸ *ibid* 2

⁵⁹ *ibid* 5

⁶⁰ Byron, T (2008)

children being ‘immature at self-regulation’⁶¹ have a reduced impact without there being a concerted effort to understand the ways in which those subjects regulate themselves. Additionally, there is little consideration of the extent to which formal modes of self-regulation are reliant on the operation of informal normative strands of self-regulation.

The attachment to self-regulation can be found in more than just the desire to resist a traditional regulatory approach, but in the history of the internet and its structure. While the internet is treated in contemporary culture as a virtual environment in which anyone can participate, it is important to appreciate that the internet was first developed as a closed environment. Finding its first uses within scientific communities, a model of self-regulation was thought sustainable among those who had both a shared interest and a ‘high capacity for self-regulation’⁶²; thus it is little surprise that architecturally the internet may lend itself to this form of regulation.

Now, in an environment where interaction between people is faster, easier and more common than ever, the force of the norm is desperately in need of attention. In the words of Ewald the norm can act both as ‘a rule of judgement, as well as a means of producing that rule’⁶³. However, norms can also communicate expectations, desires and responsibilities and can act as a guide for communicative practices. Moreover, the norm represents a model of regulation which is not delivered by the state as a supreme provider of regulation⁶⁴, instead emerging from and tailored to the needs of a given community.

This dissertation is not the first to call for an appreciation of norms and their role in internet regulation, though instances of such calls are far and few between. A notable exception is the work of Major in her article ‘Norm Origin and Development in Cyberspace: Models of Cybernorm Evolution’. Stating that the study of cybernorms is ‘of exceptional salience’ and that the ‘impact upon society and social norms has just begun’⁶⁵ Major appreciates the importance of informal constraints to behaviour and notes that, despite prevalence in alternate disciplines, norm theory as applied to the internet in legal theory has yet to take hold⁶⁶.

⁶¹ *ibid* 36

⁶² Agre, P (1999)

⁶³ Ewald, F (1990, 154)

⁶⁴ However, law and norms in tandem can provide a tool to predict the effects of incoming legal orders. See Major, A (2000, 109)

⁶⁵ Major, A (2000, 59)

⁶⁶ *ibid*

A second and third exception to this relatively unexplored field are the works of Levin⁶⁷ and Murray⁶⁸. Written shortly after Major's work and influenced by the writing of Lessig on the role of code in architectural regulation, Levin's piece seeks to explore the role of architectural innovations in the process of normal development, or as he terms it the 'building' of social norms. Levin provides an excellent justification for his study and examples on which to build further work upon and as such will be influential to the structure of the following chapters. At this point it is enough to recognise his substantive contribution to the debate as a way in which social norm theory can be explored in internet and legal theory.

Murray's contribution comes in the form of a larger work entitled *The Regulation of Cyberspace*⁶⁹ published in 2007. Framing the activities of the internet as a community, Murray draws comparisons between that and the type of normative adherence we can observe in frequently visited locations such as the London Tube network. Murray notes that the development of 'Tube etiquette'⁷⁰ by the community allow for the smooth running of the London Underground. Whilst supported by Transport for London, the conventions governing the use of the underground are underpinned not by formal sanctions but by 'a system of social sanctions or stigma', developed 'organically'⁷¹ by underground users.

Murray subsequently finds this form of organic organisation in examples of online communities. Notably, in exploring the efficacy of a P2P file sharing community's efforts to act on the distribution of legal pornographic content and child pornography he observes that efforts were undermined by what he describes as a 'lack of ownership'⁷² of the community. Proposing that 'the fact online pornographic content remains widely available within P2P communities may be seen to be a measure of the communities resolve to protect their values and interests, despite attempts at outside interference from lawmakers and the media'⁷³, Murray raises an interesting question regarding the strength of motive, independence and effectiveness of community measures. To what extent must a community's purpose be understood throughout the community in order for self-protective measures to be effective? Is it possible for a community to self-regulate if its users each share a different version of its purpose?

⁶⁷ Levin, D B (2002)

⁶⁸ Murray, A (2007)

⁶⁹ *ibid*

⁷⁰ *ibid* 126

⁷¹ *ibid* 127

⁷² *ibid* 162-163

⁷³ *ibid* 159

Moreover, can purpose or ownership be embedded within architecture of a digital environment?

2c. Signals from case law

In addition to academic attention given to the plausibility of self-regulation normativity, calls for the recognition of self-regulation can be found in the practical legal challenges which have arisen over time.

A principal example of this can be found in two high profile court battles tried in the United Kingdom regarding social media and words said by an individual. The cases of *Smith v Trafford Housing Trust*⁷⁴ and *Chambers v DPP*⁷⁵ have created headlines for messages that had been spread via social networking (Facebook and Twitter respectively). While these cases are in many ways distinct (*Smith v Trafford Housing Trust* concerning personal distaste at a news headline regarding same sex church marriages and *Chambers v DPP* pertaining to a threat to blow up an airport made in jest) they both share in common the feature that in the absence of specific legislation or guidelines governing the use of these communication tools⁷⁶, a burden is being placed on the individual to have censored themselves on the basis that both messages were outside the spectrum of acceptable behaviour. While both cases resulted in decisions in favour of the appellants, this is almost of no consequence bearing in mind the gravity that a legal action of such magnitude has in being actioned at all. What might seem like an obvious statement (that there is no expectation for the social media networks to be responsible for these messages), is in fact an expression in favour of self-governance.

With this in mind the motivation to explore normative development in these online environments becomes clear. Take for example this statement from Lord Judge in the High Court's decision of *Chambers v DPP*:

It seems to us unsurprising, *but not irrelevant*, that none of those who read the message during the first days after it appeared thought anything of it.⁷⁷

⁷⁴ [2012] EWHC 3221 (Ch)

⁷⁵ [2012] EWHC 2157

⁷⁶ It is worth noting that in *Chambers v DPP* use of these sites was held to 'represents no more and no less than conversation without speech' *ibid* [9] (Lord Judge)

⁷⁷ *ibid* [32] (Lord Judge) *my emphasis*.

In the judgment that follows, Lord Judge uses the fact that the Twitter community did not perceive a threat in Chambers' post as an indication of the characteristic of that message. It is not unimportant that the reception of this message will have been decidedly reliant on the norms of that community. If messages of this nature were not accepted as more likely to be a joke than not by the Twitter community, then the question must be asked as to what extent this (and the consequential reaction) would have influenced the court's decision and before this the decision of Chambers to post the message at all.

There is similar evidence of the attachment to self-regulation in academic studies of computer related behaviour. For example, Malin and Fowers' 'Adolescent self-control and music and movie piracy'⁷⁸ investigates the relationship between low self-control, 'opportunity' (a fairly pessimistic look at the idea of insidious behaviour being encouraged by private access to technology) and association with other 'deviant' peers.

The role of the norm in regulation has not gone unnoticed by those in the business of "running" the web either. Founder and CEO of Facebook, Mark Zuckerberg, gave a now infamous interview in early 2010 in which he claims:

People have really gotten comfortable not only sharing more information and different kinds, but more openly and with more people. That social norm is just something that has evolved over time.⁷⁹

Speaking on the subject of privacy changes in the functional aspect of the Facebook website, Zuckerberg notes the *change* of the social norm. While the answer he gives is framed in a way which says that architectural design changes at Facebook are made in response to social changes, there is a need to determine whether this is the case, or if Facebook can be considered to be the agent of these changes itself.

The potential of Facebook to hold this role is important given the need to appreciate that norms do not emerge of all other influences, but in reaction and in harmony with the environment in which they are set. This is an idea which is clear in many of the works drawn upon thus far and provides an important link to the potential role of self-regulation in legal theory.

⁷⁸ Malin, J and Fowers, B J (2009)

⁷⁹ Zuckerberg, M cited in Bobbie Johnson, 'Privacy no longer a social norm, says Facebook founder' (*The Guardian*, 11th January 2010) <<http://www.theguardian.com/technology/2010/jan/11/facebook-privacy>> last accessed 28/08/2013

Christopher McCrudden, taking the opportunity to respond to what he describes as a proposed ‘new legislative framework’ in anti-discrimination legislation law, describes a movement he sees as ‘reflexive regulation’⁸⁰.

As I understand it, under these approaches the cause of regulatory failure in the past is attributed to a failure to appreciate the limited role that law can play in bringing about change directly in other social sub-systems because of the limited openness of these other sub-systems to external normative interventions. Messages from one social subsystem, to use Colin Scott’s phrase, ‘are processed according to the normative structure of the subsystem and not the normative structure’ of the other sub system. Regulation has failed in the past because of a failure of ‘communication’, in this specialised sense, which must be addressed if future regulation is to be successful.⁸¹

Taking a phrase from Hugh Collins, McCrudden states the “problem” for law makers is how best to provoke a ‘reconfiguration of self-regulation’⁸² by constructing what he describes as ‘procedural stimuli that lead to the targeted subsystem adapting itself’⁸³. This problem mirrors that posed by Lessig regarding selecting the means which best advances the goal of the regulator and raises the question of architecture’s ability to communicate norms or other values which influence the emergence of norms.

While the ideological underpinning of reflexive regulation is strong, allowing both for internal legitimacy of regulatory actions and external stimuli which motivate those actions, McCrudden notes that in order for those stimuli to predict the ways in which they will operate and the effects they will have it is a pre-requisite that there be an empirically grounded identification of the circumstances under which they would have effect⁸⁴. As such, this study aims to look at actors which influence, sustain and reproduce norms which facilitate self-regulation in an online environment.

⁸⁰ McCrudden uses the term reflexive regulation to substitute for the variety of names under which such an approach has been discussed within literature.

⁸¹ McCrudden, C (2007, 259)

⁸² *ibid*

⁸³ *ibid*

⁸⁴ *ibid* 263

3. Youth and the internet

You are terrified of your own children, since they are natives in a world where you will always be immigrants.⁸⁵

That children can navigate and understand nuances of the internet better than their adult counterparts is familiar rhetoric within this body of literature. For this reason, much of the tension which exists over young person's use of the internet derives from simultaneous beliefs that they are more proficient in using the internet than their adult counterparts but remain 'entitled to special care and protection by virtue of their age, mental or physical immaturity'⁸⁶.

It is unsurprising therefore that concerns over the use of the internet are often expressed through youth's usage, as well as their vulnerabilities. Ahn notes that 'the apprehensions of parents and educators about SNS [social network sites] are also comparable to past questions about how youth spend their time'⁸⁷ and as such much of the interest in studying the internet and especially social media relates to its potential as a medium through which to express and examine 'adolescent development and learning' – broadly, what Boyd terms 'teen sociality'⁸⁸.

While my research also aims to concentrate on the behaviour of young people online, it is done in such a way that does not seek to undermine the importance of youth responses to and understanding of digital environments. Livingstone notes that 'children themselves play a key role in establishing the emerging internet-related practices'⁸⁹. This approach appreciates both the role of youths in the debate which is to be had over online regulation, as well as the idea that young people are not simply acted *upon* online and that they share a capacity to react and respond to the characteristics of the internet as successfully as adult users, as opposed to work which focuses solely on vulnerabilities. Similarly, Boyd's seminal work on teen social media use was conducted under the premise that 'teens' activities and logic can be understood as rational response to the structural conditions in which they are embedded'⁹⁰. This is an approach which will be supported in the forthcoming discussion of teens' behaviour and their capacity to engage in critical reflections of their own online use of social media. Moreover, it is one which is particularly relevant to an age group whose capacity is historically undermined.

⁸⁵ Barlow, J P (1996)

⁸⁶ Nair, A (2007, 16)

⁸⁷ Ahn, J (2011, 1438)

⁸⁸ Boyd, D (2008a)

⁸⁹ Livingstone, S (2003, 159)

⁹⁰ Boyd, D (2008a, 2)

As Valentine states, the construction of childhood whereby young people are ‘imagined as naive, immature and innocent’ leads to an overlooking of their perceptions and understanding of their surroundings in both academic literature and in everyday concerns⁹¹.

Livingstone proposes that online spaces are enticing to teens as there exists the opportunity to enter a realm which ‘represents “their” space, visible to the peer group more than to adult surveillance’⁹². While the idea of private and public spaces will be developed further in later analysis, for now it is sufficient to note the idea that normative independence is both a reason to focus on teens as much as it is a reason for teens to go online. As Boyd states, other spaces familiar and accessible to teens such as the home are ones ‘with rules and norms that are strictly controlled by adults’⁹³; as such the opportunity afforded to teens by technology to be normatively creative in their own spaces instead of, or perhaps concurrent to, being socialised into adulthood and the inheritance of norms which accompanies this process is worthy of attention.

An interesting example of where teens have been able to engage in normativity and rule-making in situations which would usually be governed by adults is Summerhill School in Suffolk, United Kingdom. Based on A.S.Neill’s understanding of the capacity of children to self-regulate⁹⁴, this alternative school draws interesting parallels with the freedoms which the internet affords people of this age. This is particularly true in the case of Summerhill’s most notable and controversial policy that children need not attend lessons. The unusual nature of Summerhill means that not only is it a school without a traditional authority structure but it is a site in which self-expression is prized above adult and state regulatory influence. Appleton claims, in a book published following nearly ten years of working at the school, that ‘self-government functions in a fairer and more competent way than an authority exercised by adults only’ due to the understanding of how children communicate, should be taken seriously. Suggesting that ‘perhaps it is because their own values are respected that they respect other people’s values’⁹⁵, Appleton touches on the type of reciprocity which is valued in Melissaris’ vision of legal pluralism. Meaning is not imposed on the will of children, but instead their will forms of basis of rule-making within the community.

⁹¹ Valentine, G (1997, 65-68, 82)

⁹² Livingstone, S (2008, 5)

⁹³ Boyd, D (2007, 134)

⁹⁴ Appleton, M (2002, v)

⁹⁵ *ibid* 58

A comparison to Summerhill is even more poignant given that the unsettling imagery of a lawless or unregulated environment which accompanies the drive to re-evaluate how the internet is governed exists too with regards to Summerhill. Appleton discusses the frequently quoted “school with no rules” characterisation as a fallacy, and one which is proven untrue simply by looking at the number of rules which the school has – many which would not occur within a traditional school. He notes that at the time of writing there was approximately two hundred ‘written laws’⁹⁶. Though laws, customs and norms need not be written or codified, the ability for young people to manage community law making at such a scale supports inquiry into their ability to do so online.

Works such as Arnett’s ‘Emerging Adulthood’ advocates the importance of remembering that those in their late teens are still within a developmental period of their lives. Arnett’s period of emerging adulthood is particularly relevant to the age groups studied in this thesis as he describes a group that is distinct from understandings of childhood and of adulthood. Instead, there exists a ‘relative independence from social roles and from normative expectations’⁹⁷, which occurs between leaving childhood and entering adulthood. Furthermore, friendships, strength of friendship, and friend ordering (core tenets of Facebook use) have been shown to be particularly important to those of the ages between school leaving in the United Kingdom (sixteen⁹⁸) and of entering Higher Education. These, as will be discussed, are all central features of Facebook use. Notably, this age group is one which entails changes both socially and geographically which engage processes of maintaining friendships as changes are undertaken in the passage into employment and university life.

While Ong *et al* point out that adolescents of an age younger than those commonly studied at university age are ‘likely to be less socially-exposed’⁹⁹, there is an inherent interest in the way in which Facebook users of this age are engaging with friends online for this very reason. Limited social exposure may entail membership in a similarly limited number of social groups and therefore mean that teens of this age find themselves within a reduced plurality of normative orders. As such, it may prove more constructive to study the online practices of this age due to the increased opportunity for consensus to exist. Moreover, the language in which youth frames their experiences and the processes by which norms emerge are of particular

⁹⁶ *ibid* 63

⁹⁷ Arnett, J. J (2000, 469)

⁹⁸ In the United Kingdom this is due to change incrementally to 17 from late 2013, to 18 in 2015.

⁹⁹ Ong, E YL (2011, 184)

interest given the claim that the internet is philosophically challenging and understood predominantly by analogy (above). Given Livingstone's argument that 'the terms used by children differ from those of adults, challenging adult-centric perspectives'¹⁰⁰, it would be advisable to recognise the potential of youth perspectives to enhance this understanding.

4. Facebook

Some, such as Wilson and Peterson, have been cautious to focus specifically on single online services due to the risk that they may not exist in the near future¹⁰¹. In this dissertation I have chosen to narrow my focus not only to the social networking site Facebook, but the activity and practices of youths in relation to online activity on Facebook.

While the propensity of digital environments to change has a forthcoming role to play in my analysis, that my chosen site of focus may not exist in its current form or at all in the near future is consistent with its use in this study simply as a lens through which to explore the relationship between youth, sociality, technology and the subsequent behaviours and norms produced.

As of June 2013, Facebook reports to have over 1.15 billion monthly active users, with over 699 million of these using the site daily¹⁰². Founded in 2004 by Harvard student Mark Zuckerberg as a way for Harvard students to connect online, the site finds itself ranked among the most visited in the world, with Alexa site metrics consistently placing it within the top 3 websites globally¹⁰³. By allowing its members to add friends, join networks, share photos, text updates, manage events, message and more, the Facebook platform is ubiquitous in its online presence¹⁰⁴.

Facebook has proven particularly popular amongst young people. While initial versions of the site were restricted solely to those attending higher education institutes (thus effectively targeting a population of a certain age), Raacke and Bonds-Raacke report findings that suggest despite this restriction having been lifted for many years, users remained 'significantly

¹⁰⁰ Livingstone, S (2003, 158)

¹⁰¹ 'We are reluctant to label or characterize particular technologies or applications with great specificity because they may no longer exist in a few years'. Wilson, S M and Peterson, L C (2002, 452)

¹⁰² 'Facebook Reports Second Quarter 2013 Results' (*Facebook*, 24th July 2013)
<<http://investor.fb.com/releasedetail.cfm?ReleaseID=780093>> accessed 10/09/13

¹⁰³ 'Facebook.com Site Info' (*Alexa*, nd) <<http://www.alexa.com/siteinfo/facebook.com>> accessed 10/09/13

¹⁰⁴ Wilson, R E *et al* (2012, 203)

chronologically younger than nonusers'¹⁰⁵. Though this may be demonstrably true for a range of online services, few have achieved such a presence in the day to day life of teens. A 2013 Pew research paper covering the use of social media by teens states that of the 82% of teens who use social media, 94% of those reported using Facebook¹⁰⁶.

In 1999, well before the prevalence of Facebook and other social network sites, Agre suggested that 'the Internet is not growing apart from the world, but to the contrary is increasingly embedded in it'¹⁰⁷. Facebook represents an example of this claim both in terms of physical presence – the company itself reporting that over 75% of monthly users access Facebook through a mobile device¹⁰⁸ - as well as the way in which the design of the site encourages its incorporation as a cultural phenomenon. Facebook, therefore, inherently displaces the treatment of internet activity as an isolated phenomenon by itself challenging the boundary of what is online and what is offline.

The primary motive behind choosing the site of Facebook to conduct this study derives from a tendency to focus attention on people's actions as related to or happening on Facebook as opposed to being a part of or encouraged by Facebook. Park *et al* note that 'many studies have been conducted to figure out the link between Facebook use and civic and political involvement...however, it is not clear what specific features of Facebook produce those effects'¹⁰⁹. Though Park's focus differs from my own, the sentiment that there is an absence of efforts seeking to better understand the way people behave online and the way an online environment is structured is formative in this dissertation.

In response, I will treat Facebook not only as a site of online expression but as an environment upon which those actions are based. The implication of this approach is that the role of Facebook in facilitating, determining and influencing the behaviour of youths will be explored and by extension, youths taken seriously as actors in online regulation. What elements of the site allow for a potentially self-generative and self-organising system to exist? What evidence can be found that a group of internet users are subject to observable, and potentially influenceable forms of regulation?

¹⁰⁵ Raacke, J and Bonds-Raacke, J (2008, 173)

¹⁰⁶ Madden, M *et al* (2013, 23)

¹⁰⁷ Agre, P (1999, 1)

¹⁰⁸ 'Facebook Reports Second Quarter 2013 Results' (*Facebook Investor Relations*, 24th July 2013) <<http://investor.fb.com/releasedetail.cfm?ReleaseID=780093>> last accessed 10/09/13

¹⁰⁹ Park, N *et al* (2009, 729)

In this chapter I have detailed some of the challenges which the internet presents to traditional methods of regulation, in addition to the responses which cyberlaw literature has produced. By taking the characteristics of the internet to be not simply problematic to a state-based model of regulation, but as unique qualities which can have a role in the regulation debate the question of the extent to which behaviour is influenced by these qualities is raised. In the following chapter I will seek to add detail to these qualities and how they are constructed by the use of digital architecture. Moreover, I will identify a series of characteristics which have the potential to order and influence behaviour online as well as begin to demonstrate the ways in which valuing the ability of teenage users to understand themselves in relation to architecture as a regulatory force can help us to understand the role of architecture in norm making.

II. ARCHITECTURE

In this chapter, the term “architecture” (which will be refined in the forthcoming sections) should be taken to mean those structural characteristics of the internet and its applications which mediate how people experience the online environment, and which are achieved primarily through programming code. Though I will generally avoid making claims as to how architecture may be used as a regulator per se, I will seek to advance claims made of the internet in the previous chapter by looking at the internet’s very nature and its subsequent role in shaping the behaviour of its users.

1. What is architecture?

Tamanaha states that the internet, as a *functional normative system*, ‘possess[es] some degree of autonomy and self-governance’¹¹⁰. On the internet, to talk of the self-governance and ‘regulatory capacities’ which he refers to requires an appreciation of the role of digital architecture. Architecture is the medium through which online activity is practiced. Architecture acts as a mediator, a recorder and an instigator of social behaviour online and as such rightly commands some attention when discussing these behaviours. Tien defines

¹¹⁰ Tamanaha, B (2008, 399)

architectural regulation as that which is ‘intended to influence acts by shaping, structuring or reconfiguring the practical conditions or preconditions of acts’¹¹¹.

The term “architecture” itself is one that does not come without baggage, and is well known within the study of law and the internet. Lessig, in his book *Code and Other Laws of Cyberspace* introduced the idea that code can do the work of law. Coining the phrase ‘code is law’¹¹², the nuances of which are often lost due to its sloganized nature¹¹³, Lessig sought to stimulate thought around the idea that code itself can act as a regulator itself and not necessarily as merely a tool to be used by the state. Though some have taken to using this idea in such a way that would see architecture enforce pre-existing legal norms¹¹⁴, this chapter is concerned more with the inherent normativity with which architecture acts.

The idea of architecture as a method of regulation is a familiar concept and not one derived from the challenges of the internet. Shah and Kesan write that in addition to the tradition of study within the fields of anthropology and sociology, recognition of the role of architecture can be found within state law¹¹⁵. For example, on the ordering of spaces the authors suggest that ‘the legal system has long recognised how the built environment affects social interaction’¹¹⁶.

Architectural influences are commonly felt in this way. People will walk single file into a room if the doorway is not of sufficient width, a room which they might not enter at all should they find a lock has been installed and used. Moreover, the presence of a door at all influences our reactions and thoughts on entering¹¹⁷.

As Levin identifies:

Your neighbour’s backyard may be easily accessible from the street, but even though architecture allows you to enter the backyard, certain norms against nosiness and invasiveness prevent most people from venturing into other’s backyards.¹¹⁸

¹¹¹ Tien, L (2005, 5)

¹¹² Lessig, L (1999a, 3)

¹¹³ Lessig himself concerns himself with this point in his keynote address to the ABA-Tech conference, Chicago in 2011.

¹¹⁴ See Hildebrandt, M. ‘Legal protection by design: Objections and refutations’. *Legisprudence* 5.2 (2011) 223

¹¹⁵ Shah, R C and Kesan, J P (2007, 4)

¹¹⁶ *ibid* 8

¹¹⁷ Of course, there is some reflexivity in this relationship.

¹¹⁸ Levin, D (2002, 112)

Architecture is a relatively simple concept to comprehend when discussed outside of the internet, and as Levin suggests (above) it is readily understood to exist as an influence with other factors. However, when the word “architecture” is used with regards to the construction of an environment on the internet we are unable to rely on our understanding and experience of physicality. What does it mean to say that digital architecture is structural in the same way that a physical structure is? Is this code subject to the same fragility and, importantly, can evidence be found that characteristics and embedded values of architecture guide a person’s behaviour?

A distinction between digital architectures and real world architecture which is worth paying some attention to can be observed by considering the absence of that architecture. As Solum and Chung explain, the internet exists without the inherent uncontrolled properties of the real world¹¹⁹. While physical space can be altered by human intervention, the digital world exists only as a result of it. Therefore, the qualities of the internet exist only as a result of architectural implementation. As is suggested by Kesan and Shah, even those traits which we associate with the web as a whole – such as the freedom to read and publish content – can be traced back to architects who engineered the way in which we engage with the internet. In this case the efforts of Tim Berners-Lee and his determination to include both browsing and editing capabilities in the first web browsing software are said to have encouraged an open and accessible web¹²⁰.

Structural components of online environments allow changes which are difficult, costly or simply unachievable in offline space. Early explorations of social structures within online systems (such as MUDs¹²¹) demonstrate this in action, exercised over both virtual environments and virtual bodies.

The haves are those who can control the form of the virtual world depicted by the system; the have-nots are those who can’t. Power on a MUD is quite literally the power to change the world. ¹²²

While the more draconian world-changing possibilities of architectures have been explored in some detail by those taking to explore online gaming and virtual world communities¹²³, it is

¹¹⁹ Solum, L and Chung, M (2003, 12-13)

¹²⁰ Kesan, J P and Shah, R C (2004, 377)

¹²¹ MUDs (Multi-User Domains) are multiplayer virtual worlds.

¹²² Reid, E (1999, 118)

¹²³ See for example Boellstorff, T (2008) on the virtual world of Second Life.

only in recent years where the internet has seen a move towards sharing and aggregating vast amounts of informational data that its role in how that information is attained and interpreted has come into question.

Kalay and Marx provide an interesting discussion of the ‘peculiarities’ of digital architecture in their comparison of the construction of physical structures with online spaces. While no objection is made of the term ‘cyberspace’, Kalay and Marx cite the importance of understanding that ‘people inhabit *places* not *spaces*’¹²⁴. Places, they argue, are a ‘consequence of the activities and conceptions of the inhabitants of a space’¹²⁵, where space is partly controlled by designers but where activities in a place are ‘mostly determined by the users’¹²⁶. Kalay and Marx emphasise the importance of distinguishing between abstraction and implementation and as such precedes this chapter’s efforts to distinguish between two types of architecture; macro and micro where the inherent properties of the space (macro) are influential in the creation of a place and the way in which it is used (micro).

When it comes to the practice of normative ordering, as in traditional methods of regulation, people are not passive. Therefore, as much as this chapter concerns itself with the way in which architectural decisions may impact the development of certain norms, it is equally important to have in mind that this is not a determinist view. Social practices are fluid and responsive and do not operate outside of all other influences. As likely as it is that norms can be influenced positively by a technical force, social practice can develop in reaction to such influence as well as in a way which can change that technology.

Boyd notes:

A technology's value is shaped by its social construction—how designers create it and how people use it, interpret it, and reconfigure it. It is not an outcome of the technology alone or its potential.¹²⁷

What is important to have in mind is that ‘how designers create’ and ‘how people use’ are not two distinct phenomenon, as Boyd suggests by her claim that people can reconfigure and reinterpret the shape of technology.

¹²⁴ Kalay, Y and Marx, J (2005)

¹²⁵ *ibid*

¹²⁶ *ibid*

¹²⁷ Boyd, D (2008a, 12)

Malaby provides an example of one such occurrence in his study of Linden Lab, creator of the virtual word game Second Life. Noting a change in certain users' use of virtual land¹²⁸ and real estate in response to software changes, he explains that:

The lesson contained in this unintended consequence was for Linden a familiar one: their efforts to prompt user behavior of one sort or another were fraught with complexities, as a number of ongoing processes collided with their own interventions.¹²⁹

The idea of unintended consequences and the developer's appreciating this not as an error in usage, but a reflection of how people's behaviour can be reactive to technology demonstrates a single instance of developer engagement with the reciprocal relationship between people and technology. However, it is one which is like to be common.

Berry suggests that increasingly, code (and software) have 'become the conditions of possibility for human living, crucially becoming computation ecologies'¹³⁰. Noting the difference between code and other forms of media, Berry claims that its "processual" nature allows for agency to be delegated in such a way that it has 'penetrated more and more into the lifeworld'¹³¹. This idea of architecture having agency through which to enact the will of others reminds us of the existence of the role of the creator of that architecture. Emphasising the power of architectural regulation, Tien remarks in a similar way to Berry that architectural regulation is one which 'structures the conditions of action'¹³². Though care need be taken not to enter into a determinist line of thought (as such it would be hasty to conclude that alteration of conditions ultimately alters the actions which take place within them), that architectural regulation manifests in the control over structure demands that there need be an understanding of the extent to which it is visible to those upon which it acts. While this will be returned to, the question as to what extent key conditions of activity online can, or are, known to its users is fundamental to this chapter.

In chapter one, I referred to Shirky's observation that the technical possibilities of the internet are now seen as mundane¹³³. By having introduced the role of digital architecture in this

¹²⁸ See Stoup, P (2008, 332-336) on land control and norm adherence.

¹²⁹ Malaby, T M (2009, 7)

¹³⁰ Berry, D M (2012, 379)

¹³¹ Berry, D M (2012, 379)

¹³² Tien, L (2005, 7)

¹³³ See 10

discussion it is constructive to treat this as something more than a mere remark upon people's use of technology. Instead, the reaction to the commonplace characteristics of the internet can be understood as a reaction to the acceptance and assimilation of technology into daily practices. Kang and Cuff note of McLuhan's work that '[technological] pervasiveness can recede into cognitive invisibility' whereby those technologies which are 'culturally accepted retreat into the unnoticed, invisible background'¹³⁴. The importance of this possibility draws us back to the idea of people as actors in their own regulation. While the (potential) invisibility of architectural control need not necessitate determinism, a question must be raised as to the extent to which norms are determined or enforced in reaction to the structural conditions in which behaviours occur, and the extent to which norms may be determined or enforced merely as a result of actions taking place within those structural conditions.

While Lessig noted this problem by suggesting we should be concerned by the opportunity for "invisible regulation"¹³⁵, it is Tien who has produced the most comprehensive account of this problem and its relation to social norms. Criticising Lessig's concerns for being similar to those which might be had about traditional state methods of regulation (e.g. that state law tends to be 'obscure' and in this way hardly free from the criticism of transparency¹³⁶) he suggests that the use of architecture 'changes the nature of rule-presentation and rule-enforcement'¹³⁷. By reducing the visibility of regulation, a scenario occurs where the 'regulatory target need not be aware that there has been a decision to constrain'¹³⁸ their actions nor need they be aware, or capable of knowing from who that regulatory effort is derived. This is undoubtedly the source of the sometimes cited belief that architectural regulation can be a more effective or greater-reaching source of regulation than state law¹³⁹. Moreover, as Merry states of those communities without the colonial pasts with which legal pluralism began, 'nonstate forms of normative ordering are more difficult to see'¹⁴⁰. The potential invisibility of architecture as a regulator is an interesting extension of Merry's observation. While Merry describes the tradition of ignoring these communities in academic studies, is it possible that architecture can be observed

¹³⁴ Kang, J and Cuff, D (2005, 108)

¹³⁵ Lessig, L (1999a, 98-99)

¹³⁶ Tien, L (2005, 3); Goldoni, M (2011, 4)

¹³⁷ Tien, L (2005, 4)

¹³⁸ *ibid* 7

¹³⁹ See for example Bonnici, J P A (2008, 115) where it is suggested that this is the case where users have 'no choice but to follow the rules imposed by technology'. Choice in this instance is irrefutably linked to knowledge of circumstances.

¹⁴⁰ Merry, S E (1988, 873-874)

as an invisible force on those who it acts upon due to the way in which it manifests in unfamiliar forms?

Some architectures of cyberspace are more regulatable than others, some architectures enable better control than others.¹⁴¹

Architecture can and must mean more than the analogy to code introduced by Lessig. For example, while the likeness of a physical wall to a digital structure might be fair to some degree, it is detrimental to think that our interactions with that wall are isolated from the physical reality of it. The physical reality of a wall is important in that it involves certain norms associated to it (e.g. cost, permanence, intention). Goldoni remarks of the rule making capacity of architecture that ‘code as law is normative in the sense that it regulates and guides human behaviour’¹⁴².

While the complexities of modern coding practices would not allow for a full discussion of their operation in this work, it is important to take seriously the claim that Murray makes in that discussions surrounding the topic of internet governance are all too often dominated by what he terms the ‘North American cyberlawyer’¹⁴³ who might happen to possess both technical and legal knowledge. For this reason, subsequent discussion will endeavour to bring to light the implications of digital architecture while maintaining a style of explanation which would require no more than an ordinary amount of understanding of the technologies involved.

In the following section two types of architectural issues will be explored: macro architecture, which refers to those properties of the internet which derive from its technological nature; and micro architectures, those characteristics of any given website which mediate interactions between macro architectures and the user and which serve to provide design and functionality.

2. Macro architecture

2a. Archive and information recall

We may not like it, but forgetting is something very human.¹⁴⁴

¹⁴¹ Lessig, L (1999a, 20)

¹⁴² Goldoni, M (2011, 4)

¹⁴³ Murray, A (2007, x)

¹⁴⁴ Mayer-Schönberger, V (2011, 16)

In 2009, Mayer-Schönberger published *Delete: The Virtue of Forgetting in the Digital Age*. Introducing the story of Stacey Snyder, a young woman whose dreams of being a teacher were cut short through the discovery of her dressed as a pirate and seemingly drinking posted on the internet, Mayer-Schönberger predicts that troublesome stories of internet activities having detrimental effects on people's real life identities will 'become paradigmatic'¹⁴⁵ for society as a whole.

Concerning himself with the way in which the internet digitally archives material, Mayer-Schönberger challenges us to consider the consequences of being able to recall information quickly and easily, and with no sense of degradation over time. The ability to store huge quantities of data and organise it with upmost ease is a key feature of internet technologies. Success stories such as Google's email service which began in invitation only form in 2004, demonstrate the mainstream appeal of this when it is considered that its selling point was not the technical innovation which it offered, instead it looked to draw users from competing services by offering vastly more storage space. Not only is the ability to store files a desired feature of many of the internet's offerings but it is also second nature to computers. Moreover, under numerous conditions the default behaviour of computation is to log information. For example, a web server executing a script will log certain details in the event of an error and even the features users find most attractive on the web (such as product recommendations) come from the storage of personal information.

Mayer-Schönberger reminds us that while the storage revolution is cause for celebration, memory is not simply recollection. In this important sense it is detrimental to equate the ease with which we can recall memories with a "better" memory. Remembering, he writes is 'more than committing information to memory'¹⁴⁶, and includes both the ability to recall that information and the level of ease with which we are able to do it. Attempts to make recollection easier is not a concept that is unfamiliar to people. With the invention of the printing press, analogue photography and more, innovation has often sought to externalise the way in which we store the passage of our life. However, the internet presents a new challenge.

Easily the most effective storage method to date with the Oxford Internet Institute's "Big Data" project estimating the total world's stored data to be 1.2 zettabytes (of which just 2% is non-

¹⁴⁵ ibid

¹⁴⁶ ibid 72

digital¹⁴⁷), the internet differs from analogue mediums in that it is capable of managing and reorganising data once it has been stored and can do so without a person's involvement, and without any maintenance. A diary written will often sit in a drawer, analogue photographs are usually put in folders and can often be found tucked away in lofts or cabinets. The very act of placing a photograph into a folder, or merely positioning them outside of day to day reach is a significant part of how we manage the way we hold on to some memories and let go of others. Mayer-Schönberger terms this the problem of 'accessibility'¹⁴⁸. With the rise of the digital age we no longer need to open the book, or find the correct folder and page of photos. There is no longer a labour cost associated with recalling information.

Mayer-Schönberger's concern is that by placing our memories into systems that have control over when we are reminded of something, how we are reminded of it, how often, and for what purpose, there exists the potential for those systems to alter our decisions at a given time by presenting various types of information. The historicity of our lives was a matter of some discussion by Friedrich Nietzsche in his second untimely meditation *On the uses and disadvantages of history for life*. Making the claim that 'an excess of history is harmful to the living man'¹⁴⁹ Nietzsche compares the life of man with the life of an animal who 'lives *unhistorically*'¹⁵⁰. In contrast, he claims, man lives with the burden of the past. An 'invisible burden which he would like to disown'¹⁵¹, we have a preoccupation with history which prevents us from living in the present as cattle may do.

The modern world surely would come as a shock to Nietzsche, for what would he think of an infrastructure where search engine giants index historical artefacts for recollection at any point, and with such poignant ease as typing in one or two related phrases. What are the consequences of being able to recall in acute detail conversations from the past at any point in time? To what extent can these words and pictures hold meaning over time and by what standard do we judge them years down the line?

However important these questions might be, they lack an appreciation of the temporal complexity caused by digitisation. That which is stored online does not get lost, does not fade,

¹⁴⁷ Mayer-Schönberger, V, 'Big Data - The Book' (*Webcast*, 29th January 2013)
<http://webcast.oii.ox.ac.uk/?view=Webcast&ID=20130129_489> accessed 10/09/13

¹⁴⁸ Mayer-Schönberger, V (2011, 101)

¹⁴⁹ Nietzsche, F (1983, 67)

¹⁵⁰ *ibid* 61

¹⁵¹ *ibid*

does not tear or in other ways degrade over time. The digital archive does not just store, it preserves. While the photos I stored in the loft will become damaged, or be forgotten when I move house, online storage affords us no such mistakes.

In *Delete*, Mayer-Schönberger discusses what he describes as the negation of time by the digital archive¹⁵². ‘What digital remembering yields is not the entire picture, but at best only those elements of it that are captured in digital memory’¹⁵³. The fear is that a temporal de-contextualisation occurs as the digital archive is incapable of reflecting the nuances and personalisation of a moment. A joke made between friends, an argument posted online, an unusual photo all lose the connections to that moment when viewed weeks, months or years on. Moreover, with the vast majority of information to be digitally remembered being self-recorded, it is important to keep in mind the effects utilizing the archive as an autobiographical in addition to a collective memory. A Microsoft research paper highlights the possibility of digital archiving obscuring what is most valuable and *increasing* the burden of managing personal information¹⁵⁴. While this is an interesting observation, the premise upon which Microsoft builds – that everything is remembered – is not so on Facebook. Instead, Facebook requires the selective archiving of information. Moreover, information shared on Facebook may not be done with the express intention of archiving it. For example, if it can be observed that a primary activity on the site is conversation, can it be demonstrated that users appreciate or value the incidental archiving of that conversation?

The implications of the architectural nature of a system to archive information in this way must be considered in any discussion of the way in which norms emerge over time. If a person were to publish content online today under their own name, what standards are they employing to decide whether or not to make that post? What content is acceptable by these standards and can we rely on future standards to be sufficiently similar, or forgiving of content that might now be deemed unacceptable? Can a person “grow up” online or is a mistake made once, a mistake made permanently? Tufekci affirms the importance of this in her proposal that ‘the definition of freedom is giving someone space to change their mind’¹⁵⁵. Though the internet facilitates freedoms, can it also be demonstrated that it is restrictive as well?

¹⁵² Mayer-Schönberger, V (2011, 113)

¹⁵³ *ibid* 123

¹⁵⁴ Czerwinski, M *et al* (2006, 49)

¹⁵⁵ Tufekci, Z ‘Nobody Should Make Transgender Kid a “Poster Child” for Anything’ (*Wired*, 21st March 2013) <<http://www.wired.com/opinion/2013/03/privacy-a-given-for-children/>> last accessed 10/09/13

Markwick *et al* determine that it is youth, in this way, that will be among the first to experience the effects of both the opportunities afforded by use of the internet, and the potential consequences of those opportunities¹⁵⁶. Quoting Solove on his understanding of privacy violations, it is said that architectural problems – understood to be those which are structural in nature¹⁵⁷ – allow for the ‘creation of the risk that a person might be harmed in the future’¹⁵⁸. This observation is inseparably linked to both the notion of the archive in addition to that of the instability of shared information (see below).

A recent example of the profound impact archiving information can have on a young person’s life through the creation of future harm of which Solove writes can be seen in the case of Paris Brown. Following the election of local police and crime commissioners (PCCs) in the UK, Anne Barnes (elected as the county of Kent’s first PCC in November 2012) chose to appoint 17 year old Paris Brown to the role of Youth Police and Crime Commissioner. The first of its kind, the role was meant to engage and provide outreach to youth in the local area. However, shortly following the appointment several messages she had posted on the social networking site Twitter were discovered by tabloid newspaper The Mail on Sunday. Her “tweets” (since removed), posted at ages as young as 14 were hailed to be racist, discriminatory and in other ways offensive in nature leading to her eventual resignation.

Potential validity of this claim aside, Paris Brown found herself subject to a kind of attention not often focussed on people of her age. In a series of events not so far apart from the case of Stacey Snyder, the archiving nature of the internet allowed not just for otherwise forgotten expressions to be accessed, but accessed by a party completely independent of her role and appointment.

Though reported to have claimed that her actions were exaggerated and were those of someone ‘who was still learning the implications of growing up in a social-media age’¹⁵⁹, the importance of what happened to Paris Brown is not in the decision to resign nor whether this was appropriate or not. Instead, what can be witnessed is something that could foreseeably happen

¹⁵⁶ Marwick, A *et al* (2010, 15)

¹⁵⁷ Solove, D (2006, 487)

¹⁵⁸ Solove, D (2006) cited in in Markwick, A *et al* (2010, 11)

¹⁵⁹ Dutta, K ‘Crime commissioner PCC Paris Brown apologises amid calls to resign over her “offensive” Twitter posts’ (*The Independent*, 7th April 2013) <<http://www.independent.co.uk/news/uk/home-news/crime-commissioner-pcc-paris-brown-apologises-amid-calls-to-resign-over-her-offensive-twitter-posts-8563246.html>> last accessed 10/09/13

to any teenager, or indeed person of any age, using the internet to express themselves in this way.

While the investigation into Paris Brown's online life was purportedly justified by her appointment by Kent's PCC, the difference between this case and any other is merely the motivation to take interest. It is not unreasonable to imagine that Brown is by far alone from posting content online that they may later come to regret or which has become unrepresentative of their beliefs; but is it reasonable that a person should be held to account indefinitely for them? Moreover, who do we allow to be the arbiter of these matters, and how do they re-contextualise information shared in a separate social context from a number of years ago?

The circumstances behind the case of *Smith v Trafford Housing Trust*¹⁶⁰ demonstrate that time need not even be a predominant factor in this problem. For making comments regarding his personal opinion on gay marriage within the church, Mr Smith found himself disciplined, demoted and subject to a 40% pay cut. While these comments were made on his personal Facebook profile, it was claimed by the employer that the mere identification of his role within Trafford Housing Trust on his profile was sufficient cause for his words to be interpreted as against the company's code of conduct.

Smith's case raises serious questions regarding the extent to which information on a Facebook profile can tell the reader something about that person and the content that they share. In ruling in favour of Smith, the 'brief mention at the top of the page that he was employed as a manager by the Trust' along with various other pieces of personal information was said to 'not possibly lead a reasonable reader' to interpret his comments as made in the name of the employer¹⁶¹. Unproblematic as this may seem, when the notion of time is reintroduced it becomes clear that a judgement made in reference to the architectural design of Facebook (one which displays employment information in such manner as to constitute a mere mention) is inherently unstable as it relies on the design of the profile to remain the same. For instance, what would the implications be of Facebook choosing to display a person's employment information more prominently after the post has been made?

The preconception, and increasing awareness of information shared being information permanently shared is likely to have some impact on the way in which standards of appropriate behaviours are developed at the point in which those behaviours occur. Mayer-Schönberger

¹⁶⁰ [2012] EWHC 3221 (Ch)

¹⁶¹ *ibid* [57-59] (Mr Justice Briggs)

expands upon this idea under the name of ‘cognitive adjustment’¹⁶². The cognitive adjustment theory suggests that people, in response to the architectural character of the internet and the difficulties it creates, will naturally adjust the way they behave and the way they perceive. Although sceptical of the short term feasibility of this as a solution¹⁶³, it is encouraging to see that the question of how people will begin to regulate themselves internally is not ignored. Borrowing support from Boyd, the ability of young users is brought up again:

People, particularly younger people, are going to come up with coping mechanisms. That's going to be the shift, not any intervention by a governmental or technological body.¹⁶⁴

Tied to Mayer-Schönberger’s ideas regarding the archive of data is an underlying conception of “*where*” information is located. Take for example the story of Stacey Snyder. While the unintended consequences of posting a picture onto the social networking site were unfortunate, they derive from the ordinary function of such a service. In this case the functionality of the site in storing and making the photograph available online is expected, and it is only the audience which is not.

While a more detailed analysis of the social networking site Facebook will follow, it is interesting to note one peculiarity of how it, and similar websites, treat data. A valid reaction to Stacey Snyder’s situation might well be one which promotes a form of self-censorship. A simple example of how this might take place is to consider who content posted online can be seen by and to take appropriate action as desired (for example, using privacy settings to make the photo available only to certain people). However, the usefulness of pictures, profile information and other data does not extend only to being visible or not visible.

The expectation that authors of online content need to consider their audience at the time of posting information also suggests that the person in question has a full understanding of the way in which that information might be used. While the implications of this degree of uncertainty will be discussed in a later section, it is useful to note at this stage that the problem of archiving extends beyond the infinite accessibility of data to the infinite utility of that data. Recent testaments to these possibilities include attempts to predict behavioural patterns

¹⁶² Mayer-Schönberger, V (2011, 155-157)

¹⁶³ *ibid* 205

¹⁶⁴ Boyd, D cited in Winter, J ‘The advantages of amnesia’ (*Boston Globe*, 23rd September 2007) <http://www.boston.com/news/education/higher/articles/2007/09/23/the_advantages_of_amnesia/?page=full> last accessed 10/09/13 as cited in Mayer-Schönberger, V (2011, 154)

associated with suicide in youths¹⁶⁵ as well as the ability to draw connections between figures such as suspected terrorists merely by a person's existence within a network¹⁶⁶. While the technical achievements of such projects are commendable, the use of data such as that shared on social networking sites such as Facebook raises the question as to whether those who provide it are aware of these extended uses. Users of these sites are not simply sharing data socially, they are sharing this data *to be social*, and whether users expect this data to be used for other purposes is questionable and in need of attention.

The motivation that people experience to share information socially is potentially not one which expects computed analysis of this kind, for this purpose. Therefore, this kind of secondary data use and the initial intentions for sharing that data must be considered. With the persistence of the digital archive comes the opportunity to collect vast amounts of raw data in a highly versatile and processable format¹⁶⁷ but unlike its offline counterparts the intention with which that data is shared is harder to ascertain.

2b. Instability

In 2009, writing under the heading of 'Saving Facebook', Grimmelmann discusses what he calls 'instability' and the ability of social network sites to 'change the ground rules of how personal information flows'¹⁶⁸. While Grimmelmann confines his discussion to a short description of the way in which Facebook may engage with instability, I claim it is true that instability is an unavoidable and influential characteristic of the internet's architecture. Moreover, I will demonstrate that the architectural stability of an environment, in addition to

¹⁶⁵ Lopatto, E 'Swartz Suicide Propels Facebook Search for Danger Signs' (*Bloomberg*, 23rd January 2013) <<http://www.bloomberg.com/news/2013-01-23/swartz-suicide-propels-facebook-search-for-danger-signs.html>> last accessed 10/09/13

¹⁶⁶ Lotan, G 'When Your Twitter Friend Turns Out To Be The Boston Bomber' (*Digg*, 25th April 2013) <<http://digg.com/originals/dzhokhar-tsarnaev-twitter-map+desc>> last accessed 10/09/13

¹⁶⁷ It is interesting to note that this abundance of raw data has not gone unnoticed by those taken to studying this developing area of the social sciences. A recent review of Facebook research within the discipline (Wison, E R, 2012) noted the efficacy of a practice known as data crawling in order to gather information. The implication of this example is in accordance with Paul Ohm's desire to create a new interdisciplinary 'research agenda' incorporating both computer science and legal scholarship (Ohm, P, 2008). While the focus of this dissertation is not to support this proposal, the advantages of code driven automaticity and analysis to empiricists might be of particular interest to those planning future work.

¹⁶⁸ Grimmelmann, J (2009, 1168)

the stability of expectations as to how information shared will be used, play a role in shaping behaviours.

Expectations of form and function are necessary in order for norms to develop and be enforced. Bicchieri and Xiao suggest that norm compliance itself can be reduced to two kinds of expectations. First, ‘empirical expectation’, the expectation that others will comply with a certain norm and second, ‘normative expectation’, the expectation that other’s will expect a person to comply with a certain norm¹⁶⁹. Levine *et al* add to this stating that ‘when communicating with others, people have preexisting expectations regarding the other’s behaviour’¹⁷⁰. Moreover, these expectations ‘may derive from bases other than norms’¹⁷¹. On the internet, expectations are made not only about other’s behaviour but about the environment in which those behaviours are set. As such, architectural stability plays a role in both how norms develop and are exercised.

Certainty in expectations of this sort is difficult to achieve on the internet. Firstly, a person has no relationship of proximity with internet architectures. The functionality of a website may be accessible from a pocketed device, or from a computer in front of me but it exists separately to this and is likely to be edited by parties unknown. Secondly, an architectural change to a nearby physical structure is likely to be invasive – leading to side effects such as sound – and occur over a period of time. However, on the internet large architectural changes can take place unknown to the user. Development of these changes is likely to be done apart from the version that the user experiences and even once published is undetectable unless necessarily visual.

A notion of instability is, in this sense, linked to the idea that architectural influences on regulation are inherently technical and therefore encounter a transparency problem. The transparency of architectural changes is often remarked upon in relation to the accessibility of information. For example, Fisher claims that in addition to the practical complications of broken links and missing content entailed by the UK government’s shift to a new website, the move raises wider issues of how information is presented and to what extent transparency and accountability can be observed in such scenarios¹⁷². Incidentally, Fisher praises the use of archiving to combat disappearance of information as a result of architectural change. For the

¹⁶⁹ Bicchieri, C and Xiao, E (2008, 2-4)

¹⁷⁰ Levine, T R *et al* (2000, 124)

¹⁷¹ *ibid*

¹⁷² Fisher, L ‘Liz Fisher: Gov.Uk?’ (*UK Constitutional Law Group*, 9th May 2013)
<<http://ukconstitutionallaw.org/2013/05/09/liz-fisher-gov-uk/>> last accessed 10/09/2013

purposes of this dissertation I am more concerned with instability as a description of how information can be displaced and repurposed as a result of architectural change and the extent to which norms emerge in relation to user awareness of this.

There are clear and understated examples of how architectural instability itself could prompt people to modify their behaviour. For example, a private message sent between person A and person B is private to the extent that the message is only seen by the intended recipient. While internet technologies allow user identification and restriction with ease (something that cannot be said for offline messaging systems) their message data remains subject to instability in so far as more than one person may be looking at the screen of the recipient at the time of reading.

Moreover, technology presents a further set of challenges to any such scenario. When the aforementioned private message is received by person B, the architecture of the platform upon which they receive that message is likely to allow for various ways to easily replicate and share that message. While this is a problem that is not unique to internet communications (e.g. someone might show a personal letter to someone else) the ease of replication that the internet allows for enables these re-communications to be faster, large and more permanent¹⁷³ than before.

Instability, therefore, should be taken to mean not only the propensity for rules which govern information flow to change, but also the opportunities to replicate and displace information on the internet. Recent developments in user experience reflect a recognition of these problems and serve as testament to the idea that architectural factors such as this form of instability are influential.

There is value in the ephemeral. Great conversations are magical. That's because they are shared, enjoyed, but not saved.¹⁷⁴

The release of Snapchat in 2011 demonstrates how architecture can facilitate innovation both in accordance with that architecture and in reaction to it. Snapchat allows users to send private messages to one another in much the same way as an SMS. Where Snapchat is distinct from other services is in the way in which messages are compulsorily deleted from both the recipient device and the company's servers. While users are able to specify the expiration time they are limited to a maximum of 10 seconds. In addition to this restriction, while circumventions such

¹⁷³ For example, a letter might be lost or degrade over time. A screenshot of a personal message is unlikely to be subject to these kinds of degradation.

¹⁷⁴ 'About' (*Snapchat*, nd) <<http://www.snapchat.com>> last accessed 10/09/13

as taking a screenshot of the incoming message are not absolutely prevented (nor preventable), they entail a consequence in which the sender of the message is notified that this action has taken place.

There are two matters of interest which are worth drawing attention to. Firstly, there is something telling about the words chosen in Snapchat's mission statement. To assert that there is value in the ephemeral is to indicate that there is an observable social phenomenon, a subset of people, for whom this reminder would have value. What Snapchat asks its users to do is consider the distinction between what is memorable and what is valuable. By removing the archiving effects of similar message sending applications there is not only the possibility of forgetting; the effects of having that data taken away from you are able to be utilised. Given a picture of the perfect scenery I may spend some time looking at it, exploring it from every angle. However, given a picture to glance at for mere seconds is likely to provoke a more ruminative response.

This shift in focus¹⁷⁵ offers a reconfiguration in attitude that not only rebels against the idea that the preservation of data is a universally positive process but offers an alternative experience which actually values the destruction of data.

The second aspect worth noting is that the development of Snapchat and similar applications¹⁷⁶ demonstrates the ability to innovate in response, and around architecture. Provoked by the way in which previous messaging applications chose to archive data, the creators of Snapchat chose to do something different¹⁷⁷. By negating the effects of the archive and the unpredictability of audience discussed previously the application creates a new environment for users to work within, one which is likely to lead to a distinct set of reliances, assumptions and practices which in turn is likely to alter the type of content users feel safe in sharing.

¹⁷⁵ 'The ephemerality sharpens viewers' focus: Once received, a Snapchat count-down is a kind of time-bomb that demands an urgency of vision, a challenge to exhaust the meaning from the image before the clock runs out. Unlike a paper photo that fades slowly over the years, the temporary photo disappears suddenly. Given only a peek, you look hard'. Jurgenson, N 'Pics and It Didn't Happen' (*The New Inquiry*, 7th February 2013) <<http://thenewinquiry.com/essays/pics-and-it-didnt-happen/>>

¹⁷⁶ See for example the recent launch of twitterspirit.com from a former employee of the social networking site Twitter. The service allows users to append certain strings to their posts to be identified by the system for deletion after a set time, effectively creating an expiration date relative to the time of posting. For example, "I am reading *The Fault in Our Stars*. #15m" would see this post deleted after fifteen minutes.

¹⁷⁷ This constitutive type of technology self-regulation is comparable to the way in which copy protection is applied to digital media in response to the each with which it can be recreated. Goldoni, M (2011, 4)

Interestingly, this possibility has not gone unnoticed by the developers of Snapchat:

On traditional social networks, users tend to feel pressure to curate the perfect representation of their lives for their friends, coworkers, and relatives. It's normal to worry about what people in your network might think about the things that you post.

Sometimes this means that we say things that we think people will like, rather than expressing who we really are.¹⁷⁸

The manifestation of this has – as it so often does – materialised in the concern over the sharing of sexual or pornographic images between teens. While the subject matter is predictable, what is of interest here is the idea that Snapchat have managed to architect an environment which provides a sense of security to its users. The underlying concern is of course that teen users will feel that sharing these image types on Snapchat is a “safer” option than through other mediums

This norm altering effect is not just a consequence of the functions which Snapchat allows (i.e. positively enabling users to expire data) but also those which it does not positively engage with. While Snapchat does not prevent users from taking and saving screenshots of received messages, it does monitor the activity and notifies the sender if this occurs. The implications of this are of particular interest as they play on the desire for users to monitor the usage of the data sent.

Feeling betrayed when someone takes a screenshot on snapchat ¹⁷⁹

While there may be technical limitations to the prevention of screenshots being taken, Snapchat has made a choice to engage with people's expectations and relationships rather than to enforce some code driven sanction (for example introducing an infraction scheme whereby offenders would have reduced functionality). Described by Oremus as a ‘virtual slap in the face’¹⁸⁰, the above twitter message suggests the kind of feelings that may arise in reaction to the misuse of

¹⁷⁸ ‘Snapchat guide for parents’ (*Snapchat*, nd) <http://www.snapchat.com/static_files/parents.pdf> last accessed 10/09/13

¹⁷⁹ Strong, Em (EmStrong1) ‘Feeling betrayed when someone takes a screenshot on snapchat #sluts’ (Twitter, 2nd May 2013) <<https://twitter.com/EmStrong1/status/330075348345692160>> last accessed 10/09/13

¹⁸⁰ Oremus, W ‘OMG, “Deleted” Snapchat Sexts Can Actually Be Recovered’ (*Slate*, 9th May 2013) <http://www.slate.com/blogs/future_tense/2013/05/09/recover_deleted_snapchats_decipher_forensics_finds_sexting_app_s_privacy.html> last accessed 10/09/13

a system which has otherwise designed and represented itself as an environment in which these abuses do not happen¹⁸¹.

The significance of instability becomes clear at this point. As Grimmelmann remarks, ‘if you – like most people – formed your privacy expectations around the way the site originally worked, they ceased being valid when the site changed’¹⁸². Not only is it true to say that the nature of a site plays a role in the way in which you behave on it, it is also true to say that these behaviours can be modified by architectural changes in that site. Moreover, it is unwise to make the assumption that users will become aware of the change and subsequent invalidity of expectations given the way in which these changes can happen without any user involvement or notice.

The fast paced evolution of online environments and consequential inconsistency in user experience may impact on the opportunity for norms to develop over a period of time. While it is possible that this characteristic might influence the way in which norms develop by forcing, for example, a consensus to occur online faster than offline due to the regularity of architectural change it must also be considered that norm development may be hindered if the experiences upon which a person bases those norms consistently change¹⁸³. Moreover, the character of instability itself is commonly transient. Not every consequence of instability will occur at one time, nor to every piece of information shared. Moreover, there exists no certainty that these consequences are observable to those they effect. However, short of lessening the effects it is possible that this very uncertainty of circumstances is what increases the impact of instability itself. In this sense, a stability within the online environment is achieved not by architectural integrity but a reaction by the person to a perceived instability.

¹⁸¹ While this is true it is interesting to note that Snapchat mitigates this claim within their privacy policy: ‘we cannot guarantee that the message contents will be deleted in every case’. See ‘Privacy Policy’ (*Snapchat*, 22nd June 2013) <<http://www.snapchat.com/privacy/>> last accessed 10/09/13

¹⁸² Grimmelmann, J (2009, 1169)

¹⁸³ It is important to recognise that these changes can also occur as a result of malfunction or exploitation. A recent, albeit anecdotal example of a malfunctioning photocopier rewriting documents that were intended to be replicated speaks to this point. See ‘Confused Xerox copiers rewrite scanned documents, expert finds’ (*BBC*, 7th August 2013) <<http://www.bbc.co.uk/news/technology-23588202>> last accessed 10/09/13

2c. Group participation

Cyberspace is changing the social physics of human life, broadening the size and power of group interaction.¹⁸⁴

The video is only 20% of the debate. The other 80% comes from the comments. Thank you, YouTube.¹⁸⁵

To understand the unique nature of the internet is to contrast it with existing forms of communication. David Holmes does just this by comparing the qualities of television with those of the internet. He writes that television bears a spectacular ‘ability to convey complexity’ and has a ‘power of simulation’¹⁸⁶. The strength in television then is its ability to broadcast a particular message at a particular time, or as Holmes puts it to act as a ‘primary memory machine for universal culture’¹⁸⁷. Television’s fundamental flaw is that there must first be a message formulated for distribution before it can be broadcasted. In Holme’s view it is an agent of representation as opposed to the internet which acts as an agent of connection¹⁸⁸.

In an earlier chapter I used the works of Clay Shirky to introduce the internet as an object which inherently facilitates group activity and that it does so in a way which previous mediums have failed to. What Shirky realises is that the impact of this goes beyond the observable fact that the internet allows many people to complete many actions simultaneously. Instead, the importance lay in a realisation that the internet does more than simply allow members of a group access to one another; in addition it creates opportunities for exchange and collaboration.

Given that much of our lives are mediated by relationships with people in the work place, in school, in social arenas and in the family, it is evident that people are not unfamiliar with group action. What the architectural nature of the internet does is modify the rules under which these group interactions take place and does so in such a way which increases the speed, centralises and lowers the cost¹⁸⁹ of those interactions.

¹⁸⁴ Smith, M (1999, 195)

¹⁸⁵ Commenter on ‘Hitchens v Hitchens - Brothers Debate God & War’ (*YouTube*, 15th June 2011) <<http://www.youtube.com/watch?v=jsPovB3AQjo>> last accessed 10/09/13

¹⁸⁶ Holmes, D (1997, 27)

¹⁸⁷ *ibid*

¹⁸⁸ *ibid* 29

¹⁸⁹ ‘New social tools are altering this equation by lowering the costs of coordinating group action’. See Shirky, C (2009, 337)

The centrality of group effort to human life means that anything that changes the way groups function will have profound ramifications.¹⁹⁰

It is worth noting that Shirky's idea of profound ramifications does not have to be limited to effects *within* a group. In addition to this the open nature of the internet allows for these group structures to manage themselves in a way not usually possible. By operating within a technical structure which not only allows behavioural rules to be collectively developed but simultaneously enforced, there is potential for new expectations to be forged as to how these rules should operate. Thus, the architectural nature of the internet can be seen to influence the normative process itself as well as those norms which result from group structures.

Moreover, at a time when collective action is not only possible but becoming expected¹⁹¹ there are fundamental questions to be posed regarding the legitimacy of any individual or organisation which attempts to impose regulation. Levin highlights that this conversation is beginning to take place in response to the ease with which illegal file sharing and replication is possible online. Taking what he claims to be a rhetorical question posed by the US print magazine Newsweek as an example ('Can 62 million Napster users really be wrong?'¹⁹²), Levin identifies a type of question which might well become more frequent given that the same architecture which allows 62 million users to perform a single action also allows those users to determine that behaviour as acceptable. To demonstrate this it is helpful to examine McAdams' model of esteem-based norms, the operation of which McAdams bases on three conditions; consensus, risk of detection of norm violation, and publicity.

By looking at a community's need for consensus, it becomes clear that the ability of the internet to enhance group function, and therein group discussion provides not only the opportunity for consensus to be established but to be done so in a way which precludes certain inefficiencies of offline consensus making such as the requirement to bring a group together. Major notes that in addition to collaborative ease, 'consensus transpires at an accelerated rate in cyberspace due to the increased speed at which information travels'¹⁹³.

¹⁹⁰ *ibid* 187

¹⁹¹ See Tapscott on the eagerness of 'Net Geners' to collaborate; Tapscott, D (2009, 89-91)

¹⁹² Levy, S 'Playing Fair With Copyright' (Newsweek, 25th February 2001)

<<http://www.thedailybeast.com/newsweek/2001/02/25/playing-fair-with-copyright.html>> as cited in Levin, D (2001, 132)

¹⁹³ Major, A (2000, 95)

In a study on the development of norms in Usenet newsgroups, Burnett and Bonnici determined that it was common for users to spend ‘a good deal of their time engaged in discussions that either dissected or were directly focussed on issues related to acceptable behaviour and group norms’¹⁹⁴. Terming these dialogues ‘metadiscussions’, the authors note that they were often derived from arguments within a community¹⁹⁵. Discussions such as these can have a far wider reach than their origins may suggest, and as such demonstrate the ability for consensus to be reached online quickly and among a wider population. Boyd and Markwick support this, stating that participation alone in these kind of networks ‘make content widely available to many interested parties’¹⁹⁶ and as such act to widen such discussions¹⁹⁷.

3. Micro architecture

Micro architecture differs from its macro counterparts in that it directly guides the way in which a user interacts with a website. While the primary concern of micro architecture is with the code and characteristics of a given website, the term should be taken to mean any element with which the user can have immediate interaction and those features which mediate the relationship between macro architectures and the user.

In order to introduce this idea it is constructive to examine an example developed by Levin in relation to the online auction site eBay¹⁹⁸. One of the largest online purchasing companies, the eBay website subjects both potential buyers and sellers to compulsory registration before allowing access to the site’s full features. As Levin describes, eBay is a ‘pseudonymous community’¹⁹⁹, although one which allows for username changes at any given point. While this allows for a degree of privacy and perhaps retains a certain level of flexibility which users of the service may demand, this also has implications for values such as trust, identification and credibility (broadly, reputation) which help to maintain transactions of this nature.

¹⁹⁴ Burnett, G and Bonnici, L (2003, 341)

¹⁹⁵ *ibid* 341-342

¹⁹⁶ Boyd, D and Markwick, A (2011, 11)

¹⁹⁷ One such example is the recent discussion posted to social news website reddit. Posing the question ‘What was Reddit’s lowest moment?’ the author states ‘I feel that it’s important to self-regulate in a place like this’. The discussion amassed over 10,000 replies in 5 weeks. See ‘What was Reddit’s lowest moment?’ (*Reddit*, 7th July 2013) <http://www.reddit.com/r/AskReddit/comments/1htjq8/what_was_reddits_lowest_moment/> last accessed 30/09/2013

¹⁹⁸ Levin, D (2002, 122-128)

¹⁹⁹ *ibid* 124

In order to remedy this Levin suggests that eBay chose to design in such a way that frequent name changes would carry a 'negative social meaning'²⁰⁰, communicating and encouraging a group value.

Users may change user IDs, but if they do so an icon of a pair of "shades," dark sunglasses, appear next to the new user ID for thirty days...The "shades" icon works in two ways. First it carries some kind of negative social meaning-the wearer is a shady fellow. This deters the disfavored behavior of ID changing. Second, it works at a level of indirection, by facilitating norm development.²⁰¹

The decision by eBay to implement a method to actively encourage certain behaviours amongst users provides an excellent demonstration of the way in which architectural decisions on a micro level can not only provide short term relief for a given problem but positively foster a particular culture. While this mechanism works in combination with other measures developed by eBay in order to provide a secure trading environment (e.g. public user feedback, various trading sanctions and guarantees) it is particularly interesting that the decision was made not to use code in a way that forcibly regulates user behaviour by preventing username change but to recognise that the eBay community can be an active part of the regulatory effort to prevent undesirable trading.

Though eBay has since changed the design of the icon which it appends to a recently changed username²⁰² the practice of notifying users of such behaviour remains unchanged in the twelve years since Levin's analysis. Moreover, as discussed in relation to Snapchat, similar practices where architectural *control* has been exchanged for architectural *influence* can be found across many of the internet's most popular services. In such cases it is possible to conclude that the efficacy of the norm as a way to regulate behaviour has been recognised, though the role of architecture as a regulation from which the norm emerges is evident. Moreover, while technical and resource limitations are likely to play a role in the decision to design for influence as opposed to control, it is clear in such cases as eBay that normative influence is used as a mechanism to ensure the community's survival as much as the company's – which itself depends on the existence of that community.

²⁰⁰ *ibid* 124

²⁰¹ *ibid* 124-145

²⁰² The icon has changed from the shades Levin describes to a shaded figure seemingly standing behind a lighter figure in the foreground.

What this practice demonstrates is that not only can architecture on a micro level *not* be interpreted independently from its users but that it is demonstrably the case that it is *not* seen as independent by those who use it. The effects of a username change, the disclosure of trading history by way of the public feedback profile, the relatively unmoderated process of selling and buying are all constructed by the site's code base and manifests in a clear shift of the burden to authenticate from the facilitator of the transaction to the actual parties involved.

While this kind of practice represents an attempt to use architecture in order to enforce a “top down” regulation, it should be noted that the strength of this relies on the support of the community. Given that there is no code based restriction that prohibits the action of changing a username, the success of eBay's attempt to foster a reluctance to make this change relies on the participation of its user base in recognising the symbolic value of the icon. For example, given the decision of each user to change their username after every sale (perhaps to circumvent the ability to check trading history) the icon would have little significance.

The ability of symbols such as the aforementioned to influence a person, group or community to regulate themselves through the emergence of norms should not be underestimated. What is remarkable when considering this point is that people are not at all unfamiliar with the permeation of symbols and their meanings in the offline world. At some point in our lives we have all made decisions regarding what we wear, what posters we put pride of place on our walls, what colour we paint objects. We concern ourselves with the way in which we value our friends, in the value of gifts we give, and in the value we put in ourselves with the causes we associate with and the products we use. This is something which youths are acutely aware of, with decisions of clothing style having been said to be ‘intrinsically linked’ with identity and social acceptance.²⁰³

What is, in contrast, a relatively under-explored area is the way in which architectural decisions in the services we use online reflect on our behaviour both online and offline. Though fleeting references are often made to this effect when dealing with offline environments – such as Lessig's remark that the installation of a near-by mirror can affect the length of time a person expects to wait for the arrival of an elevator²⁰⁴ – little attention is given to the online equivalent.

²⁰³ Swain, J (2004, 81)

²⁰⁴ Lessig, L (1999a, 92)

Light and McGrath describe this as the tendency for research to be ‘focused on how users domesticate them [social networking sites], thereby overstating the role of human agency’.²⁰⁵ Advancing the idea that technology can have a moral profile, Light and McGrath encourage us to think of technology not as something neutral by design but something which can have agency of its own.

This situation is best described by Kranzberg's First Law: "Technology is neither good nor bad; nor is it neutral" (Kranzberg 1986: 454-548).²⁰⁶

While this claim refers only to ‘technology’ in a fairly broad manner, and as such might better be situated within the discussion of macro architecture as a matter of the global nature of the internet, Hull *et al* distinguish as I have done but through the language of technology and its interfaces. Citing Latour’s discussion of the self-closing closing door, it is not the object itself or indeed the closing mechanism (which, in Latour’s words is delegated the task of closing²⁰⁷) which discriminate against the elderly and disabled, it is the speed with which it operates and the expectations it has of people’s ability to negotiate the door²⁰⁸.

Though the embedded biases and value oriented nature of design has been recognised by other disciplines such as the study of human-computer and computer mediated communication²⁰⁹, from a regulatory point of view there has been a lack of attention. Instead. There is a tendency to concentrate on how architecturally derived characteristics (such as reliability) impact on traditional conceptualisations of regulation and not on how these characteristics already govern the behaviour of those who use the internet. A key theme throughout this chapter, and prime motivation for the desire to enter into a discussion regarding digital architecture, stems from this very idea. If a claim is to be made that legal scholars should begin to take the capacity for people to regulate themselves online seriously, there must also be attention given to the ability of their environment to influence this.

However, to say that digital architectures can have influence is not to say that this influence is readily observable. As stated earlier in this chapter, the effects of architectural decisions do not always manifest in this way. The propensity for technology to be “unstable” as discussed must

²⁰⁵ Light, B and McGrath, K (2010, 306)

²⁰⁶ Boyd, D (2008a, 12)

²⁰⁷ Latour, B (1992, 157)

²⁰⁸ Hull, G *et al* (2011, 299); Labour, B (1992)

²⁰⁹ See for example Friedman, B (1996) on the impact of user autonomy, misrepresentation of systems and technical bias.

be considered in tandem with this point, for to what extent do people rely on stability of online practices and to what extent can those practices be normalising? As Light and McGrath recognise, the agency of technology can be difficult to uncover given that ‘we get used to how it works’²¹⁰.

Search engines provide an interesting case study for this point. We have seen that due to the inherent archiving effects of the internet, data storage is neither time consuming nor costly and in some cases purely incidental. The existence of this data is a consequence of the characteristic of computing, and of the internet. However, the substantive differences between a large stack of physical photos, and an equal quantity of digitally stored photos come not from their digital existence but from the possibilities to manipulate that digitisation that micro architectures enable.

The ability to search and the alterations to the way in which data can be accessed represents an excellent example of the way in which architecture can alter expectations of information and of the flow of that information. Julie Cohen notes that:

Search engines configure us to expect every conceivable kind of information readily displayed at our fingertips...The reconfiguration of search and accessibility reshapes the process by which individuals and communities discover and make sense of information about the world.²¹¹

Cohen’s claim suggests that this reshaping extends beyond the online environment and introduces an interesting point regarding the expectations which services such as search engines encourage us to develop. As Cohen notes, accessing and searching through offline information is a practice which is observably mediated by what she terms ‘physical and cultural factors’²¹². While searching through my stack of photos I will find that the photos I take from the stack is affected by the time I wish to spend searching, the number of photos collected, the original order I placed them in, my ability to interpret a given photo’s relevance to what I am looking for and numerous other factors.

However, given the ability for services such as Google to architect algorithms which take the process of searching out of my hands (what Cohen identifies as establishing ‘new geographies

²¹⁰ Light, B and McGrath, K (2010, 295)

²¹¹ Cohen, J (2012, 4)

²¹² Cohen, J (2012, 4)

of access'²¹³) these factors become, to a greater extent, unobservable. Being able to score data based on potential relevancy, appropriateness, context, timeliness, popularity, history and a wide range of other factors, a search engine is capable of yielding a set of results which not only produce relevant data but exceed (and subsequently alter) expectations of what data might have been returned. However, this is not a universally positive implication of search engine design. Introna and Nissenbaum, on the political implications of search engine design, suggest that the utility of the internet as a conveyor of information can be undermined as access is mediated by search engines whose tendency is to give provenance to varying sources of information (claimed in this analysis to be the 'popular, wealthy, and powerful sites'²¹⁴). While my interest is not, as for it is for the authors, in the implications of this for the utility of the internet as a way to encourage public sphere participation, the incongruity between the expectations which certain architectures create and their functionality is of interest.

Though architectural influence can be said to have an effect on expectations of what a given search will return, Goldman, on the editorial bias of search engines, suggests that expectations can also have a limiting effect in this capacity where there will be a certain return expected from any given query²¹⁵. As such, bias is limited by the implication of market forces acting on those search engines whose algorithms return results too obscure to be seen as providing an effective service. Goldman describes a regulatory landscape which highlights the force of the norm, and is one which is particularly interesting as it assumes the existence of these norms to compete against architectural influence. Given the young age of the participant group selected in this dissertation it may be the case that these norms do not exist, in which case the role of architecture as an expectation guide in younger years may prove formative.

4. Architecture and Facebook

Though the role of architecture in guiding people's behaviour on Facebook will be discussed at length in the empirically grounded sections of this dissertation, the conclusion of this chapter provides opportunity - so as to avoid the impression that these ideas are simply abstract - to make some observations about the nature of Facebook and some events which demonstrate the impact of architecture. Given the ubiquity which Facebook and other social network sites enjoy

²¹³ *ibid*

²¹⁴ Introna, L D and Nissenbaum, H (2000, 54)

²¹⁵ Goldman, E (2006, 196-197)

it is to forget that they are evolving, ever progressing, entities which play an active role in guiding the way in which social interactions are expressed. Claims such as Livingstone's that the very language of social relationships is being rewritten²¹⁶ should be treated as indistinct from one which would claim the language of social relationships is written *into* the architecture of such sites. Moreover, it is important to remember that while the current incarnation of environments such as Facebook can be subject to architectural analysis, that current product is the result of a history of changes and decisions which were played out through architecture at the time.

An excellent example of a change in circumstances against which norms are developed (the essence of instability) is the introduction of the "News Feed" feature in 2006. While Facebook's history is littered with examples of where instability has been highlighted through the discovery of programming bugs²¹⁷, the News Feed is different (and arguably more important) due to its release as a wilful design change. The News Feed introduced a centralised, aggregated version of the interactions which a person and their friends were making on the site. Though the information the feed made use of was "public" to the extent that it was already visible to those you were connected with on the site, the News Feed's impact was to deliver this content more readily to other users, as such Hull *et al* describe the change as giving 'users their friend's updates automatically, without the need to visit anyone else's page'²¹⁸. This removal of labour previously entailed when wanting to observe other's online behaviour is the root of how we can understand this architectural decision to impact users' normative expectations. As Boyd notes, though there was no expectation that this information was "private", users understanding of "privacy" in this context was produced under an understanding of the architecture which formed their environment and, I contest, the expectation that this environment would remain constant. Boyd equates this to the decision of how loudly one would speak inside a room, given an understanding of acoustics and proximity to those who might overhear²¹⁹. While this serves to demonstrate the point, it lacks an appreciation of the temporal complexity that is entailed with the retrieval of archived information.

²¹⁶ Livingstone, S (2008, 4)

²¹⁷ See for example 'Millions exposed by Facebook data glitch' (*BBC*, 24th June 2013) <<http://www.bbc.co.uk/news/technology-23027643>> last accessed 10/08/13

²¹⁸ Hull, G *et al* (2011, 296)

²¹⁹ Boyd, D (2008b, 14-15)

Hailed as ‘intrusive’ by nature²²⁰, Facebook users lost a sense of security that derived from the labour involved in recovering their information. Where a friend would previously have had to seek out your posts and communications with others, they were now presented with them and as such the reliance on site design to guide expectations had been exposed.

While users felt disrupted by the change²²¹, architectural changes reflect not only on past information sharing practices but form the environment upon which new ones are formed. As such, the question is raised as to what extent the introduction of the “News Feed” has changed both perceptions of Facebook and norms which govern which content should be shared through it. While Hull *et al* provides a small discussion of the consequences of the acceptance of this change in architecture²²², this forgoes consideration of the implications of visibility which it gives rise to. Though a comparative effort would be problematic given the age and duration of use of the participants in this dissertation, my analysis will provide some insight into this aspect of use.

Moreover, while the introduction of the “News Feed” is perhaps the most significant example, many changes of this nature have been introduced since 2006. Most recently, the introduction of “Timeline” in 2011 saw the profile page of every user replaced with one which chronologically listed a person’s profile content. Developed in reaction to an architectural design constraint which caused historic content to be time consuming to access²²³, the new profile format produced a backlash of its own.

A second matter which addresses directly the claim that social interactions are subject to being reframed by the language of social media sites is the “like” button, often illustrated by a “thumbs up” icon, which accompanies each post made by a user²²⁴. A tool through which a person can provide a signal of their reaction, the “like” button is one of a choice of responses

²²⁰ Schmidt, T S ‘Inside the Backlash Against Facebook’ (*Time*, 6th September 2006)
<<http://content.time.com/time/nation/article/0,8599,1532225,00.html>> last accessed 10/09/13

²²¹ Boyd argues that this change engaged with a sense of vulnerability which users have when sharing information online. As such, users felt exposed. Boyd, D (2008b, 14)

²²² Hull, G *et al* (2011, 297) fn 22

²²³ ‘The way your profile works today, 99% of the stories you share vanish. The only way to find the posts that matter is to click “Older Posts” at the bottom of the page. Again. And again.’ See Lessin, S W ‘Tell Your Story with Timeline’ (*The Facebook Blog*, 22nd September 2011)
<<https://blog.facebook.com/blog.php?post=10150289612087131>> last accessed 10/09/13

²²⁴ This feature must be distinguished from the “Like Button” plugin available to developers to allow social promotion of external pages. For an interesting discussion of some of the technical and privacy implication of this feature see Roosendaal, A. ‘Facebook Tracks and Traces Everyone: Like This!’ *Tilburg Law School Legal Studies Research Paper Series* (2011) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1717563>

available to a user's friends, the feature allows – in effect – the submission of qualitative feedback which is displayed and utilised as a quantitative measure in the promotion and display of shared content.

Facebook explains the feature as follows:

Clicking Like under something you or a friend posts on Facebook is an easy way to let someone know that you enjoy it, without leaving a comment. Just like a comment though, the fact that you liked it is noted beneath the item.²²⁵

Already it is clear that while Facebook intends the feature to allow for the substitution of a long form response, the language involved in doing so is relatively complex. Though this can be demonstrated simply by highlighting the inconsistency in the above explanation (though the distinction may be slight, to “like” something is not the same as to “enjoy” something), a better way to see this is to consider the sentiment a person wishes to express when they use the “like” feature to respond to stories of bad fortune, or typically deplorable events such as violence.

The like feature represents an architectural element that explicitly seeks to enable expression of a kind without the necessity of articulating it within a commented response. The relevance of this is clear when considered in combination with the recent United States District Court judgment in *Bland v Roberts*²²⁶. The facts of the case in this instance relate to the use of the “like” feature to (purportedly) signal support for their employer's political rival²²⁷. Upon re-election, the defendant dismissed the plaintiffs, subsequently causing the plaintiffs to claim that they were wrongfully terminated as a result of their actions, itself a violation of their First Amendment rights. In judgment, it was held that ‘merely “liking” a Facebook page is insufficient speech to merit constitutional protection’²²⁸. Distinguishing from precedent on the basis that the act of “liking” involved no ‘actual statements’²²⁹ the court arguably demonstrated a naivety as to the consequences of “liking” on Facebook.

In the discourse which has followed the decision of the District Court, commentators have sought to elucidate the “like” feature as having extended functionality, not resulting simply in

²²⁵ ‘Liking Things on Facebook’ (*Facebook Help Centre*, nd)
<<https://www.facebook.com/help/www/452446998120360>> last accessed 10/09/13

²²⁶ 857 F. Supp. 2d 599 (E.D. Va. 2012)

²²⁷ In addition to liking content posted by others, a person may “like” a Facebook page. Pages are set up by, amongst others, businesses, brands, musicians.

²²⁸ 857 F. Supp. 2d 599 (E.D. Va. 2012) [603] (Raymond A. Jackson, District Judge)

²²⁹ *ibid*

the act of having liked something in a quantitative sense (that is to say liking is not simply done to be seen and counted as having done so). Determining that the “like” feature has ‘multiple effects’, Robbins explains that the act also leads to the publication of this action to friends, the person’s name being added to a list of others who have performed the action and the association of that person’s picture with the page which has been liked.²³⁰ The importance of understanding the extended functionality in this way is clear when it is considered that the court in this instance sought to challenge the sufficiency of the act to meet First Amendment requirements. Though not a party to the legal challenge, a brief submitted by Facebook themselves to the subsequent appeal court notes that the effects of using the “like” feature, in particular the publicity and association consequences, renders the use of it in these circumstances as akin to ‘the 21st-century equivalent of a front-yard campaign sign’²³¹.

In an online post made shortly after the ruling, Professor of Law Eric Goldman – while making similar observations regarding the real effect of using the “like” option – remarks that ‘these are only the implications that occur off the top of my head’²³². Goldman’s remark reflects upon the ability of those who are users and those who are non-users of Facebook to interpret the architecture of the site. That it is possible with a few moments thought to recall the multiple implications of a single action suggests that the interpretation of a site’s architecture can be understood in vastly different ways. While Goldman seeks to criticise Facebook for not clarifying the range of implications a single action can have, this raises a broader question regarding the visibility and interpretation of digital architecture. That it is possible, even under misguided judgement, for Facebook to be ruled to have developed a form of expression that cannot be constitutionally protected as freedom of speech implicates the enormity of consequences which can arise from users conforming to behaviour which the site’s design seeks to encourage – as Robbins concludes, affirming the approach in this case would see the right of free speech ‘censored and chilled’²³³. Similarly, that a user’s interpretation of this architecture might vary so significantly to a legal interpretation emphasises the importance of understanding online behaviour in the social network environment.

²³⁰ Robbins, I P (2013, 131-132)

²³¹ Brief of Facebook, Inc. as *amicus curiae* for Bland et al v Roberts, 4th US Circuit Court of Appeals, No. 12-1671 <<http://www.dmlp.org/sites/dmlp.org/files/2012-08-06-Facebook%20Amicus%20Brief.pdf>> 13

²³² Goldman, E ‘Facebook “Likes” Aren’t Speech Protected By the First Amendment–Bland v. Roberts’ (*Technology and Marketing Law Blog*, 26th April 2012) <http://blog.ericgoldman.org/archives/2012/04/facebook_likes.htm> last accessed 9/09/13

²³³ Robbins, I P (2013, 151)

This chapter has sought to explore the way in which qualities of the internet – expressed through digital architecture – can guide behaviour. Whether it be from the creation of future harms due to archived content or from perceptions of instability or specific design elements, the capacity for architecture to communicate values, order the space in which interactions occur, and influence the decisions of users demonstrates the importance of recognising the role of architecture.

In the analysis that follows, I turn to the experiences of teenage Facebook users to determine the extent to which architectural influence can be seen in the practices of this user group. By focussing simultaneously on the ability of architecture to structure these experiences, in addition to the ability of teenagers to interpret and negotiate the environment which it creates, the capacity of teenagers to critically engage with regulatory forces and normative discourse will be explored.

III. FIELDWORK ANALYSIS PART ONE

In the following two chapters I will offer both a presentation and analysis of the fieldwork conducted. In chapter three I will focus firstly on the concept of building a community of “friends” on Facebook both as the subject of behavioural norms and expectations, and as the building blocks of an audience which forms the setting for all other Facebook actions. Secondly, the role of architecture on Facebook in coercing certain behaviours through the aggregation of content will be explored wherein I claim the algorithmic determination of how a person observes other people’s behaviour acts to communicate norms as well as enforce them. In the fourth chapter, the particular norms and practices which participants discussed will be analysed in greater depth by distinguishing particular practices.

1. Facebook “friends” and building relationships

1a. A certain type of relationship

You don’t know everyone you have on Facebook really, really well. – Helena

It’s like building a community, you can often relate to what they’re talking about or what’s being posted about – George

The opportunities which Facebook affords young adults to create connections between profiles, a process Boyd terms ‘friending’²³⁴ is perhaps the best known feature of this and many other social networking sites and is one that must be discussed in order for any analysis of the norms and practices which might govern content creation or reception to take place. On Facebook those who are classed as friends form both an audience and a context in which these activities take place, yet there is some disagreement as to what the term should mean in relation to online social networks. For the purpose of this analysis I adopt Richardson and Hessey’s view that what is meant by the word “friend” is a ‘complex, heterogeneous and variable category’²³⁵ and as such is best discussed in the language of relationships between people, and not friendship as a category defined by Facebook.

Facebook represents a departure from existing studies of online groups as, unlike MUDs or virtual worlds such as Second Life, it is well established that the primary purpose of social networking sites such as Facebook is to build upon its users’ existing relationships²³⁶. To this end, the features of the site and architectural possibilities to make “friends” is important as it may alter the ways in which its users interpret the meaning of friendship, the norms that this inherits and those that develop in consequence²³⁷.

The concept of making friends online fits neatly into a long held concern of computer mediated interactions that relationships between users would be weaker, or, in other ways created and sustained differently to those making friends offline. In 2012, a review of Facebook research in the social sciences revealed that a total of 27 per cent of the literature examined (112 articles) focused on the way in which Facebook is affecting relationships between individuals²³⁸. While much of this research has focused on relationships between those beyond school age, the subject of making friends is of particular interest in relation to the demographic chosen in this dissertation of those between the age of sixteen and eighteen.

Just short of entering the adult world, but in many instances shielded from exposure to it, relationships between adolescents are particularly formative. Friendship in this sense should not be taken to be a binary matter of friend or not. However, the design of Facebook might

²³⁴ Boyd, D (2008)

²³⁵ Richardson, K (2009, 29)

²³⁶ Bevan, J *et al* (2012, 1458); Subrahmanyam, K (2008, 1)

²³⁷ Hull, G *et al* (2011, 293). The activity itself is a constitutive norm in that “friending” (and being available to be added as a friend) is a required part of the way in which Facebook must be used.

²³⁸ Wilson, E *et al* (2012, 211-212)

support such a conclusion if one were to examine the way in which friends are portrayed on the site. When asked, all participants were able to confidently report how many “friends” they had on Facebook to the nearest hundred without much hesitation. Responses ranged from 200 to 1,400 per individual. While participants were often quick to express some recognition of the dissonance, or at least unlikely prospect of having hundreds of “friends”, in only one case did a participant express any feelings of embarrassment in relation to their high friend count.

This sentiment expressed by the vast majority of participants (albeit by a lack of reaction) indicates that the type of relationships that are maintained on Facebook extend beyond the binary of “friend or not” that the site suggests. On Facebook, “friends” are identified, collated, displayed, and searchable and in many ways treated as an object of data. However, the argument that Facebook transforms the meaning of friendship or in other ways negatively affects the quality or strength of those relationships is true only if it is also true to say that those who use Facebook treat their online friendships as if they were all the same.

While responses varied with regards to how participants interpreted their Facebook “friends”, none expressed that those listed as friends were solely a given type of friend, or a group of people who they would consider as having a certain class of relationship with. Trent indicated that ‘although I have 500 friends I only really talk to 20 of them’. Stating that the others have simply ‘accumulated over time’ Trent expressed something which was common in all responses and echoed as follows by George – that when it comes to the quantity of “friends” one has on Facebook ‘it’s almost like collecting really’.

Comparing the function of the site to more like ‘informal networking’ (Guy), participants indicated that the ease with which Facebook allows you to add somebody as a friend meant that they were more easily able to stay in touch and interact with those who they had only minor connections with. For many people, the organisation and structuring of their social activities outside of Facebook was important when considering whether or not to add someone on Facebook. Speaking on this point, Henry said that ‘to add someone on Facebook all you need is their name, you don’t need to write down their phone number or email addresses’. In extension, it is clear that the architectural nature of Facebook is at least a factor in these decisions. Identifying an individual as someone who might play a role in future social events, it is possible with only the smallest amount of information (information that may not need to be given by those in question) to add someone as a friend.

The ease with which this can be achieved is important not only because it allows people to easily add large numbers of friends, but because the burden of personal information required to do this is directly related to the cost of falsifying it. Donath notes that in previous versions of the social networking site LinkedIn, users were required to provide the email address of the person they sought to connect with²³⁹. In doing so, this not only increased the cost of falsifying “knowing” that person (e.g. by having to find a valid email address attached to a profile) but also the reproach with which the person is met, the more personal that information requirement became.

That Facebook facilitates the relationships of those only loosely connected is in keeping with conclusions made by others having researched the practice of friending. Writing on how Facebook acts as an enabler to these kinds of connections, Lewis and West go so far as to introduce the idea that this represents a category of friend²⁴⁰. That these categories of friends exist and that they are actively thought about seems to be evident from the kinds of considerations that are made at the point of connecting on Facebook. What is interesting is that while the intention behind friending a person on Facebook varies, the treatment which they receive (that is, status as a “friend”) is the same for each. What results is an aggregated list of a person’s “friends” which represents a much richer and diverse population than Facebook’s terminology allows us to observe. This reflects the idea that Facebook serves as a way of ‘archiving the self, storing biography and enhancing social memory’²⁴¹ while simultaneously altering the way in which relationships are sustained. Relationships are, in effect, archived for later use.

While Facebook’s nomenclature almost certainly dates back to the relatively closed nature of the site in 2004 when it was accessible only to Harvard students, and later those from surrounding universities, what is observable is that people’s understanding of what it means to be a friend on Facebook overrides what the term “friend” itself would suggest if understood in a classical sense. On Facebook, the norm is not to add only those who you have a close pre-existing relationship with, but those you have *some* relationship with. While responses varied to suggest that this relation could be geographical (both in past and present circumstances),

²³⁹ Donath, J (2008, 234)

²⁴⁰ Lewis, J and West, A (2009, 1218)

²⁴¹ ‘Facebook: Changing the nature of friendship’ (*Cambridge Research News*, 23rd October 2008)

<<http://www.cam.ac.uk/research/news/facebook-changing-the-nature-of-friendship>> last accessed 25/07/13

related to family connections, schooling, interests, activities and more, the clear convention was that there need be a shared connection of some type.

Architecturally Facebook can be seen to encourage this behaviour. By placing emphasis on the number of “mutual friends” you and another person has, Facebook makes an interesting attempt at quantifying the strength of a connection. Moreover, while this information appears in a number of situations as an additional aid to gauging the quality of a connection (e.g. under a friend’s name, in friend lists, on profiles), Facebook uses this data actively to suggest “people you may know” purely on the basis of having these mutual friends.



If someone adds you on Facebook, even if you don’t know them that well if you’ve got like 200 mutual friends you’re way more likely to accept. – Craig

There’s this related friends feature, and people just click add add add add add. – Gregory



Users of Facebook are consistently subjected to the idea that if you are “connected” with another person then you should add them on Facebook.

Moreover, it is interesting to note that what is being stressed is the opportunity to add a person as a friend. Participants often remarked that what was valuable about Facebook was the way in which it behaves as a communication *tool*. In this sense, what matters is not the communications made between two people, but the opportunity which Facebook affords those people to communicate. In terms of commitment, entering in to a Facebook friendship is a low maintenance act. In 2000 – a time before Facebook and well before the mass adoption of social media – Pahl remarked that friendship ‘requires time for it to flourish and develop’ and that the nature of hectic modern life might render friendship itself too demanding²⁴². Whilst care must be taken not to assume that Pahl’s understanding of friendship can be applied to Facebook, a tentative conclusion can be made that the opportunity for Facebook to allow for friendships to develop at a different pace has been recognised.

²⁴² Pahl, R (2000, 86)

The architectural design of Facebook encourages certain types of connections between users not only by positively providing opportunities to add friends but also by enforcing sanctions and warnings towards those who appear to be taking advantage of these tools. Their documentation notes that a user may be barred from sending friend requests or otherwise given warnings for such activities as ‘sending friend requests to a bunch of people you don't know’²⁴³. While typically ambiguous, and having refrained from indicating how “knowing” a person is interpreted or to what extent a person must overuse this feature to be said to have sent a “bunch” of requests, Facebook has engaged with norm setting by practicing the use of architectural constraints on certain types of behaviour.

With only one exception all participants indicated that the friending practices as described were considered the norm, particularly in cases where two people shared important pieces of user submitted profile information such as having attended the same school. Gregory indicated that while he expected this kind of behaviour, he had actively altered some of his information so as to avoid appearing – or being recognised – in areas of the site that would encourage others to add him as a friend. By truncating his full name as displayed on his profile he achieved this, as well as preventing people from finding his profile by searching for his name thus increasing the amount of information needed about him in order to locate his profile.

Gregory’s actions demonstrate an awareness of shared and normalised behaviours on the site as well as a reaction to them. What he had realised is that despite a full name being required as part of the architecture of both the signing up process and profile display template, by removing a small amount of his information (last name) he had managed both to secure his online presence against unwanted attention and simultaneously conform to any norms which expect a true online representation of oneself by way of providing your real name. Boyd terms the similar practice of providing inaccurate data under such conditions as ‘safety through inaccuracy’²⁴⁴.

Teens have been socialized into practices of online deception and they have internalized safety warnings such that they believe that providing inaccurate information makes them safer and wards off unwanted contact.²⁴⁵

²⁴³ ‘Warnings’ (*Facebook Help Centre*, nd) <<https://www.facebook.com/help/101389386674555/>> last accessed 10/09/2013

²⁴⁴ Boyd, D (2008a, 153-159)

²⁴⁵ *ibid* 157-158

Gregory did not consider himself to be providing inaccurate information, instead having merely truncated what was truthful. Moreover, his actions were not a reaction to safety concerns as Boyd found in her study. Instead, they were a result of a low level feeling of annoyance when those with what he felt were unnecessary reasons to add him as a friend, did so. It is notable that the decision to truncate their name, a form of 'adaptive coping behavior'²⁴⁶, was a decision made against an understanding of how architecture guided and encouraged the certain behaviours of others. Gregory's choice to protect his profile in such a way is a particularly insightful demonstration of the way in which practices evolve against a setting of mixed norms of personal standards, community standards and standards encouraged by site design as well as an indication that the kind of 'cognitive adjustment' Mayer-Schönberger proposed may take place.

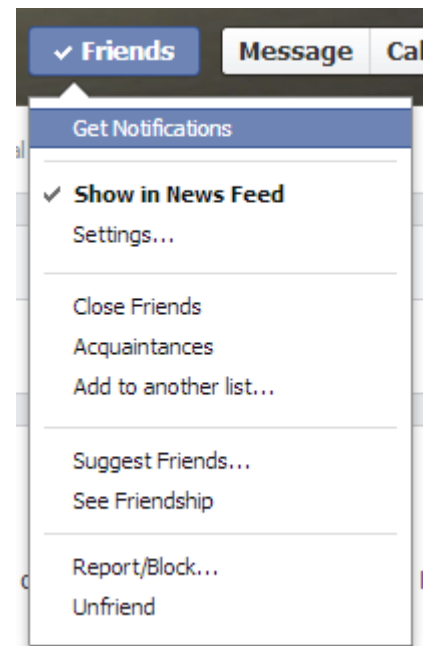
With friendships of this nature taking place it is possible to infer that the likelihood of these connections remaining valuable over time is relatively low. This is particularly relevant to Facebook users of the age group studied as social groups tend to be closely related to school and extracurricular environments. If two people were to connect on the basis they may likely see each other in the future at mutual friend gatherings, the reason to stay connected is negated if circumstances change. A recent study of the process of 'unfriending' (removing the link between two profiles) would suggest that changes of this nature are likely to instigate the process of removing a friend from Facebook²⁴⁷. However, participants indicated that unfriending was not common practice with only a single participant stating that they regularly did so.

²⁴⁶ For information see Youn, S. 'Teenagers' Perceptions of Online Privacy and Coping Behaviors: A Risk-Benefit Appraisal Approach', *Journal Of Broadcasting & Electronic Media* 49 1 (2005) 86

²⁴⁷ Bevan, J *et al* (2012)

In some cases individuals expressed that unfriending was not uncommon because of a lack of desire to remove friendships, but instead the decision whether or not to unfriend someone was related to the cost involved in doing so.

Milly said of “unfriending” that ‘it’s really hard to delete your friends quickly and easily’. Expressing her frustration with this fact she stated that she ‘would like to almost start a new one [profile] and start again – but it’s more hassle than its worth’. Milly represented both the sense of investment of time that many had in regards to their Facebook profile as well as the way in which the user experience on Facebook is unevenly weighted towards adding new friends.



While various changes have been made over time to the way in which Facebook allows you to unfriend, the latest incarnation of the process (above) demonstrates the hierarchy of options which are provided by the site. Notably, options to simply not “show” updates from a person (a theme which will be explored in greater depth in a forthcoming section) as well as options to categorise them into lesser friend groups appear well ahead of the option to unfriend. While this represents a marked improvement over previous version of Facebook’s profiles which once saw the only option to unfriend being placed in small type at the very bottom of a person’s profile, the push to alter the way in which you engage with a person is clearly prioritised over the option to unfriend.

Grabowicz *et al* noted that ‘connections can accumulate due to the asymmetric social cost of cutting and creating them, and pile up to the astronomic numbers’²⁴⁸. To this, it would seem, it is possible to add the cost in time needed to cut ties. While Grabowicz’s work focuses on the application of Granovetter’s ‘The Strength of Weak Ties’²⁴⁹ theory to the social network site Twitter, their insight is worth considering in light of the Facebook relationship forming practices described in this chapter. Though Granovetter’s theory is applied to offline networks, the application to an online social network allowed Grabowicz to consider both a site’s architecture and the practices of those who use it to find evidence of offline behaviour in online

²⁴⁸ Grabowicz, P A *et al* (2012, 1)

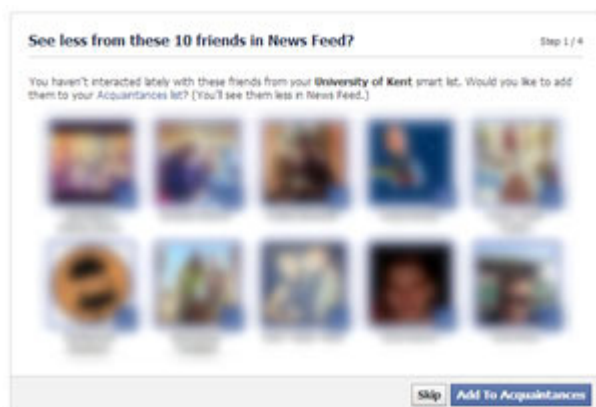
²⁴⁹ See Granovetter, M S ‘The Strength of Weak Ties’ *American Journal of Sociology* 78 6 (1973) 1360-1380

sites. Importantly, the application of a theory of weak ties offers a critique grounded in theory to the idea that relationships or communities are diluted by increased numbers. Instead, the role of weak ties to information flow within that community is highlighted.

It is possible to see from Grabowicz's explanation that 'intermediary users belong to multiple groups and play an important role in the spreading of information'²⁵⁰, that a person with a weak tie to another person may themselves strengthen the flow of information within a community by being associated with other people or other groups within it. Richard and Hessey note that Wellman has supported this idea, claiming that 'computer-mediated communication accelerates the ways in which people operate at the centre of partial, personal communities, switching rapidly and frequently between groups of ties'. Moreover, social networks 'sustain strong, intermediate and weak ties that provide information and social support in both specialized and broad-based relationships'²⁵¹. Reflecting on the nature of Facebook relationships and the group of participants in this study, it may be possible to conclude that a reluctance to unfriend stems not only from the cost of doing so, but is a response to an appreciation of the role of some connections in group cohesion.

Recent revisions to the site have users being prompted to take action against those people who they do not interact with frequently.

"You haven't interacted lately with these friends. Would you like to add them to your Acquaintances list? (You'll see them less in News Feed.)"²⁵²



Facebook's attempt to encourage people to form categories of relationships is not new. The oft-cited example of Myspace's "Top 8" friends, mirrored in similar ways in previous

versions of Facebook profiles has been shown to directly translate into something of social capital²⁵³. While features such as this might be said to be those which would clearly hold some

²⁵⁰ Grabowicz, P A *et al* (2012, 5)

²⁵¹ Wellman, B cited in Richardson, K and Hessey, S (2009, 29)

²⁵² <<https://www.facebook.com/friends/organize?source=all>>

²⁵³ Boyd, D (2008a, 223) Participants of Boyd's study stated: 'Taking someone off your Top 8 is your new passive-aggressive power play when someone pisses you off' (Nadine); 'If you're in someone else's, you have to put them in yours' (Austin).

significance, even seemingly innocuous design decisions can be seen to have similar effects. Notably, the design to quantify and display the number of “friends” on a person’s profile can be seen to impact the way in which that person is perceived²⁵⁴.

1b. Facebook as a social space

While in certain areas of conversation participants took some time to consider their responses, it is significant that discussing the ways in which they deliberate types of appropriate content and how they interact with others and that content often led to an abundance of anecdotal experiences. The importance of this is that the Facebook website itself no longer seemed to be a phenomenon to participants. Instead, those willing to tell stories would do so in many ways as if they could have happened in any social geography, and often lacked reflection of the way in which their experiences were shaped by taking place online.

The dominant line of thought from participants was that while on Facebook, you are where your friends are. Though participants’ uses of Facebook varied, this much was clear from all involved. Themes of talking to friends, keeping in touch, planning events and just “hanging out” online dominated discussions of what kinds of activities were associated with Facebook.

But why is this the case? In part this must be attributed to the design of Facebook as a networking website. The creation of a profile and connecting with friends on Facebook is demanded before other activities can take place. The site is designed in such a way that it is portrayed solely as an intermediary between you and your friends claiming to help ‘connect with friends and the world around you’²⁵⁵. After creating a profile (a process which comes with the mandatory expense of some disclosure of personal information²⁵⁶) users are immediately set to task adding (or, as participants have suggested ‘collecting’) friends. Knowing relatively little about you and thus lacking processable information from which to produce suggestions, Facebook offers the ability to add friends using various bits of information such as an email address associated with a profile. The higher burden of information at this stage determines the kind of people a new user is able to add and inevitably leads to a reproduction of a person’s offline friend groups.

²⁵⁴ See for example Tong, S T *et al* (2008, 535-537)

²⁵⁵ ‘Welcome to Facebook’, (Facebook homepage, nd) <<https://www.facebook.com/>> last accessed 10/09/13

²⁵⁶ Light, B and McGrath, K (2010, 297)

While this may go some way to explaining the feeling that Facebook represents a collection of friends rather than merely a site where friends are accessible, this sentiment is difficult to comprehend, particularly when expressed by those who have over time amassed thousands of “friends” connected to their Facebook profile. Despite the multitude of connections Facebook users make, the site manages to maintain the feeling of being a close-knit group of people.

Miller poses a question which seeks to take this analysis a step further.

What if, instead of seeing Facebook as a means of facilitating friendships between people, many of us used friendships between people to facilitate a relationship to Facebook itself?²⁵⁷

Identifying this hypothetical relationship as the ‘meta-friend’, Miller suggests that Facebook acts itself as a ‘totally reliable best friend’²⁵⁸ by mimicking the features which a person values in a friendship. Validating this idea is not the concern of this dissertation. However, it is worth noting that it was not uncommon for participants to refer to qualities of their Facebook friends as being qualities of Facebook.

This type of immersion in the environment of Facebook itself bears similarity to the ‘perceptual illusion of nonmediation’ which Soukup posits is required of the ‘virtual *third-place* experience’²⁵⁹.

1c. A third place

Participants commonly expressed an idea of Facebook as somewhere where their friends are, where they are free to “hangout” and where people can talk and stay connected. Oldenburg’s publication of *The Great Good Place* addresses precisely these areas where he claims ‘community is most alive and people are most themselves’²⁶⁰. As a response to the lack of informal-public gathering places in American daily life, Oldenburg develops the notion of the ‘third place’. Noting the difficulty in finding a term for places which are ‘beyond the realms of

²⁵⁷ Miller, D (2011, 170)

²⁵⁸ *ibid* 171

²⁵⁹ Soukup, C (2006, 435); my emphasis.

²⁶⁰ Oldenburg, R (1999, 20)

home and work'²⁶¹ (interestingly dismissing 'hangout' due to its negative connotations²⁶²), the term 'third place' is chosen to describe those places which 'host the regular, voluntary, informal and happily anticipated gatherings of individuals'²⁶³.

While some caution need be exercised in applying Oldenburg's observations of third places to the internet, himself expressing disbelief that this would be possible²⁶⁴, some notable similarities in his characteristics of third places are apparent²⁶⁵. Moreover, his understanding of how relationships are developed and sustained mirrors the behaviour observed on Facebook. Oldenburg writes that it is 'a fact of social life that the number, kind and availability of friends depend upon *where* one may engage them'²⁶⁶. Poignantly, he recognises that environments which encourage relationships where the 'membership requirements are exceedingly modest'²⁶⁷ allows a person more choice to experience the range of benefits which can be had from friends who would be 'limited by the narrowness of personal choice'²⁶⁸. These observations are directly relevant to the practices which were apparent when forming relationships on Facebook, and to some extent addresses the question of friend value. Additionally, the comparison raises questions as to what extent Facebook's success is down to its architectural similarity to the type of informal meeting places which Oldenburg prizes.

²⁶¹ *ibid* 16

²⁶² *ibid* 15-16

²⁶³ Oldenburg, R (1999, 16)

²⁶⁴ 'The only predictable social consequence of technological advancement is that they will grow ever more apart from one another' Oldenburg, R (1999, xxvii); 'It seems quite likely that he does not believe that communication technologies can foster authentic or legitimate third places'. Soukup, C (2006, 426)

²⁶⁵ For example, that third places must be 'neutral ground' whereby 'none are required to play host' is particularly relevant given the nature of the Facebook platform which sees no one user in any managing capacity. Secondly, Oldenburg's requires that a third place be a 'leveler', which 'serve to expand possibilities' of friendship beyond the social ranking associated with 'formal associations'. While this dissertation has avoided the topic of identity and representation online for the most part, it is noteworthy that participants frequently remarked that the technological affordances of online communicating allowed some to 'change identity on Facebook' and 'be seen for the better' (Madeline). Most commonly, responses of this nature reflected positively on the fact that Facebook communications limited the anxieties associated with communicating with others offline (such as immediacy of response, physical interaction, embarrassment) and as such allows for those who would infrequently interact offline to do so more regularly online. That Oldenburg requires a 'leveler' to allow individuals to know others 'in a different and fuller aspect' also harks of practices amongst users of observation. Though more evidence can be submitted in favour of the possibility of Facebook being a third place per Oldenburg's definition (e.g. of the requirement that there be regulars which characterise the place, a propensity of participants to categorise types of Facebook user by their most common activities can be observed) it is not the claim of this section that this is the case.

²⁶⁶ Oldenburg, R (1999, 60); emphasis in original.

²⁶⁷ *ibid* 20

²⁶⁸ *ibid*

2. The development of norms

So if I do something – it’s like a magnifier effect or a chain effect – so if I do something then others might do it or equally might not do it, intentionally. So the whole community learns, there’s this unwritten etiquette of Facebook that’s just developed through time through existing friends like evolution. So you see what your friends are doing, if you’re a new user, then you feel comfortable doing it and adapt it. – Gregory

What emerged time and time again was that when it came to the norms which would develop and guide behaviour, there exists a perceived obligation to consider the reactions of those who would observe your behaviour (and therefore necessitate an assessment of who you thought would observe it).

These standards, which were said to emerge from what ‘your friends are doing’ indicates that the kind of norms that operate on Facebook are implicitly developed between users and are not dependant on codified standards such as written community guidelines observable in some online communities²⁶⁹. This finding supports the work of Hooper and Kalidas who found that ‘when it came to determining what was and what was not acceptable behaviour on Facebook, a recurring theme amongst respondents was to observe others’ behaviour and then copy what they perceived as acceptable’²⁷⁰.

Burnett and Bonnici note that implicit norms can be said to be those which are ‘present in the day-to-day interactions between members of the community through often unspoken (but observable) behaviours’²⁷¹. The creation of normativity through exposure to interactions thus is characterised by the interactions to which one is exposed. While behavioural patterns may be observable within these reactions, the type of behaviours will vary with those interactions.

Participants frequently suggested that while they may have a large number of friends, interactions often only occur between much smaller numbers of people. Remarks such as ‘the number of people that I actually, actively speak to on a regular basis is probably 5 or 10’ (Madeline) and ‘although I have 500 friends I only really talk to 20 of them’ (Trent) were often made in part of wider discussions of how a “friend” was defined. Analysis in 2009 by Facebook data scientist Cameron Marlow supports this finding, determining that in the range of users

²⁶⁹ See for example ‘reddiquette’ on for users of reddit.com. ‘reddiquette’ (*Reddit*, 2nd April 2013) <<http://www.reddit.com/wiki/reddiquette>> last accessed 10/09/2013

²⁷⁰ Hooper, V and Kalidas, T (2012, 263)

²⁷¹ Burnett, G and Bonnici, L (2003, 341)

who have 500 friends, on average women interacted most frequently with 26 friends, with men only interacting with 17²⁷². In further discussions, it became clear that although often expressed in a way which suggests that only talking to small numbers of people is a positive decision not to include many from the larger number of “friends”, who a person interacts with is more often decided on the basis of visibility and exposure.

When asked by what standards a participant decided what to share or not to share, and what content they saw as appropriate to be seen on Facebook, participants often referred to an obligation to consider the reactions of others. Found in various forms (an obligation to consider a person’s feelings, a desire to be interesting to others, fears of vaguely identifying others and more), remarks of this nature were consistent and were presented not solely as expectations of the self but expectations of the wider community.

However, while all participants were aware of the number of friends they had associated to their profiles, the expectation of who would be able to see content they had shared was often incongruent with the possible audience for that content. Guy said ‘you basically just think it’s going to be your close friends viewing it. They’re the people that usually comment on it, they’re the people that usually like it. You don’t realise that people outside of that group of friends are looking at it’. Similarly, Helena stated ‘you only think about a maximum of 10 people, even if like everyone can see it’.

This conceptualisation of the audience of shared material as something much smaller than the theoretically infinite range for which Facebook allows²⁷³ goes some way to explaining the dichotomy which has been observed by some that ‘although FB members express, in general, significant concern about their privacy, they are not particularly concerned for their privacy *on* FB’²⁷⁴.

Analysing the exposure of participants to interactions on Facebook by those in their friend group is as much a practical problem as an architectural one. Firstly, participants may not see interactions from some friends simply due to the way in which that friend uses Facebook. As much as it is unwise to assume all youths use Facebook in the same way, it is unwise to assume that some use it at all or that those who have once used it will continue to do so. A user

²⁷² ‘Primates on Facebook’ (*The Economist*, 26th February 2009)

<http://www.economist.com/node/13176775?story_id=13176775> last accessed 10/09/13

²⁷³ By enabling content to be viewed by anyone through the site’s privacy settings.

²⁷⁴ Acquisti, A and Gross, R (2006, 37); emphasis in original.

of Facebook who spends many hours of the day using the site will inevitably interact less with someone who uses it once a month, and this natural information ordering should not be underestimated.

Secondly, given the way in which the site's design allows users to quickly and easily connect with multitudes of people, it has been reported that for some 'it is hard to even remember whom they listed as Friends, let alone assess the different ways in which they might interpret information'²⁷⁵. While there may be a desire to consider the audience of any given content, the sheer magnitude of people involved increases the cost of assessing this.

Thirdly – and most relevantly from an architectural sense – it is important that the role of the Facebook website as an aggregator of information is not overlooked. If implicit norms depend on observable behaviours within interactions, then the aggregation of those interactions is directly involved in the creation of those norms. An important distinction must be made at this juncture. In conversation, participants would often interchange notions of “talking” to other users and “interacting” with others users. With regards to the perception of norms, participants were concerned not only with direct interactions (“talking”) with other people but also of those they witnessed between other users. Miller notes that although, as indicated, the category of people with whom a person interacts directly remains relatively small on Facebook, this is distinct from the type of behaviour which sees users ‘commonly observe the postings’ of a wider range of people²⁷⁶. Moreover, Burnett and Bonnici indicate that if community is to be found online, it is ‘not a series of one-to-one interactions but is publicly shared’²⁷⁷.

The observation of other users' behaviours is an integral part of the process of self-evaluation and reflection that is exercised when making decisions as to how to engage on Facebook. While some such as Karakayali and Kilic have gone so far as to analyse the ‘analytic labour’²⁷⁸ involved in this process as a response to the challenges posed by social networking sites, there is evidence enough in the fact that evaluations of behaviour from participants (both of themselves and others) were often made in relation to a *type* of user whose behaviour fell within a certain category. For example, those who asserted that some of their friends were “oversharers” (posting too frequently or trivially) identified this behaviour by the violation of

²⁷⁵ Boyd, D (2008b, 16)

²⁷⁶ Miller, D (2011, 182)

²⁷⁷ Burnett, G and Bonnici, L (2003, 336)

²⁷⁸ Karakayali, N and Kilic, A (2013)

a norm by which they governed their own actions. The question which this raises is the extent to which the visible activity on Facebook is representative of the activity of their friends, and to what extent architecture governs what *can* be observed.

Described as the ‘central hub’ through which most interactions occur by Gregory²⁷⁹, the Facebook “News Feed” is presented to users when they first login to the site and acts as a central hub of information flow between users. In a way that is ‘akin to the algorithmic logic of search engines’²⁸⁰, the “News Feed” through its default setting of “Top stories” seeks to display to users only those interactions which the site deems as the ‘most interesting’ to that person²⁸¹. Through an algorithmic balance of relationship strength, type of interaction and time²⁸² the site departs from its approach in other areas and makes a basic assumption that the relationship between users is not equal²⁸³ in order to determine which interactions are of most interest and to visualise them accordingly. The “News Feed” thus provides an excellent example of the way in which architectural designs can interact with normative practices.²⁸⁴

The significance of this is twofold. Firstly, normative orders are unable to develop independently of the site’s architecture if it is directly involved in the way in which users can observe people’s behaviours. Karakayali and Kilic note that one of the ways which users often evaluate other user’s behaviour is to consider the frequency of posting²⁸⁵. Noting that ‘the main question here is how talkative or passive/quiet a user is’²⁸⁶, there are direct consequences to the way in which a user would be compared to the ‘normal’ (a standard itself that must be constructed from similar observations) if an algorithmic decision determines that only a subset of all interactions are to be seen by the user on the “News Feed”.

²⁷⁹ ‘The news feed orchestrates most of my actions, it’s the central hub’ – Gregory

²⁸⁰ Bucher, T (2012, 1167)

²⁸¹ ‘How News Feed Works’ (*Facebook Help Centre*, nd) <<https://www.facebook.com/help/327131014036297/>> last accessed 09/09/13

²⁸² Bucher, T (2012, 1167)

²⁸³ *ibid* 1168

²⁸⁴ This is particularly true in light of the fact that Bucher, in keeping with the theme of this dissertation, stresses that an algorithmic relation is not a deterministic one. She notes that it ‘is not something that merely acts upon users from above, but rather that power arises from its interrelationships with users’. See Bucher, T (2012, 1172)

²⁸⁵ Karakayali, N and Kilic, A (2013, 185)

²⁸⁶ *ibid*

Secondly, the frequency with which various types of interactions and their content are displayed determine their own importance and subsequently the type of interactions likely to take place therein.

They [Facebook] dictate how important it [content] is by deciding how often you see it
– George

Architecture rewards popularity with visibility by giving weight to the number of “likes” or “comments” an interaction such as a status update or other shared content on Facebook has received. Those with a high number of “likes” – regarded universally by participants as a sign of a positively received interaction²⁸⁷ – are more visible than those with a low number. With an average of 1,500 potential “stories” (interactions and other content) to choose from per user at any given time²⁸⁸, this is not only influential in so far as dictating what kinds of content are seen as ideal on Facebook but also, as Bucher notes, constructs the idea that ‘a useful individual is one who participates, communicates and interacts’²⁸⁹.

A negative reaction would look like nothing, so no likes no comments no nothing. That would probably be even worse than people commenting negatively, just to be completely ignored. That’s probably why I almost censor my thoughts on Facebook, just in case I don’t come across as interesting - Gregory

Gregory explains in his own words the way in which liking and commenting features act as a signifier of a positive reception as well as the way in which the absence of these signals leads to modification in his behaviour in order to ‘approximate the normal’²⁹⁰.

My homepage is often dominated with funny photos or funny conversations people have shared. – George

²⁸⁷ The language and delivering of positive feedback has also recently been explored from a neurobiology point of view utilising brain imaging to explore the connection between social media use and those areas of the brain which govern self-reward. See Meshi, D *et al* ‘Nucleus accumbens response to gains in reputation for the self relative to gains for others predicts social media use’ (2013) *Frontiers in human neuroscience* 7

²⁸⁸ ‘...every time someone visits News Feed there are on average 1,500 potential stories from friends, people they follow and Pages for them to see, and most people don’t have enough time to see them all’ See Backstrom, L ‘News Feed FYI: A Window Into News Feed’ (*Facebook for Business*, 6th August 2013)
<<https://www.facebook.com/facebookforbusiness/news/News-Feed-FYI-A-Window-Into-News-Feed>> last accessed 10/09/13

²⁸⁹ Bucher, T (2012, 1175)

²⁹⁰ *ibid* 1176

If someone's sharing a status I feel as if it should be important, like a landmark rather than "I'm just going to the shop". It's just kind of dull, and I don't like seeing it. – Robin

If I'm uploading something I'm not thinking that everyone can see it, just that this is funny and I want so, so and so to see this. – Philippa

Though Facebook relies on its users to report content which is harmful or otherwise against its term of use, by affecting the visibility of content the site engages in a process that Kraut *et al* term 'coercing compliance'²⁹¹. This kind of behaviour modification is agreeable with McAdams' esteem based model of norms which is premised on the idea that 'norms arise because people seek the esteem of others'²⁹². That users might positively change their content sharing standards in order to receive positive feedback indicates the presence of norms which rely both on the feedback of others, as well as the opportunity to be seen to be complying with those norms. However, on Facebook this process is mediated by the site's architecture. By using various factors to determine the number of people who will be exposed to, for example, a status update, the site can be said to be playing a role in the way in which people are introduced to and learn norms. Moreover, controlling the visibility of shared content not only reduces its exposure in a way which limits the frequency with which users are shown 'unpopular' content, but simultaneously acts in a way which limits the association of that content to the person who posts it. Though Facebook cannot be said to be using the sandbox technique that can be observed of some online communities such as Wikipedia and Second Life²⁹³, that exposure of undesired content is limited by architecture might well function to socialise new members into adhering to community norms.

On controlling visibility, Kraut describes a type of pre-approval of content which might more readily be associated with communities formed around bulletin boards or forum software where a more formal hierarchy of power is often established²⁹⁴. Noting that there are 'several ways to disguise a gag or ban'²⁹⁵, Kraut describes a way in which architectural decisions can be used in order to alter the feedback a person receives after posting:

²⁹¹ Kraut, R E *et al* (2012, 136)

²⁹² McAdams, R (1997, 335)

²⁹³ "Sandboxes are safe, isolated areas for exploration and skill development" Kraut, R E *et al* (2011, 218-219)

²⁹⁴ For example, by appointment of moderators – a group of users with special permissions.

²⁹⁵ Kraut, R E *et al* (2012, 131-136)

For example, in a chat room, the gagged person may see an echo of everything she types, but her comments may not be displayed to others in the room. The gagged person may think that everyone is just ignoring her.²⁹⁶

What's notable in this action is the appearance of a user receiving feedback which they might otherwise have not, leading to assumptions forming about the nature of a community which if left unmediated by the site's architecture, may otherwise not have been formed. What this reveals is that if the design of a site's feature such as the "News Feed" aggregates content in such a way as to interfere with how users would observe that content, it simultaneously affects the opportunity for users from whom that content originated to experience feedback. On Facebook, this is both a mechanism by which to produce norms as well as to enforce them. What is interesting to note here is the balance between what the user inputs in feedback and the algorithmic design which suppresses a person's post. What is posted may be unpopular and thus given less exposure by the system, but is removed of its opportunity to be popular if suppressed before having had sufficient enough exposure for community feedback to be given. Grimmelmann, in his comparative law study of virtual world practices, stresses the need to understand what makes for an effective punishment online²⁹⁷. On Facebook it would seem that there is evidence to suggest that architectural construction and norms act to utilise visibility.

Kraut's work, *Evidence-Based Social Design: Mining the Social Sciences to Build Online Communities* published recently in 2012 represents one of the few acknowledgements of the role of architectural decisions in successful community building to date. Valuing both the agency of technology and the role of people as actors²⁹⁸, a series of "design claims" are made which highlight the opportunities which architecture provides to community builders to guide the behaviour of its users.

Similarly, Christofides *et al* provide an interesting remark which supports this idea:

Because need for popularity was found to be a significant predictor of disclosure on Facebook, the environment itself may enhance the saliency of popularity and its

²⁹⁶ *ibid*

²⁹⁷ Grimmelmann, J (2004, 168)

²⁹⁸ See for example the idea of a 'backfire' resulting from highlighting non-normative behaviour. Kraut, R E *et al* (2012, 87, 144)

importance in a social network. It may also be the case that Facebook makes information disclosure the key factor in assessing a person's popularity.²⁹⁹

What Christofides recognises is the capability of Facebook to 'enhance the saliency' (architecturally configure) of certain factors in order to shape patterns of behaviour which better suits its needs. By shaping an environment in which a person can both disappear as well as be promoted, the opportunity to be promoted can be subject to conforming to certain types of behaviour.

Influences of this nature impact not only on the social practices governing types of content sharing but in turn on the kind of relationships that flourish. Lewis and West note that 'the architecture of the site [Facebook] worked to encourage a particular form of communication between friends, based in the main on banter and gossip'³⁰⁰. While the small sample interviewed in this dissertation would allow only for tentative conclusions with regards to what types of relationships are encouraged, the role of architecture in determining content norms which in turn encourages forms of communication and relationships is clear. This issue has a wider importance when considered with research which claims that online activity of this sort is often an exercise in presenting themselves as they would wish to be seen by others³⁰¹.

This chapter has sought to highlight the way in which architecture influences processes within the community of Facebook users. From the construction of relationships to the governing of information flow within that community, the capacity of architecture to guide behaviour and for people to react and adapt to that guidance can be seen.

In the chapter that follows I will take a more detailed look at the way in which the participants of this study reacted to and developed practices in relation to the architectural influences discussed. For example, given the friending norms that have emerged in congruence with architecture, what practices have developed in order to cope with forming a type of relationship which would see acquaintances have access to personal information and in what ways do users verify the identity of those they would interact with? In what ways are values communicated by architecture embedded in the behaviour of users?

²⁹⁹ Christofides, E *et al* (2009, 343)

³⁰⁰ Lewis, J and West, A (2009, 1224)

³⁰¹ A theory which, as indicated in the findings of Pempek, some users are conscious of. See Pempek, T A *et al* (2009, 234).

IV. FIELDWORK ANALYSIS TWO

The focus of this chapter is delivered in three parts which seek to build upon the analysis of chapter three. First, practices developed with regards to common interactions on Facebook will be detailed. Norms regarding consideration, passivity and observation will be explained and set against their architectural influences. Secondly, authentication practices having emerged as a result of friending norms will be detailed, demonstrating the existence of behaviours which seek the implicit verification of identity through others, in addition to those which exist to service a desire to know more about a person or to establish identity through comparison of disclosed information. Finally, the way in which architecture, subsequent practices and teen's understanding of their environment engage with the notion of private and public spaces will be explored.

1. Identification of norms

Norms of the kind which emerge in settings like social networking sites are, by their nature, infrequently codified and rarely written down. This fact makes not only the identification of norms, but the separation of one norm from another problematic. Twining observes of norm theory in general the problem of determining 'what counts as one rule or one norm', derived from a lack of agreed vocabulary or theory³⁰².

Additionally, Facebook, a site which frequently makes additions and amendments to its design and feature set in ways which are instrumental to how people interact, infrequently provide a window of time in which to observe behaviour without the variable of design change. At the time of writing Facebook is rolling out changes to all users which affect the visibility and format of content as well as introducing refined methods of controlling what content a user sees, and from whom. In spite of this, participants indicated that shared practices governed their use of the site.

³⁰² Twining, W (2009, 479)

1a. Norm of consideration

You expect your friends to regulate what they put on [Facebook] about you really. –
Robin

The norm to consider fellow Facebook users is one which has two primary objectives. Firstly, participants often spoke of a desire to avoid offending through their use of the site and thus felt an obligation to consider the feelings of those who would be likely to observe their actions. Secondly, users were aware of the potential permanence of content which implicated another's involvement or interest in certain behaviours. Therefore, they were cautious when posting on profiles and uploading content such as a photo picturing a person in circumstances which they might not wish to be seen in.

The existence of this norm is testament to the idea that while users are engaged in an online environment in which interactions are primarily conducted through written word and other digital content, the friend group's initial basis in existing offline relationships³⁰³ means that more is considered in these interactions than what can be observed online. Though it must be said that the efficacy of this norm is reliant upon a person's appreciation of audience as previously discussed, participants often indicated that they were sensitive to topics which they knew were the cause of anxiety in those on their friends list.

Similar findings were indicated by McLaughlin and Vitak who stated that their participants infrequently experienced the posting of undesirable content onto their profiles by others³⁰⁴. While little is provided in the way of explanation as to why this norm had developed within their research group, a number of the participants of this study indicated that the death of a classmate had proved to be an event which had made themselves and others reflect upon what is appropriate to post on Facebook at that time. Even Madeline who defined her normal activity online as 'controversial' expressed reluctance to post on the topic. Events of this type are indicative of those which Feldman terms 'critical events in the group's history' whereby a precedent for future expectations and behaviours is set³⁰⁵.

³⁰³ Hull, G *et al* (2011, 293)

³⁰⁴ McLaughlin, C and Vitak, J (2011, 306-307)

³⁰⁵ Feldman, D (1984, 51)

This norm, the existence of which (however termed) is perhaps best found in evidence from McLaughlin and Vitak suggesting its efficacy, is clearest when discussed in relation to content posted from one user to another.

People don't want things on their Facebook profile that will make them look bad. –
Alistair

Alistair refers to the ability to be associated with and perhaps even identified by the content that is visible on their own profile. By unpacking this statement, a complex picture emerges regarding the possible ways one can be subjected to these kind of associations. Firstly, while Alistair is discussing content that is shared by a friend to their own profile and thus the requirement to consider what will make the receiver of that content look bad, opportunities to be associated in this manner extend beyond the profile and beyond this direct method of communicating on Facebook. As demonstrated by the case of Paris Brown, instability means what is embarrassing on social media can also be so in the national media. Secondly, Alistair refers only to “things” and not to forms of communication such as the written word or photos. The suggestion is that more than one element of the Facebook profile would allow for content to be shared which could reflect negatively upon the owner of that profile. Thirdly, he does not restrict his remarks to communications from others as that which might make a person look bad. Instead, the implication is that this can be self-inflicted. Fourthly, a question is raised over to *whom* a person would look bad.

One aspect of Facebook is that users can largely control what information they do and do not present about themselves. While this may take the form of relying on the site's privacy controls (noted by Acquisti and Gross to often be ‘weak by design’³⁰⁶) or by simply abstaining from revealing certain aspects of their own lives, this aspect of self-control has attracted the attention of academics asking how a person chooses to present themselves. However, fewer have found themselves concerned with the effects of a person's social connections on identity.

A notable exception to this is the work of Walther *et al* whose insight is worth quoting at length. On friends posting to a person's profile they write:

These postings contain the friend's default photo from his or her own profile, as well as a verbal message. The messages may express sentiments or reflect common or individual activities between the target and/or the friend. They may even reflect a desire

³⁰⁶ Acquisti, A and Gross, R (2006, 38)

to embarrass the profile owner, according to a popular press account (Haskins, 2005). Individuals may not know, for some interval of time, that particular comments have been posted to their walls. Even if they do, they tend not to remove friends' postings from their profiles. Doing so is possible but defeats the spirit of Facebook's very utility and implicitly challenges the rules of friendship. Therefore, even if people question what has been said about them, they may follow Facebook norms and leave questionable posts on display.³⁰⁷

Walther's work describes a complex regulatory framework entwined with expectations derived from the architectural composition of the site. Later concluding that 'the verbal statements within wall postings may describe behaviors of the profile owner more directly'³⁰⁸, it can be seen that matters of micro architecture such as inclusion of profile picture, visibility of the post and even the way in which users are alerted to the post (therein affecting the opportunity for the profile owner to remove or otherwise determine to what extent it should be disclosed to others) may play a role in the way a person is perceived.

Macro architectural factors also play a role in the importance of a norm to consider others when using Facebook. The effects of Mayer-Schönberger's conceptualisation of the internet as archive in addition to the effects of other macro architectural qualities described in chapter two mean that a photo of a person posted to their profile one day can potentially be recalled many years in the future. This relationship with time has led Miller to suggest that there may be 'profound consequences'³⁰⁹ whereby Facebook may be treated as a narrative of a person's life. The clear tension between these two ideas is that a digital archive does not inherently suggest a degradation of importance as another form of narrative, such as memory, may. While the case of Paris Brown suggests that the question of whether information degrades in importance on social media is still not clear, it is being played out in the minds of its users. Robin describes a fear that 'anything you do say is in ink, you can't change it and you can't erase it'. Similarly, the implementation of tools to enable historic posts to be displayed in a quicker and easier way than before has led Felicity to have 'deleted a load of stuff'.

The most common example provided to describe this norm was regarding the publication and sharing of photos at parties and where the consumption of alcohol was involved. With all but

³⁰⁷ Walther, J B *et al.* (2008, 30)

³⁰⁸ *ibid* 44

³⁰⁹ Miller, D (2011, 192-193)

one participant being under the legal age to consume alcohol in the United Kingdom, pictures of this type were often coupled with comments regarding online friendships with parents.³¹⁰

While some expressed extremely negative views about parental presence on Facebook ('If my mum got Facebook I would kill her', Helena) a majority of participants likened their attitude to an increasing maturity, and were more willing to accept their parents as Facebook friends where their offline relationship had developed.

The involvement of parents is important to the formation of a norm of consideration as they represent individuals who are wholly separate from the social category of which the majority of a young adult's friends will be derived. The inclusion of multiple social groups within a singular context (such as the friends list) is described by Boyd as the problem of collapsed contexts. Said to be defined as 'the lack of spatial, social, and temporal boundaries'³¹¹ which users encounter in online social networks, the description of collapsed gives a name to the problem that young adults encounter between disclosure of information and subsequent control of that information. While participants were happy to disclose information such as their activities at parties to their peer groups, it was reported that many users were wary of the way in which this information can often be seen by all those listed as friends, including parents.

She's [mother] always like "can you take it off Facebook please?" and I'm like "it doesn't apply to you". – Craig

If you met them all [in person] there's no way you would act exactly the same way to each and everyone one of them, but on Facebook you say the same status to them – Helena

Though experiences such as Craig's had been had by a small number of participants, others would deal with any content that they foresaw problems with by asking those who had uploaded it directly to remove it therefore shaping their behaviour to conform with the perceived standards of others

The impact of "external" regulators such as parents influencing online behaviour would require greater attention than it was possible to give in this study in order to be able to draw meaningful conclusions. However, the line of inquiry is clearly endorsed by participants' references to

³¹⁰ For an analysis of social networking site's impact on drinking norms between college students see Fournier, A K *et al* (2013)

³¹¹ Boyd, D (2008a, 34)

these figures. While some were a result of them having connected on Facebook, others described a sense that certain groups of people would disapprove of their online behaviour *if* they were ever able to survey it. This speculation of conditions is, as discussed in chapter two under the name of instability, an important tool with which people can seek to understand and normalise their experiences online as well as limit risk³¹².

Reference was also made to the setting in which many of the participants accessed Facebook. Accessing the site through school terminals was indicated by some to lead to an incorporation of the school's standards of conduct in their online behaviour. Though few references were made to this, the question of physical location during Facebook use is particularly salient to youths. In 2005 a Pew report indicated that 'of those teens who connect to the web from home', 72% of those were using computers located in a "public", open area of the home³¹³. While the proliferation of mobile technology and wireless networks has undoubtedly led to a change in usage patterns with many participants indicating they primarily used Facebook on mobile devices, the imposition of others as external regulators as a consequence of this would have direct impact on content sharing norms.

For example, Boyd and Marwick found that given an awareness of the ways in which published content can be observed by those 'looking over people's shoulders, accessing information in ways which cannot be controlled through Facebook's privacy settings'³¹⁴, users can be observed to engage in what they term 'social steganography'³¹⁵. Described as a process where users attempt to hide information in plain sight, messages posted with this objective require more information than is given in order to understand it. Using the example of Kristy, who wrote simply 'I'm sick and tired of all this'³¹⁶, the authors demonstrate that accurate interpretation of such posts is impossible without prior knowledge of, in this instance, the argument Kristy was having with friends. This form of obscuring demonstrates the impact of external regulators as well as the instable nature of how Facebook information can be accessed, and the anxieties this can cause. While external regulators in this instance did not change standards of what was acceptable to post on Facebook, they can be seen to have altered the way in which what was posted was expressed in much the same way as those who would truncate

³¹² See 2.2b

³¹³ Lenhart, A *et al* (2005, 7)

³¹⁴ Boyd, D and Marwick, A (2011, 20)

³¹⁵ *ibid*

³¹⁶ *ibid* 23

their names to avoid being found by everyone³¹⁷. By increasing the level of knowledge required to interpret or access information on Facebook there exists method to target content shared to a specific audience who will understand it, regardless of who reads it.

1b. Norm of passivity

Where undesired content was not directly related to the person in question, it was often met with disregard. Participants were eager to suggest that they were not bothered by certain types of content being posted online. However, it was far more often the case that they were simply *not* bothered by the content because of the fact that unpopular content was placed outside of the regular patterns of Facebook use (i.e. not appearing where content is aggregated). This is due to the way in which the site rewards content which is held to be popular by making it more visible. Therefore, though some may have objected to certain content, it was often not highlighted to them.

While the aggregation of content features in a discussion of how frequently a person will encounter undesirable content, the role of architecture differs in people's responses to this content. The primary response from participants was that the ease with which content can be ignored on the site was formative with regards to how they chose to respond. Notably, participants were drawn in their responses to the way in which content on the "News Feed" and other areas of the site can simply be scrolled past, with it disappearing from the screen shortly thereafter and not to the features of the site which allow users to actively hide content from others.

If you saw something you didn't like on Facebook you just wouldn't read it. I just scroll down. – Helena

It is important to note at this point that a passive reaction need not be one without any meaning. For example, in McAdams' model of esteem based norms it is determined that 'the essential point is that denying esteem is a costless means of punishing norm violators'³¹⁸, therefore the ease with which one can simply ignore another's posts (and therein not reward them by "liking" or commenting on it) is an important factor in understanding this behaviour. That a person may

³¹⁷ While participants in this study offered no contradictory evidence to suggest that Boyd and Marwick's information is false, outdated or otherwise untrue within this group it is notable that multiple participants expressed that they disliked vague referencing and overtly attention seeking behaviour through status updates.

³¹⁸ McAdams, R (1997, 355-358)

express disapproval without having to positively act in order to do so allows users to participate in the emergence and enforcement of norms in a way which requires virtually no effort in doing so.

Passivity on Facebook appears to derive both from the ease with which content can be ignored – itself an inherently normative action - in addition to, in some cases, a reluctance to engage in a *direct* conversation about what behaviour was beneficial to the group’s online experience. While some participants indicated that they would be inclined to talk to another individual in person about their conduct, this was likely to be in response to fears over illegality or formal rules within their offline environment (e.g. instances of bullying) and would not be similar in form to a discussion of group standards.

Users were unlikely to confront another person on the site by, for example, commenting on their behaviour and this was often due to the way in which users perceived being held accountable, in turn, to their own actions. Describing a sense of symbiosis between one’s online presence and their ‘reputation’, Gregory expresses his concerns in doing this:

If I had a reputation bar³¹⁹ on my profile, it would drop as soon as I had an argument with someone. It’s such an easy medium to have arguments, or say things you wouldn’t say in real life. – Gregory³²⁰

In much the same way as it is possible for users to be associated and identified by their friend’s behaviours (previously discussed), it was evident that a sense of self-reflection was in the minds of those interviewed. Design decisions such as denying the ability to post anonymously means that if a person wants to comment on an activity they are forced to identify themselves. Milly, later stating that she viewed Facebook as a very ‘self-conscious environment’ remarked that the de-contextualisation of information made her feel as if responding to something where the full story is not presented would give the impression that he chose to infer the worst³²¹.

³¹⁹ No such feature exists as part of the Facebook profile.

³²⁰ Gregory’s remarks support an awareness of Levin’s conclusion that ‘If you have a bad reputation, people will not want to cooperate with you in the future’. Levin, D (2008, 107)

³²¹ This raises an interesting question regarding the transmission of feelings through architecture. While in this instance being seen to have assumed the worst of someone seems to be the constraint in action, do digital communications and architecture have the ability to communicate feelings such as guilt or fear?

In Loewenstein and O’Donoghue’s discussion of negative emotions, self-regulation and the law, the use of internal sources of self-regulation such as fear and guilt is seen to be an important part of an individual’s self-regulation. See Loewenstein, G and O’Donoghue, T (2006).

Reflecting on the saga of Paul Chamber's twitter comment it can be seen that these kind of perceptions shape the way in which communication is interpreted online.

However, Henry disagreed in a way which demonstrates the role of architecture as something which is not disconnected from the interpretation of an individual person. While others saw the identification of themselves through name and image (a micro architectural quality) as that having the most impact on their actions, Henry described the way in which he felt more able to challenge others as she can act 'behind the protection of a computer screen' (macro architectural).

A small number of participants expressed that the exposure of content and any subsequent discussion of it to large numbers of people within the Facebook friend group meant that online confrontations lent themselves to escalating rapidly. It is true also that confrontations are not exempt from the problems of archive and instability. In these instances it was reported that users were likely to consider the reactions of certain groups (e.g. teachers, future employers, parents) in deciding whether or not to respond. While participants, as before, expressed a knowledge of the ways in which the site allows content to be restricted to certain user groups and protected from the public, speculation over both who might come across it in the future and what they may think played an important part in this kind of self-regulation.

Sometimes as I am typing, I do just think...wait, what if my mum sees that? I do have to bear that in mind. – Madeline

This behaviour is contrary to studies such as Karakayali's which have suggested that Facebook users concern themselves more with how they are observed within their own social circle than by 'complete outsiders'³²², though it is not clear how these two spheres are to be distinguished in an online setting. Additionally, it supports findings which suggest online disclosures are based on what can be said to be socially acceptable among a given audience.³²³

This phenomenon has strong links to Boyd's concept of the invisible audience. Described as a situation where 'not all audiences are visible when a person is contributing online, nor are they necessarily co-present'³²⁴, the perception of how content will be received, read and interpreted become virtually impossible to achieve accurately. This is a problem which arises both in

³²² Karakayli, N and Kilic, A (2012, 183)

³²³ Strater, K and Lipford, H R (2008, 114)

³²⁴ Boyd, D (2008a, 34)

determining reactions across ordinarily distinct social circles but also one which operates on a temporal level in determining who might be able to view the content in the future and how they may react. Likening this to the way in which journalists are forced to consider their audience when they ‘craft a story’, Boyd highlights a change in behaviour which is prompted by architectural characteristics of the environment. In this case, teens online are forced to engage in a type of moderation which would previously have been associated only with those *seeking* to broadcast a message. On Facebook, it can be said that there is a behavioural shift to assume that this is the default consequence of posting online. As unpredictability of audience leads to difficulty in codifying types of behaviour which are and are not acceptable this, moderation is surely a difficult task. Hooper and Kalidas indicate this in passing, noting that ‘unprofessional content’ was found to be unacceptable from their research, albeit ‘audience dependant’³²⁵.

In 2013, an article entitled *Quantifying the Invisible Audience in Social Networks* jointly published by Stanford University’s Computer Science Department with members of Facebook Data Science sought to determine the consequences of the perception of audience size on Facebook. The research, which shows a clear understanding by those working at Facebook of the relationship between user perception, user interaction and site design³²⁶, uses server level data to conclude that users underestimate their audience sizes³²⁷ and that the visual cues presented by the current site design do not provide enough information for audience size to be predicted by the user³²⁸.

Moreover, the problem of instability means that it is not possible to confine the idea of audience to those using Facebook. Participants were clearly aware of the ease of reproduction which accompanies digitised data (for example, Robin suggested that ‘someone could see it and then possibly print screen’) and this informed their concern behind online confrontations. Litt notes that ‘technological environments are partially responsible for limiting and exposing cues about who is in one’s actual audience’³²⁹ in a way which influences how users imagine their audience.

Litt’s recent publication locates the subject of the audience’s role in social media within existing literature concerned with perceptions of who we are communicating with. Focusing on the term “*imagined audiences*”, Litt discusses the audience which a user is forced to create

³²⁵ Hooper, V and Kalidas, T (2012, 266)

³²⁶ Bernstein, M S *et al* (2013, 1-3, 7)

³²⁷ *ibid* 3-4

³²⁸ Bernstein, M S *et al* (2013, 6-7)

³²⁹ Litt, E (2012, 335)

within their imaginations where there is an inability to determine the actual audience³³⁰. Noting the need to understand the audience as those whose role it is to be ‘the other side of the screen reacting and judging’³³¹, Litt touches on the idea that the audience, whether imagined or actual, can be seen to be judgemental. While often implicitly expressed by participants in the idea that certain individuals or groups would constrain their behaviour, the judgemental nature of Facebook was remarked upon by some participants. Clarice suggested that ‘Facebook is very judgemental, it’s more judgemental than school’.

That some feel no strong urge to respond to others who have broken norms of behaviour may be indicative of the type of norms which are developing between users of the site. Tamanaha notes that ‘while many social norms are felt to be obligatory, not all infractions result in sanction’³³². This leads to difficulty both in identifying distinct norms, due to the lack of response by others, as well as in producing a hierarchy of these norms. Further research would benefit from investigating to what extent users feel Facebook has taken over the role of sanctioning by altering the flow of information so as to “burry” unpopular posts as described in chapter three³³³.

1c. Norm of observation

Before Facebook, if you were to tell someone you were looking at everything they wrote during the week they would freak out. Now it’s just a social norm. – Alistair

The only reason I go on Facebook is to stalk – not stalk – but to see what people are doing. – Helena

If it is true to say that Facebook users learn behavioural norms from patterns of use demonstrated by other users it must follow that these behaviours are observed, but, as suggested in the previous section, not necessarily engaged or interacted with.

³³⁰ *ibid* 333

³³¹ *ibid*

³³² Tamanaha, B (1993, 200)

³³³ See 3.2

Though discussed in academic literature under a variety of names³³⁴, respondents repeatedly referred to this type of behaviour as “stalking”. The process of using Facebook to check another person’s profile for information having been previously or recently posted was commonly understood by this term and considered expected behaviour. Some writers such as Grimmelmann implicitly suggest that stalking is akin to that in a criminal sense, claiming that “stalking” ‘means more than just looking at someone's Facebook profile. It's also an obsessive pattern of observing someone else’³³⁵. However, indications from participants suggest that observations of this sort were more often random in nature, often facilitated by the ease with which one can click through to a person’s profile from the aggregated content of the “News Feed”.

While various parts of the site entail this kind of activity, participants indicated that “stalking” is more than the routine observation of what their entire friend group has been posting and instead requires navigating to a specific friend’s profile and going back over previously shared content, such as photos or status updates. Though some participants were reluctant to admit to stalking frequently, it was often referred to as a guilty pleasure which was done solely to observe what a person has been up to. While some have identified this kind of behaviour as a passive one having no particular function in relationship building³³⁶, the motivation to “stalk” a person seems to be founded in a curiosity about the other person’s lifestyle and by extension the desire to know more about them.

Suggesting the practice amounts to a form of “Facebook surveillance”³³⁷, Marshall observes that ‘people who engage in it tend to perceive it as harmless’³³⁸. Participants’ responses supported this idea, though they expressed some concern over the personal harm they would suffer if those who they had stalked were aware of them having done so. When asked how their behaviour would change if the person being “stalked” would be able to see who had done so, all participants indicated that they would either “stalk” less people (only their inner circle of

³³⁴ Chaulk and Jones note a number of examples including “facestalking” and “facebook cyber-stalking”, while themselves choosing to discuss the practice under the term “online obsessive relational intrusion”. Chaulk, K and Jones, T (2011, 245)

³³⁵ Grimmelmann, J (2009, 1167) fn 188

³³⁶ Lewis, J and West, A (2009, 1215-1216)

³³⁷ Marshall, T C (2012)

³³⁸ *ibid* 521

‘friends’³³⁹) or not at all. This practice demonstrates a noteworthy inversion of more typical fears of being under surveillance from others. The indication from participants that stalking was common practice was expressed without significant exception. Stalking was accepted both as an activity which they would carry out, and that they themselves would expect to have carried out upon from others. As Solove recalls, a ‘direct awareness of surveillance’³⁴⁰ is often the source of some discomfort, which may also lead to a person modifying their behaviour. However, as discussed in the previous section, while it is clear that participants did consider surveillance from those within their Facebook friend group when acting online, surveillance was more of a concern if that surveillance was from “others”. That is to say surveillance was deemed undesirable only by the fear of it being exercised by those not yet known (in the event of future connections) or by those who would be known in an alternate social context.

“Stalking” on Facebook represents an awareness by users of the ability to use the site to stay connected to another person without necessarily requiring increased communication, itself a capability which supports the type of relationships and friending norms described in chapter three³⁴¹. Facilitated by a form of anonymity, the ability to browse at length the profile of another user, particularly those with whom the user has no close relationship with, allows users to remain (and become) informed about those people and as such was often associated with connecting and reconnecting with individuals who had moved school or with whom little personal contact was had. Madeline highlighted the role of architecture in practices facilitated by anonymity by stating that although she felt norms should ‘transfer’ from real life, certain influences lead to some not doing so. Describing the idea of ‘hiding behind a screen’, Madeline expresses a notion of privacy which is common amongst participants as well as one which is common in popular culture. The saying ‘on the Internet, nobody knows you’re a dog’, coined in caption form by cartoonist Peter Steiner in 1993³⁴², encapsulates the idea of anonymity which Lessig claims is an absolute (macro) architectural quality of internet communications. In *Code*, Lessig describes the internet as having no inherent mechanism for authenticating identity claims.

However, this is not the form of anonymity which is in operation. Instead, users base their behavioural patterns on the effects of micro architecture. Chaulk and Jones note that ‘Facebook

³³⁹ Participants often referred back to the idea of “friends” in situations where they sought to describe only a small group of people they were closest to.

³⁴⁰ Solove, D (2006, 493)

³⁴¹ See 3.1

³⁴² Fleishman, G ‘Cartoon Captures Spirit of the Internet’ (*The New York Times*, 14th December 2000) <<http://www.nytimes.com/2000/12/14/technology/14DOGG.html>> last accessed 10/09/13

allows this behaviour to occur in relative anonymity'³⁴³. While Facebook's site design encourages the use of a person's real name, certain behaviours are able to be carried out anonymously by site design not to notify the target of this behaviour. From within their own participants, Lewis and West found that such practices were said to be done 'under the cover of "electronic cloaks"'³⁴⁴.

Though participants such as Madeline would not express these ideas in the language of architecture, their comments show an awareness of the environment and structures with which they engage when communicating on Facebook. The consequences of reliance on an unstable environment such as Facebook's site design have been stated by Grimmelman specifically on the topic of "stalking"³⁴⁵. Noting a Gawker article in which it is claimed a Facebook design change has enabled viewing a list of those profiles which are most frequently viewed by a user, he claims that the 'mere thought that searches might be visible to others makes some people freak out'. This is an example of how behaviour is being expressed and how norms of behaviour are being afforded by the architecture of the site. However, as follows, the need to generate practices which engage with the restrictions of the internet's architecture is equally important.

2. Authentication through architecture

Authentication in online environments is problematic. As Lessig describes, the natural characteristics of the offline world allows traditional forms of regulation to utilise information about the self which are 'automatically asserted', for example physical characteristics which can be readily observed³⁴⁶. However, the architectural nature of the internet means that no such information is available and so increases the challenge of identification.

Online spaces are not devoid of authentication efforts. On an abstract level computer systems have been designed to generate tasks to verify only that a user is human, and not a computer program. Tasks of these kind, such as CAPTCHA³⁴⁷ are developed to request a response which could not be provided by a computer, such as identifying an obscured string of text. Moreover,

³⁴³ Chaulk, K and Jones, T (2011, 250)

³⁴⁴ Lewis, J. and West, A (2009, 1216)

³⁴⁵ Grimmelman, J (2009, 1163)

³⁴⁶ Lessig, L (1999a, 32)

³⁴⁷ 'What is a CAPTCHA?' (*reCAPTCHA*, nd) <<http://www.google.com/recaptcha/captcha>> last accessed 10/09/13

it is common for services to require a user to enter a password before gaining full access to that service, a technique which determines access based on a person's knowledge of their own particular password.

While methods such as these are often used, they do little to enable fellow users to verify another user's identity. For example, password protection has negligible impact if the Facebook profile has been created to imitate another's identity to begin with. Recognising the importance of this, the social network site Twitter now makes use of a 'blue verified badge'³⁴⁸ which displays on a user's profile. Though the badge is 'currently used to establish authenticity of identities on Twitter'³⁴⁹, verified badges – which act as a (micro) architectural stimuli to signal a legitimate identity claim – are limited to 'highly sought users'³⁵⁰ likely to be a target of identity imitation and do not operate for the community as a whole.

On Facebook, though no participant identified any incident which led to cautious behaviour, there was a consistent theme of people using various architectural elements of the site in order to verify (or authenticate) the person they were communicating with was who they claimed to be, in addition to a practice of using Facebook to investigate a person's character. These practices varied in form from the use of profile structure, to expectations of profile completion as well as in goal, ranging from seeking to verify to all possible extents that a person was who they said they were, to seeking only to reassure the user *to some degree* of another's identity.

Both forms of authenticating practices which will be discussed in this section demonstrate the way in which behaviours are expressed through and develop in response to architectural dynamics. Specifically, these practices engage with identity and anonymity in an unconventional way. Unlike some practices formed in other online communities³⁵¹, authentication efforts on Facebook work on the basis that a user is presenting to be a person that those interacting with them already know³⁵². For this reason repurposing profile information to determine whether an online profile matched the picture of the offline person

³⁴⁸ This works in a way that is similar to the previously discussed example of eBay's name change icon. See 2.3.

³⁴⁹ 'FAQs about verified accounts' (*Twitter Help Centre*, nd) <<https://support.twitter.com/groups/31-twitter-basics/topics/111-features/articles/119135-about-verified-accounts>> last accessed 10/09/13

³⁵⁰ *ibid*

³⁵¹ For example "doxxing", the practice of unmasking a person's identity by the sharing of personal information on the internet. See Boyd, D 'Truth, Lies, and 'Doxxing': The Real Moral of the Gawker/Reddit Story' (*Wired*, 29th October 2012) <<http://www.wired.com/opinion/2012/10/truth-lies-doxxing-internet-vigilanteism/>> last accessed 10/09/13

³⁵² As per previous discussion of friending practices and community building. See 3.1.

seemed to be the norm. It is difficult to establish whether people behaved in this way in reaction to architectural design or because of it. The relevance of this is highlighted by Tien who makes the case that this kind of difficulty distinguishing between norms that have been architected into features and design features that are simply just that undermines our ability to recognise architecture as a normative agent³⁵³.

2a. Connection checking

Participants frequently observed the number of mutual connections they had with someone they were seeking to connect with. While dependent on user settings, there is often limited profile information accessible to those who are not yet Facebook friends with one another. Participants reported that in these instances where they did not recognise a name, or were unable to tell a person from a profile picture they would look to see how many connections they had in common with the person in question.

If someone adds you on Facebook, even if you don't know them that well if you've got like 200 mutual friends you're way more likely to accept – Brendon

In the first section of this chapter Brendon's response was used to demonstrate the type of relationship, in terms of connection strength, it was seen as acceptable to have with another person before becoming Facebook friends. Here, it is constructive to note that participants had often taken characteristics of their environment into account and considered that if the number of mutual friends was high enough it was likely that they knew of the person, even if they could not identify them immediately. This was often considered to be a quality of being part of a large school or having been introduced to large numbers of new people at parties or similar offline social gatherings. Here, the assessment of connections is not a standard by which to judge identity *per se*, but a signal that the person is an authentic member of a similar social circle.

Donath and Boyd support this finding and propose that a 'public display of connections is an implicit verification of identity'³⁵⁴. By taking time to check a person's mutual friends for recognisable names a person relies on the prior verification of another user's identity by other Facebook members within a social group. Utz notes that this type of authentication is difficult to fake, given that 'if these friends are indeed friends, or at least people who know the profile

³⁵³ Tien, L (2005, 12)

³⁵⁴ Donath, J and Boyd, D (2004, 72)

owner in real life, they might express doubts on the validity of some information on the profile'³⁵⁵.

This represents an interesting denigration of the importance of using real names to stake an identity claim on Facebook. Given that in some instances users are relying on the willingness of others to (knowingly or not) support the identity claims of another, it may be possible to substitute a real name for one which a person is simply recognisable by. Though framed in the context of reputation keeping, Shirky has proposed that for this kind of behaviour to take place requires only the maintenance of a 'persistent handle', in addition to some penalty for changing that handle if the requirement is not to be absolute.³⁵⁶

Shirky's claim supports the analysis of eBay's pseudonym changing policy by Levin, and goes some way to explaining the decision of Facebook to limit the number of times a person may change their name. While Facebook requires that a person uses their real name³⁵⁷, a limited number of name changes are allowed to account for legitimate changes and stylistic preferences. This design decision recognises both the need of communities to identify someone by their real name, as well as the need for a persistent handle to be used.

A less often mentioned use of checking public connections was to verify a person's character. One participant remarked that they would often use a person's Facebook profile and the information available to them to verify that they were the type of person who would fit well within an existing offline friendship group, or that they would be a suitable romantic match for a friend. The previously discussed phenomenon of profile activity reflecting on the identity of the profile owner did not require explicit suggestions of character (e.g. being pictured at a party or sporting events), as even the friends with whom a person is connected to on Facebook would imply something about them on the principle of shared interests and personality traits. Utz extends this idea by showing that 'other-generated' information (that which is not provided by the profile holder, but by friends) is valued above self-generated content when making judgments about a person's behaviour. In particular, profile pictures of friends was found to

³⁵⁵ Utz, S (2010, 316)

³⁵⁶ Shirky, C (2003)

³⁵⁷ 'Facebook is a community where people use their real identities. We require everyone to provide their real names, so you always know who you're connecting with. This helps keep our community safe.' See 'Facebook's Name Policy' (*Facebook Help Centre*, nd) <<https://www.facebook.com/help/292517374180078>> last accessed 10/09/13

influence impressions of the profile owner³⁵⁸. Therefore, connectedness and visibility of connectedness are an important part of the process of forming relationships on Facebook.

2b. Expected information

Facebook is a site driven primarily by the completion of a template of information. While for the most part users have control over how much information they choose to disclose in these predefined fields (age, employment, education, and so on), participants indicated that expectations of information disclosure had a role to play in both what was completed and what was expected of a “complete” profile. A profile deemed less than complete, therefore lacking expected information can be indicative of a profile which would arouse suspicions.

An underlying theme in all responses was that a Facebook profile should mirror a person’s offline identity. While literature on identity is frequently spurred by a perceived opportunity to regulate the way in which identity is performed online, when it came to profile completion participants expected information recognisably related to the person. All participants indicated that a real name – or a name by which they are known - should be used, which supports findings both in naming expectations previously explored and in Facebook’s own requirements.

Participants in our study were familiar with the layout of Facebook profiles, and took notice when information was lacking or a profile contained sections they were not used to seeing.³⁵⁹

Expectations were often centred on fields of information which Facebook’s profile design displayed on the index of a person’s profile and which required no further clicking through to see. While individuals expressed different preferences as to what information they would wish to see³⁶⁰, participants were hesitant in dictating the type of information that a person should be sharing. In this sense, the expectation was not that information of a certain type should be disclosed, but that *some* information should be disclosed. Christofides *et al* note of this that it

³⁵⁸ Utz, S (2010, 326)

³⁵⁹ Strater, K and Lipford H R (2008, 115)

³⁶⁰ Facebook frequently changes the information which is displayed on the profile’s index. As of August 2013 the primary fields are employment, education, location, “from” (location) and relationship status.

is information disclosure itself which ‘increases the impression of trustworthiness and results in reciprocal personal disclosure’³⁶¹.

While no direct questions were asked as to why, for some, it was information disclosure which was valued and not necessarily the type of information shared, it was apparent that the potential instability of that information played a role in some instances. Though participants often indicated a readiness to share information of a kind amongst their Facebook friends, the perceived inability to limit the purposes for which that information was used impacted the extent to which some would do so. Alistair shared from his own experience of this:

I was quite shocked to search [my name] on Google and it had pictures of me from three, four years ago coming up, and my email. I found several websites what aren’t directly related to Facebook that had a profile of me from information they had got off Facebook from me. I thought that was a bit weird how you can’t get that information removed – Alistair

Though Alistair placed this information on Facebook himself, and did so as part of his public profile, he did not consider this information public in such a way that he saw the automatic construction of a profile on another site as an acceptable consequence. As such, he now limit the amount of information he shares as a result of his findings. These experiences, and even simply the perceived risk of such instances, may go some way to explaining that while it would seem many had flexible expectations as to what information they wanted to see shared, profile disclosure expectations of others were strongest when it came to non-identifying information such as schooling, location and employment.

Lampe *et al* describe these elements as ‘verifiable identity cues’³⁶². Determining their importance through the lens of common ground, the authors suggest that including information of this type ‘establishes common ground, and interests reveal personality aspects that can help people make decisions about declaring friendship links’³⁶³. This analysis seems conducive with the sort of relationships which it has been established Facebook facilitates and encourages, where people need not know each other well before accepting friendship. In these instances, setting indicators of shared interests or shared circumstances (such as attending the same school, or working for the same company) both support the connection between two people as

³⁶¹ Christofides, E *et al* (2009, 342)

³⁶² Lampe, C *et al* (2007, 437)

³⁶³ *ibid*

well as opening a conversational avenue. Tidwell and Walther observe that ‘these dynamics promote attraction within a group as they lead members to attribute similarities among themselves and others’³⁶⁴. While participants did not explicitly indicate a desire to connect with similar people, common ground in Donath and Boyd’s words can be used to ‘turn an encounter into a connection’³⁶⁵. That Facebook is structured in such a way as to encourage users to share certain categories of information may go some way to explain what a recent Pew Research Center report described as the ‘much more common’ occurrence of ‘sharing certain kinds of personal information on social media profiles’³⁶⁶.

Another form of content which was determined to be important was the profile picture. A profile picture is a single picture chosen by the user which is displayed in the header of their profile page for both friends and public³⁶⁷. Determined by Hum *et al* to be the ‘photo by which Facebook users choose to identify themselves within the entire network’³⁶⁸, participants’ most frequent expectation of profile content was that a profile picture needed to be present in addition to that profile picture being one of that person. Moreover, a small number of participants remarked that they did not wish to see pictures of a person within a group as this caused an ambiguity and reduced the ease with which a person could be recognised. Notably, the effect of a profile picture being present was unaffected by the ease with which a photo could be used to misrepresent a person’s identity. When participants were asked to consider that profile pictures might be used to misrepresent identity in this way, responses indicated that the presence of the profile picture served only to lessen uncertainty as to a person’s identity. Commonly, a profile picture was said to encourage a feeling of familiarity when communicating on Facebook.

Participants interviewed in a similar study indicated that the general use of Facebook to observe and learn about other people might be a behaviour more common amongst those who are ‘starting off’³⁶⁹ on Facebook. However, participant responses in this study would not support this. Instead, behaviours associated with those new to Facebook were described as part of

³⁶⁴ Tidwell, L C and Walther, J B (2002, 317)

³⁶⁵ Donath, J and Boyd, D (2004, 77)

³⁶⁶ 84% were found to share their interests, 71% school name, 71% location (nearest city or town). In contrast only 20% were found to share their mobile phone number. See Madden, M *et al* (2013, 23-30).

³⁶⁷ The profile picture also appears alongside their name and other identifying information in status updates, wall posts, private messages and in most situations where they are referenced,

³⁶⁸ Hum, N J *et al* (2011, 1828)

³⁶⁹ See response by Jack, University of Cambridge in Richardson, K. and Hessey, S (2009, 32)

classifying types of behaviour which were considered to be in violation of a norm (for example, increased frequency of posting and mundane postings).

While common themes were present in the range of information which people expected to see while looking at another's profile, that there was no agreement on what people were looking for supports the idea that while users have the choice as to what information they disclose on their profiles, determining how that information will be used, by who and at what point is significantly more problematic. West *et al*³⁷⁰ and Boyd discuss this in similar terms as a reversal in the way in which information is shared. Boyd suggests that Facebook allows information to be shared 'for others to consume when and as appropriate'³⁷¹, which largely seems the case for participants use and expectations of use from others. The privacy concerns which participants expressed could often be reduced to an issue not of *what* was shared but of *who* it was shared with. Boyd and Marwick offer a more nuanced understanding of this phenomenon in their analysis that 'most teens think about what to exclude' rather than what to 'include or what to publicize'³⁷². While my discussions with participants would largely support this conclusion, I would offer the amendment that this is predominantly true when participants reflected on their own behaviours and expectations of themselves. When asked about information sharing practices of others, the style of response would change from what is expected to be excluded to what is expected to be shared.

3. What is public and what is private

The inherent difficulties in analysing a reformation of, or alteration in attitude towards private and public domains are encountered at this juncture. Though conceptually rooted in not only the language of online interactions³⁷³ on Facebook (often represented as the choice between public and "friends") but in the historic position of youths within these spheres (notably the frequent exclusion of young people from public space³⁷⁴), even a superficial analysis encounters both the problems in defining these spaces in addition to the lack of consistency in how these spaces are understood. As Papacharissi claims, the very characterisation of this type

³⁷⁰ West, A *et al* (2009)

³⁷¹ Boyd, D and Marwick, A (2011, 11)

³⁷² *ibid*

³⁷³ Livingstone, S (2008, 4)

³⁷⁴ Livingstone, S (2005b, 165-168)

of electronic media supports the ‘ability to remove, or at least rearrange, the boundaries between public and private’³⁷⁵.

The possibilities of collective discussion, decision making and access to information that the internet allows for often encourages academics to embrace democratisation of online spaces as either an expansion or revival of *the* public sphere or the creation of a “new” public sphere³⁷⁶. This is an approach suitably summarised by Poster in his claim that ‘machines enable new forms of decentralized dialogue and create new combinations of human-machine assemblages, new individual and collective "voices," "specters," "interactivities" which are the new building blocks of political formations and groupings’[sic]³⁷⁷. However, for the purpose of this dissertation it is important to question whether this classical lens through which many seek to understand the way users of Facebook engage with the private and public dimensions of online life is suitable. Moreover, as Boyd observes, a discussion of public automatically requires thought as to whether there may be only one public or many publics. This is particularly important when set against the nature of the internet as a facilitator of coming together, Boyd claiming the possibility for multiple publics to gather in a space which can be characteristically identified as itself a public.³⁷⁸

Similarly, conceptualisations of online privacy are often derived from an architectural quality of the internet. While it can be observed to have been defined in some instances as vaguely as what is “in here” (as opposed to what is “out there”)³⁷⁹, privacy online enjoys a rich tradition of being characterised by the purported risks created upon the disclosure of personal information, in combination with an implied assumption that this disclosure is involuntary, or otherwise ‘irrational or foolhardy’³⁸⁰. Markwick *et al* and Livingstone are among those who recognise that this phenomenon takes place against an increasing appreciation of youth as being better versed in online practices than their adult counterparts³⁸¹. Thus, while confidence is placed in youth’s ability to negotiate online spaces such as Facebook, their understanding of

³⁷⁵ Papacharissi, Z (2009, 206)

³⁷⁶ For example, Papacharissi, Z (2002, 20). Though, it is noteworthy that Papacharissi claims “cyberspace” is itself both a ‘public and private space’

³⁷⁷ Poster, M ‘CyberDemocracy: Internet and the public sphere’ (1995)
<<http://www.hnet.uci.edu/mposter/writings/democ.html>> last accessed 10/09/2013

³⁷⁸ Boyd, D (2007, 8)

³⁷⁹ Pitkin, H F. as cited in West, A *et al* (2009, 616)

³⁸⁰ Marwick, A *et al* (2010, 23-24)

³⁸¹ *ibid* 10; Livingstone, S (2005b, 165)

and therein agency to act as a person with an idea of what constitutes privacy, or what it is to be a constituent of a private space is undermined. Moreover, Livingstone posits that being credited with an understanding of online spaces leads to being credited with those aspects of them which are deemed less desirable. Expertise in this area, she argues, ‘wins them unexpected responsibility’³⁸². Therefore, youth are deemed both unable to act out notions of privacy while simultaneously seen as responsible for privacy failures.

While conceptual difficulties exist, what remains in focus in this dissertation is the ways in which youths interpret the public and private. To this end, it is particularly important to consider that youth’s understanding of these boundaries need not conform to any existing conception. As Marwick *et al* observe, ‘the idea of two distinct spheres, of the “public” and the “private,” is in many ways an outdated concept to today’s young people’³⁸³. Though the denigration of a binary understanding of private and public indicated by Marwick is important, participants in my own research did not fully support this finding. Instead, participants such as Madeline compared the delineation of boundaries online as similar to those they understood offline. On the potential of someone other than themselves logging into their Facebook account, it was said:

It’s like going into someone’s bedroom without their permission and going through all their stuff – Madeline

Her remarks reflect the idea that youth experiences of public and private are most often played out in their home life, with different areas of the property representing what is public and what is private – That which is considered private is understood as an opportunity not to keep things secret or hidden away from everyone, but to experience a level of control and opportunity to ‘evade the scrutiny’ of their parents³⁸⁴.

Additionally, a frequent response from participants was that despite perceiving *parts* of Facebook to be private (e.g. their inner circle of friends with whom they most often communicated³⁸⁵), they saw Facebook itself as a communication platform to be inherently public. For many participants, the notion of instability – that shared information might one day

³⁸² Livingstone, S (2005b, 165)

³⁸³ Marwick, A *et al* (2010, 4)

³⁸⁴ Livingstone, S (2005b, 171)

³⁸⁵ See 3.1

be visible to those it was not intended – led to them defining what was public as that which they lacked control over.

Participants often articulated a conflicted view of what is public and what is private in their mind. As Livingstone notes in a later piece, ‘the very language of social relationships is being reframed’³⁸⁶, with sites such as Facebook presenting an understanding of these concepts which does not necessarily conform to its users understandings. This was particularly clear from participants when they sought to express Facebook as public. For those interviewed, Facebook *as* a public under classical interpretation had little relevance. Though some indicated that their use might be characteristic of this by using it to aggregate and discuss current affairs, or deliberately provoke discussion by posting a knowingly controversial comment, that Facebook was a public in this way was not reflected in their responses. Instead, Facebook was a public platform in so far when information was posted by them there was the potential for “anyone to see it”. Moreover, there was a lack of clarity in whether remarks such as these should be taken to mean anyone outside of their friend group on Facebook, or outside of that smaller group of people perceived as the audience.

West *et al*, whose participants bore a resemblance to those of this study, uncovered that those interviewed perceived Facebook in this regard to be a ‘semi-public’ sphere³⁸⁷. Though this is defined in no more precise terms than those views articulated by their participants that participants were likely to demonstrate a more nuanced understanding of public and private than a binary understanding of the two would allow for was certainly the case in this study.

In her comparative study of three different social networks, Papacharissi conducts an analysis into the way in which architecture mediates the public and private boundary. Claiming that even the ‘criteria for membership’ develops a sense of the distinction between public and private³⁸⁸, she recalls elements of the site’s architecture (control over information³⁸⁹, control over profile information³⁹⁰ and instability of those controls³⁹¹) which were also seen to be important to participants. Concluding that Facebook users are left to ‘determine the balance of

³⁸⁶ Livingstone, S (2008, 394)

³⁸⁷ West, A *et al* (2009, 624)

³⁸⁸ Papacharissi, Z (2009, 207)

³⁸⁹ *ibid*

³⁹⁰ *ibid* 208

³⁹¹ *ibid* 208-209

what is made public and what remains private'³⁹², the suggestion is being made that the level of control which the site's architecture allows provides opportunity for users to determine the nature of their own space by constructing the private'³⁹³.

Moreover, participants indicated this exercise of control is not simply to determine the reach of content but also formed part of the way in which a person communicates online. This observation ties in with those which supported the expectation of certain information to be shared, and can broadly be expressed as the tendency for users to notice and interpret what has been made public and what has been made private of a person's profile. Parks reminds us that allowing users the choice to determine their own private and public boundaries in this way is a communicative tool, stating that 'the choice of private/public has a fundamental effect on how others might relate to an individual'³⁹⁴.

On this, Boyd writes:

I believe that we need to examine teens' strategies for negotiating control in the face of structural conditions that complicate privacy and rethink our binary conceptions of public and private.³⁹⁵

Later noting that teens 'want to have a sense for who is present so that they know what is appropriate'³⁹⁶, Boyd understands that approximating their audience is a key tactic in the ways Facebook users of this age understand the private/public boundary.

In this chapter the ways in which people engage with architecture has been detailed by looking at the ways in which normativity emerges in relation to it. Though the practice of each norm is singularly interesting, what resulted overall from the fieldwork undertaken and from the experiences of teenage users which were gained was that the role of architecture need be understood as something which does not undermine user agency but in fact highlights it.

Though this dissertation was shaped by an initial rejection of technological determinism, it would be disingenuous to not recognise the ability for architecture to constrain behaviour and do so in such a way that it is not always observable. However, it is evident from user

³⁹² *ibid* 209

³⁹³ Though the role of instability is recognised in her description of Facebook as 'the architectural equivalent of a glass house'. *ibid* 215

³⁹⁴ Parks, M R (2011, 110)

³⁹⁵ Boyd, D (2008a, 40)

³⁹⁶ *ibid* 165

experiences that to claim that behaviour is determined and thus predictable would misrepresent a person's ability to interpret and respond to architectural influences. For example, participants understood that characteristics such as archiving and technical instability were not simply abstract ideas but ones which were directly related to how they played out their social lives online and in turn developed practices which are responsive to these the challenges posed. That authentication online is problematic (something which returns us to Lessig's early attempt to legitimise cyberlaw studies³⁹⁷) is embedded in the practices of users, and in such a way that has led to a repurposing of other architectural features – in this case in how a person utilises knowing of who another is connected with, in addition to the emergence of expectations in information disclosure.

This dissertation does not seek to put user agency against the oft-cited regulatory difficulties which the internet faces us with. Instead, examples such as the above are valuable in so far as they build a picture of the way in which users understand their actions in the digital environment and engage with the creation of norms which reflect it. Encouraging scholarship to this end produces work that confronts the view of technological determinism and recognises the importance of not simply studying how people use the internet but how social and technological change impact upon each other.

CONCLUSION

For those interested in studying law and society, what matters most is framing situations in ways that facilitate the observation and analysis of what appears to be interesting and important.³⁹⁸

The aim of this dissertation has been to partake in the kind of framing which Tamanaha, above, describes. Though not a total exploration of the need to locate any study in the area between law, technology and society (to some degree this argument has long been complete), narrowing the focus of this dissertation to the Facebook experiences of a group of teenage users has facilitated a level of analysis which has allowed for observations of their behaviour to be set against the architecture and environment in which it takes place.

³⁹⁷ See 1.1

³⁹⁸ Tamanaha, B (2008, 411)

What participants' experiences demonstrated above all is that decisions about their own behaviour involve a complex balance of a number of factors, both social and digital. Architectural influence in this balance would appear to be split – as it is between macro and micro factors – between those instances of architectural design which users are particularly aware of, and those which they are not. For example, while participants were shown to be acutely aware of the way in which architecture played a role in the norms by which a person decides whether or not to add another person as a “friend”, there was a demonstrably less established understanding of the ways in which architecture might control such factors as the visibility of content to which they were exposed.

The observation that must be made at this point harks back to the idea of architecture as a regulator which extends beyond its role in plain sight, and as something which itself is a normalised condition of online environments. To assess the capacity of teenagers to regulate their behaviour online is to determine the extent to which they are able to take an awareness of their environment and critically reflect on how they are invited, coerced or otherwise guided by its nature. Tien argues that ‘the effects [of architecture] are enhanced by the public’s lack of technical knowledge’³⁹⁹. Though the participants interviewed during this research were of a group – by virtue of their age – often said to be better versed in technical matters, I would suggest that his conclusion is particularly relevant with respect to the claims made in this dissertation.

Where participants demonstrated a lack of understanding of the way in which Facebook operated beyond the point with which they interacted (e.g. there was little awareness of the algorithmically determined content of the News Feed upon which their friend’s behaviour was aggregated) it was apparent that the role of architecture was not appreciated. However, it can be observed that for practices to emerge this technical understanding need not be very detailed. For example, where knowledge had been gained from past experiences (such as those regarding the instability of information shared), technical ignorance itself was a source of anxiety and for some determined the way in which they used Facebook, undermining architectural efforts to construct an environment in which sharing is seen as safe amongst friends.

Thus, though Tien astutely suggests that a lack of technical knowledge inhibits a person’s ability to determine that something is of poor design, and therefore limits their ability to

³⁹⁹ Tien, L (2005, 18)

propose alternative designs⁴⁰⁰, he is mistaken to imply that this limits their ability or capacity to negotiate that environment. To the contrary, those involved in this research articulated a coherent set of practices which had formed as a consequence of their experiences online. Tien's understanding of knowledge is comparable to that of Koop's who, in his ten dimensions of technology regulation, determined a useful approach to be to consider 'what we know and how much (or how little) about a technology and its effects, about certain regulatory aspects, or about some instance of technology regulation'⁴⁰¹. While participants' understanding of technical processes might be limited, there is no questioning the fact that they valued those aspects which allowed them to partake in activities such as "stalking", and did so in a way that allowed them to draw conclusions regarding the intent of those responsible for the site's architecture. While it was unanimously held that the practice of "stalking" relied on the ability to conduct it without others being notified, participants also expressed an understanding that this was likely a designed capability and one unlikely to change – thus a stable principle upon which to engage with normativity.

If internet governance discussions are to progress they must do so having moved past the illusion that what is without regulation in a traditional sense is without regulation at all. Though by no means exhaustive, this dissertation's claim that architecture should be taken seriously as a regulator and normative influence is one which has been achieved by an appreciation of both the capacity of the person to negotiate it as well as the unique possibilities which are allowed for in a digital environment.

⁴⁰⁰ *ibid*

⁴⁰¹ Koops, B-J (2010, 320)

BIBLIOGRAPHY

- Acquisti, A. and Gross, R., 'Imagined communities: Awareness, information sharing, and privacy on the Facebook' in De Cristofaro E and Wright M (eds), *Privacy enhancing technologies* (Springer 2006)
- Agre, P., 'Life After Cyberspace' (1999) *EASST Review* 18 3-5
<<http://polaris.gseis.ucla.edu/pagre/life.html>> last accessed 10/09/13
- Ahn, J., 'The effect of social network sites on adolescents' social and academic development: Current theories and controversies' (2011) *Journal of the American Society for Information Science and Technology* 62 1435-1445
- Andrighetto, G. *et al*, 'On the immergence of norms: a normative agent architecture' (Proceedings of AAAI symposium, social and organizational aspects of intelligence, Washington, DC, 2007)
- Appleton, M., *A free range childhood: Self regulation at Summerhill School* (2nd edn, Loughton:Gale Centre Publications, 2002)
- Arnett, J. J., 'Emerging adulthood: A theory of development from the late teens through the twenties' (2000) *American psychologist* 55 469-480
- Barlow, J. P., 'A Declaration of the Independence of Cyberspace' (1996)
<<https://projects.eff.org/~barlow/Declaration-Final.html>> last accessed 10/09/13
- Beck, A., 'Is law an autopoietic system' (1994) *Oxford J Legal Stud* 14 401-418
- Bernstein, M. S. *et al*, 'Quantifying the invisible audience in social networks' (ACM Conference on Human Factors in Computing Systems, Paris, 2013)
- Berry, D. M., 'The Social Epistemologies of Software' (2012) *Social Epistemology* 26 379-398
- Bevan, J. L., Pfyl, J. and Barclay, B., 'Negative emotional and cognitive responses to being unfriended on Facebook: An exploratory study' (2012) *Computers in Human Behavior* 28 1458-1464
- Bicchieri, C. and Xiao, E., 'Do the right thing: but only if others do so' (2008) *Journal of Behavioral Decision Making* 22 191-208

Bijker, W. E. and Law, J., 'General Introduction' in Bijker WE and Law J (eds), *Shaping Technology / Building Society: Studies in sociotechnical change* (Cambridge:MIT Press, 1992)

Black, J., 'Critical reflections on regulation' (2002) *Austl J Leg Phil* 27 1-35

Boellstorff, T., *Coming of age in Second Life: an anthropologist explores the virtually human* (New York:Princeton University Press, 2008)

Bonnici, J. P. M., *Self-regulation in cyberspace* (The Hague:TMC Asser Instituut, 2008)

Boyd, D. and Marwick, A., 'Social privacy in networked publics: Teens' attitudes, practices, and strategies' (A Decade in Internet Time: Symposium on the Dynamics of the Internet and Society)

Boyd, D., 'Facebook's Privacy Trainwreck' (2008b) *Convergence: The International Journal of Research into New Media Technologies* 14 13-20

Boyd, D., 'Why youth (heart) social network sites: The role of networked publics in teenage social life' in Buckingham D (ed), *Youth, identity, and digital media* (Cambridge:MIT Press, 2007)

Boyd, D., *Taken out of context: American teen sociality in networked publics* (ProQuest 2008a) <<http://www.danah.org/papers/TakenOutOfContext.pdf>> last accessed 10/09/13

Boyle, J., 'Foucault in cyberspace: Surveillance, sovereignty, and hardwired censors' (1997) *U Cin L Rev* 66 177-206

Bucher, T., 'Want to be on the top? Algorithmic power and the threat of invisibility on Facebook' (2012) *New Media & Society* 14 1164-1180

Burnett, G. and Bonnici, L., 'Beyond the FAQ: Explicit and implicit norms in Usenet newsgroups' (2003) *Library & Information Science Research* 25333-351

Byron, T., 'Safer children in a digital world: the report of the Byron Review: be safe, be aware, have fun' (2008) <<http://dera.ioe.ac.uk/7332/1/Final%20Report%20Bookmarked.pdf>>

Calliess, G.-P., 'Lex mercatoria: a reflexive law guide to an autonomous legal system' (2001) *German Law Journal* 2
<<http://www.germanlawjournal.com/index.php?pageID=11&artID=109>> last accessed 10/09/13

- Cannataci, J. A. and Pia Mifsud-Bonnici, J., 'Foreword: Internet Governance' (2007) *International Review of Law, Computers and Technology* 21 1-3
- Chaulk, K. and Jones, T., 'Online obsessive relational intrusion: Further concerns about Facebook' (2011) *Journal of Family Violence* 26 245-254
- Cheung, C. M., Chiu, P.-Y. and Lee, M. K., 'Online social networks: Why do students use facebook?' 27 (2011) *Computers in Human Behavior* 1337-1343
- Chou, H.-T. G. and Edge, N., "'They are happier and having better lives than I am": the impact of using Facebook on perceptions of others' lives' (2012) *Cyberpsychology, Behavior, and Social Networking* 15 117-121
- Christofides, E., Muise, A. and Desmarais, S., 'Information disclosure and control on Facebook: are they two sides of the same coin or two different processes?' (2009) *CyberPsychology & Behavior* 12 341-345
- Christopherson, K. M., 'The positive and negative implications of anonymity in Internet social interactions: "On the Internet, nobody knows you're a dog"' (2007) *Computers in Human Behavior* 23 3038-3056
- Cohen, J. E., 'Configuring the Networked Citizen' (2012)
<<http://scholarship.law.georgetown.edu/facpub/803/>> last accessed 10/09/13
- Czerwinski, M. *et al*, 'Digital memories in an era of ubiquitous computing and abundant storage' (2006) *Communications of the ACM* 49 44-50
- DiMaggio, P. *et al*, 'Social implications of the Internet' (2001) *Annual review of sociology* 307-336
- Donath, J. and Boyd, D., 'Public displays of connection' (2004) *BT Technology Journal* 22 71-82
- Donath, J., 'Signals in social supernets' (2008) *Journal of Computer-Mediated Communication* 13 231-251
- Easterbrook, F. H., 'Cyberspace and the Law of the Horse' (1996) *U Chi Legal F* 207-254
- Ensmenger, N., 'Computers as ethical artifacts' (2007) *Annals of the History of Computing, IEEE* 29 88-87
- Ewald, F., 'Norms, discipline, and the law' (1990) *Representations* 30 138-161

Feldman, D. C., 'The development and enforcement of group norms' (1984) *Academy of management review* 9 47-53

Fournier, A. K. *et al*, 'Alcohol and the social network: Online social networking sites and college students' perceived drinking norms' (2013) *Psychology of Popular Media Culture* 2 86-95

Freiwald, S., 'A Comment on James Grimmelman's Saving Facebook' (2009) *Iowa Law Review Bulletin* 95 5-11

Friedman, B., 'Value-sensitive design' (1996) *Interactions* 3 6 16-23

Goldman, E., 'Search engine bias and the demise of search engine utopianism' (2006) *Yale Journal of Law & Technology* 6-8

Goldoni, M., 'The Normativity of Code as Law: Toward Input Legitimacy' (2011) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1923628> last accessed 10/09/13

Goldsmith, J., 'Regulation of the Internet: Three Persistent Fallacies' (1998) *Chicago-Kent Law Review* 73 1119-1131

Grabowicz, P. A. *et al*, 'Social features of online networks: The strength of intermediary ties in online social media' (2012) *PloS ONE* 7

Granovetter, M. S., 'The strength of weak ties' (1973) *American journal of sociology* 1360-1380

Griffiths, J., 'What is legal pluralism' (1986) *J Legal Pluralism & Unofficial L* 24 1-56

Grimmelmann, J., 'Regulation by software' (2005) *Yale Law Journal* 114 1719-1758

Grimmelmann, J., 'Saving facebook' (2009) *Iowa Law Review* 94 1137-1206

Grimmelmann, J., 'Virtual Worlds as Comparative Law' (2004) *NYL Sch L Rev* 49147-184

Grimmelmann, J., *Internet Law: Cases and Problems* (Oregon:Semaphore Press, 2011)

Hargittai, E., 'Whose space? Differences among users and non-users of social network sites' (2008) *Journal of Computer-Mediated Communication* 13 276-297

Hart, J. *et al*, *Exploring the facebook experience: a new approach to usability* (ACM 2008)

Hei-Man, T., 'An ethnography of social network in cyberspace: The facebook phenomenon' (2008) *The Hong Kong Anthropologist* 2 53-76

- Hinduja, S. and Patchin, J. W., 'Personal information of adolescents on the Internet: A quantitative content analysis of MySpace' (2008) *Journal of Adolescence* 31 125-146
- Holmes, D., *Virtual politics: Identity and community in cyberspace* (London:Sage 1997)
- Hooper, V. and Kalidas, T., 'Acceptable and Unacceptable Behaviour on Social Networking Sites: A Study of the Behavioural Norms of Youth on Facebook' (2012) *Electronic Journal Information Systems Evaluation Volume* 15 259-268
- Hull, G., Lipford, H. R. and Latulipe, C., 'Contextual gaps: privacy issues on Facebook' (2011) *Ethics and Information Technology* 13 289-302
- Hum, N. J. *et al*, 'A picture is worth a thousand words: A content analysis of Facebook profile photographs' (2011) *Computers in Human Behavior* 27 1828-1833
- Introna, L. and Nissenbaum, H., 'Defining the web: The politics of search engines' (2000) *Computer* 33 54-62
- Johnson, D. R. and Post, D., 'Law and Borders--The Rise of Law in Cyberspace' (1996) *Stan L Rev* 48 1367-1404
- Kahan, D. M., 'Gentle nudges vs. hard shoves: Solving the sticky norms problem' (2000) *The University of Chicago Law Review* 607-645
- Kalay, Y. E. and Marx, J., 'Architecture and the Internet: Designing places in cyberspace' (2005) *First Monday* <<http://firstmonday.org/ojs/index.php/fm/article/view/1563/1478>> last accessed 10/09/13
- Kang, J. and Cuff, D., 'Pervasive computing: embedding the public sphere' (2005) *Wash & Lee L Rev* 62 93-146
- Karakayali, N. and Kilic, A., 'More Network Conscious Than Ever? Challenges, Strategies, and Analytic Labor of Users in the Facebook Environment' (2013) *Journal of Computer-Mediated Communication* 18 175-193
- King, M., 'The "Truth" about Autopoiesis' (1993) *Journal of Law and Society* 20 218-236
- Kleinmans, M.-M. and Macdonald, R. A., 'What is a critical legal pluralism' *Can JL & Soc* 12 (1997) 25-46
- Kollock, P. and Smith, M., *Communities in Cyberspace* (New York:Routledge, 1999)

Koops, B-J., 'Ten Dimensions of Technology Regulation - Finding Your Bearings in the Research Space of an Emerging Discipline' (2010) *Dimensions of technology regulation* 309-324 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1633985> last accessed 10/09/13

Kraut, R. E. and Resnick, P., *Building successful online communities* (Cambridge:MIT Press, 2012)

Kübler, D., 'On the regulation of social norms' (2001) *Journal of Law, Economics, and Organization* 17 449-476

Lampe, C., Ellison, N. and Steinfield, C., *A familiar face (book): profile elements as signals in an online social network* (ACM 2007)

Latour, B., 'Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts' in Bijker WE and Law J (eds), *Shaping Technology / Building Society: Studies in sociotechnical change* (MIT 1992)

Lenhart, A. *et al*, 'Youth are leading the transition to a fully wired and mobile nation' (2005) *Pew Research Center*
<http://www.pewinternet.org/~media/Files/Reports/2005/PIP_Teens_Tech_July2005web.pdf> last accessed 10/09/13

Lessig, L., 'Law regulating code regulating law' (2003) *Loy U Chi LJ* 35 1

Lessig, L., *Code: And other laws of cyberspace* (New York: Basic Books, 1999a)

Lessig, L., 'The law of the horse: What cyberlaw might teach' (1999b) *Harvard law review* 113 501-549

Levin, D. B., 'Building Social Norms on the Internet' (2002) *Yale JL & Tech* 4 97-138

Levine, T. R. *et al*, 'Norms, expectations, and deception: A norm violation model of veracity judgments' (2000) *Communications Monographs* 67 123-137

Lewis, J. and West, A., '“Friending”: London-based undergraduates’ experience of Facebook' (2009) *New Media & Society* 11 1209-1229

Light, B. and McGrath, K., 'Ethics and social networking sites: a disclosive analysis of Facebook' (2010) *Information Technology & People* 23 290-311

Lindley, S. E. *et al*, 'Editorial: Collocated social practices surrounding photos' (2009) *International Journal of Human-Computer Studies* 67 995-1004

- Litt, E., 'Knock, Knock. Who's There? The Imagined Audience' (2012) *Journal of Broadcasting & Electronic Media* 56 330-345
- Livingstone, S., 'Children's use of the internet: Reflections on the emerging research agenda' (2003) *New media & society* 5 147-166
- Livingstone, S., 'In defence of privacy: mediating the public/private boundary at home' in Livingstone S (ed), *Audiences and publics : when cultural engagement matters for the public sphere* (Bristol: Intellect Books, 2005b)
- Livingstone, S., 'On the relation between audiences and publics' in Livingstone S (ed), *Audiences and publics : when cultural engagement matters for the public sphere* (Bristol: Intellect Books, 2005a)
- Livingstone, S., 'Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression' (2008) *New media & society* 10 393-411
- Loewenstein, G. and O'Donoghue, T., "' We Can Do This the Easy Way or the Hard Way": Negative Emotions, Self-Regulation, and the Law' (2006) *The University of Chicago Law Review* 183-206
- Luhmann, N., 'Law as a social system' (1988) *Nw UL Rev* 83 136-150
- Madden, M. *et al*, 'Teens, Social Media, and Privacy' (2013) *Pew Research Center* <<http://www.pewinternet.org/Reports/2013/Teens-Social-Media-And-Privacy.aspx>> last accessed 10/09/13
- Major, A. M., 'Norm Origin and Development in Cyberspace: Models of Cybernorm Evolution' (2000) *Wash ULQ* 78 59-112
- Malaby, T. M., *Making virtual worlds: Linden lab and second life* (New York: Cornell University Press, 2009)
- Malin, J. and Fowers, B. J., 'Adolescent self-control and music and movie piracy' (2009) *Computers in Human Behavior* 25 718-722
- Marshall, T. C., 'Facebook surveillance of former romantic partners: associations with postbreakup recovery and personal growth' (2012) *Cyberpsychology, Behavior, and Social Networking* 15 521-526

Marwick, A., Murgia-Diaz, D. and Palfrey, J., 'Youth, privacy and reputation (literature review)' (2010) *Berkman Center Research Publication* 2010 5
 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1588163> last accessed 10/09/13

Mayer-Schönberger, V., 'Demystifying Lessig' (2008) *Wis L Rev* 713-746

Mayer-Schönberger, V., 'Shape of Governance: Analyzing the World of Internet Regulation, The' (2002) *Va J Int'l L* 43 605-674

Mayer-Schönberger, V., 'Virtual Heisenberg: The Limits of Virtual World Regulability' (2009) *Wash & Lee L Rev* 66 1245-1262

Mayer-Schönberger, V., *Delete: The Virtue of Forgetting in the Digital Age* (New Jersey: Princeton University Press 2011)

McAdams, R. H., 'The origin, development, and regulation of norms' (1997) *Michigan Law Review* 96 338-433

McCrudden, C., 'Equality Legislation and Reflexive Regulation: a Response to the Discrimination Law Review's Consultative Paper' (2007) *Industrial Law Journal* 36 255-266

McLaughlin, C. and Vitak, J., 'Norm evolution and violation on Facebook' (2011) *New Media & Society* 299-315

Melissaris, E., 'The more the merrier? A new take on legal pluralism' (2004) *Social & Legal Studies* 13 57-79

Merry, S. E., 'Legal pluralism' (1988) *Law & Soc'y Rev* 22 869-896

Miller, D., *Tales from Facebook* (Cambridge: Polity Press, 2011)

Moore, K. and McElroy, J. C., 'The influence of personality on Facebook usage, wall postings, and regret' (2012) *Computers in Human Behavior* 28 267-274

Murray, A., *The regulation of cyberspace: control in the online environment* (New York: Routledge, 2007)

Nair, A., 'Internet Content Regulation: Is a Global Community Standard a Fallacy or the Only Way Out?' (2007) *International Review of Law, Computers and Technology* 2115-25

Nietzsche, F., *Nietzsche: Untimely Meditations* (Cambridge University Press 1983)

Ohm, P., 'Computer Programming and the Law: A New Research Agenda' (2009) *Vill L Rev* 54 117-154

- Oldenburg, R., *The Great Good Place: Cafés, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community* (New York:Marlowe, 1999)
- Ong, E. Y. *et al*, 'Narcissism, extraversion and adolescents' self-presentation on Facebook' (2011) *Personality and Individual Differences* 50 180-185
- Pahl, R., *On friendship* (Cambridge:Polity, 2000)
- Pamkowska, M., 'Autopoiesis in virtual organizations' (2008) *Revista Informatica Economica nr 1* 33-39
- Papacharissi, Z., 'The virtual geographies of social networks: a comparative analysis of Facebook, LinkedIn and ASmallWorld' (2009) *New Media & Society* 11 199-220
- Papacharissi, Z., 'The virtual sphere The internet as a public sphere' (2002) *New media & society* 4 9-27
- Park, N., Kee, K. F. and Valenzuela, S., 'Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes' (2009) *CyberPsychology & Behavior* 12 729-733
- Pempek, T. A., Yermolayeva, Y. A. and Calvert, S. L., 'College students' social networking experiences on Facebook' (2009) *Journal of Applied Developmental Psychology* 30 227-238
- Posner, E. A., 'Symbols, signals, and social norms in politics and the law' (1998) *The Journal of Legal Studies* 27 765-797
- Poster, M., 'Cyberdemocracy: Internet and the public sphere' (1997) *Internet culture* 201-218
- Raacke, J. and Bonds-Raacke, J., 'MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites' (2008) *Cyberpsychology & behavior* 11 169-174
- Raffl, C. *et al*, 'The Web as techno-social system: the emergence of Web 3.0' (2009) *Cybernetics and Systems* 2008 604-609
- Reid, E., 'Hierarchy and power: social control in cyberspace' in Smith M and Kollock P (eds), *Communities in Cyberspace* (New York:Routledge, 1999)
- Richardson, K. and Hessey, S., 'Archiving the self? Facebook as biography of social and relational memory' (2009) *Journal of Information, Communication and Ethics in Society* 7 25-38

- Robbins, I. P., 'What Is the Meaning of "Like"?: The First Amendment Implications of Social-Media Expression' (2013) *Federal Courts Law Review* 7 1 127-151
<<http://www.fclr.org/fclr/articles/html/2010/robbins.pdf>>
- Schultz, P. W. *et al*, 'The constructive, destructive, and reconstructive power of social norms' (2007) *Psychological science* 18 429-434
- Shah, R. C. and Kesan, J. P., 'How architecture regulates' (2007) *Journal of architectural and Planning Research* 24 350-359
- Shirky, C. *Here Comes Everybody: How Change Happens when People Come Together* (Kindle edn, Penguin 2009)
- Shirky, C., 'A Group Is Its Own Worst Enemy' (A speech at ETech, 24 April 2003)
<http://www.shirky.com/writings/group_enemy.html> last accessed 10/09/13
- Smith, M., 'Invisible crowds in cyberspace: mapping the social structure of the Usenet' in Smith M and Kollock P (eds), *Communities in Cyberspace* (New York:Routledge, 1999)
- Solove, D. J., 'A taxonomy of privacy' *University of Pennsylvania Law Review* (2006) 477-564
- Solum, L. and Chung, M., 'The Layers Principle: Internet architecture and the law' (2003) *U San Diego Public Law Research Paper* 55
<http://papers.ssrn.com/sol3/papers.cfm?abstract_id=416263> last accessed 10/09/13
- Sommer, J., 'Against Cyberlaw' (2000) *Berkeley Tech L J* 15
<<http://www.law.berkeley.edu/journals/btlj/articles/vol15/sommer/sommer.html>> last accessed 10/09/13
- Soukup, C., 'Computer-mediated communication as a virtual third place: Building Oldenburg's great good places on the world wide web' (2006) *New Media & Society* 8 421-440
- Stein, A. R., 'Parochialism and Pluralism in Cyberspace Regulation' (2003) *University of Pennsylvania Law Review* 153 2003-2016
- Stoup, P., 'The Development and Failure of Social Norms in Second Life' (2008) *Duke LJ* 58 311-344
- Strater, K. and Lipford, H. R., *Strategies and struggles with privacy in an online social networking community* (British Computer Society 2008)

- Subrahmanyam, K. and Greenfield, P., 'Online communication and adolescent relationships' (2008) *The Future of Children* 18 119-146
- Subrahmanyam, K. *et al*, 'Online and offline social networks: Use of social networking sites by emerging adults' (2008) *Journal of Applied Developmental Psychology* 29 420-433
- Suler, J., 'The online disinhibition effect' (2004) *Cyberpsychology & behavior* 7 321-326
- Swain, J., 'The Right Stuff: Fashioning an Identity through Clothing in a Junior School' in Webber M and Bezanson K (eds), *Rethinking Society in the 21st Century* (Ontario:Canadian Scholars' Press, 2004)
- Tamanaha, B. Z., 'The Folly of the Social Scientific Concept of Legal Pluralism' (1993) *JL & Soc'y* 20 192-217
- Tamanaha, B. Z., 'Understanding legal pluralism: past to present, local to global' (2008) *Sydney L Rev* 30 375-411
- Tamanaha, B. Z., 'A Non-Essentialist Version of Legal Pluralism' (2000) *Journal of Law and Society* 27 296-321
- Tapscott, D., *Grown up digital* (New York: Tata McGraw-Hill Education, 2009)
- Teubner, G., 'Substantive and reflexive elements in modern law' (1983) *Law and society review* 239-285
- Tidwell, L. C. and Walther, J. B., 'Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time' (2002) *Human Communication Research* 28 317-348
- Tien, L., 'Architectural Regulation and the Evolution of Social Norms' (2005) *Yale JL & Tech* 7 1-22
- Tong, S. T. *et al*, 'Too much of a good thing? The relationship between number of friends and interpersonal impressions on Facebook' (2008) *Journal of Computer-Mediated Communication* 13 531-549
- Twining, W., 'Normative and legal pluralism: A global perspective' (2009) *Duke J Comp & Int'l L* 20 473-517
- Utz, S., 'Show me your friends and I will tell you what type of person you are: How one's profile, number of friends, and type of friends influence impression formation on social network sites' (2010) *Journal of Computer-Mediated Communication* 15 314-335

Valentine, G., "' Oh Yes I Can.'" "Oh No You Can't": Children and Parents' Understandings of Kids' Competence to Negotiate Public Space Safely' (1997) *Antipode* 29 65-89

Van Schewick, B., *Internet architecture and innovation* (Cambridge: The MIT Press, 2010)

Walther, J. B. *et al*, 'The role of friends' appearance and behavior on evaluations of individuals on Facebook: Are we known by the company we keep?' (2008) *Human Communication Research* 34 28-49

Wellman, B. and Gulia, M., 'Virtual communities as communities' in Smith M and Kollock P (eds), *Communities in Cyberspace* (New York: Routledge, 1999)

Wellman, B., 'The glocal village: Internet and community' 1 (2004) *Ideas: The Arts & Science Review* 26-29

West, A., Lewis, J. and Currie, P., 'Students' Facebook 'friends': public and private spheres' (2009) *Journal of youth studies* 12 615-627

Wilson, R. E., Gosling, S. D. and Graham, L. T., 'A review of Facebook research in the social sciences' (2012) *Perspectives on Psychological Science* 7 203-220

Wilson, S. M. and Peterson, L. C., 'The anthropology of online communities' (2002) *Annual review of anthropology* 449-467