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Digital Possessions: Theorising Relations between Consumers and Digital Consumption Objects

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ABSTRACT

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DIGITAL POSSESSIONS: THEORISING RELATIONS BETWEEN CONSUMERS AND DIGITAL CONSUMPTION OBJECTS

By Rebecca D. Watkins

Digital consumption objects (DCOs) highlight limitations to extant theories of possession, including 1) assumptions of physical materiality, 2) privileging of human agency at the expense of the non-human, and 3) assumptions of full ownership that result in the purification of the 'cultural' level of possession from the market sphere of commodities. In order to understand digital possessions, existing theories must be extended and principles stemming from actor-network theory present a means to achieving this by re-conceptualising possession as enacted in the relations between consumers, consumption objects and broader networks of human and non-human actants.

Informed by actor-network theory, this thesis draws from in-depth interviews with twenty UK consumers and subsequent interrogation of relevant actants (e.g. software, hardware, contractual agreements) in order to document relations between consumers and DCOs from emergence to dissolution, presenting three contributions to theories of possession. Firstly, this thesis turns its attention to the consumption objects themselves. Enactments of DCOs emerged as ontologically distinct from the material consumption objects previously studied – transient as opposed to enduring and multiple rather than singular – and this thesis demonstrates ways in which the characteristics of consumption objects may shape consumer-object relations. Secondly, this thesis makes present the 'missing masses' of possession, demonstrating the role of actants beyond the end consumer in enabling, restricting and mobilising processes central to possession, as well as displacing consumers' agency and disrupting consumer-object relations. Thirdly, this thesis demonstrates that fragmented ownership configurations produce instances of ontological multiplicity whereby DCOs are simultaneously enacted as possessions and as company assets, resulting in conflicting ontologies that may produce distinct consumer-object relations.

Thus in addition to exploring the enactment of possession in an under-researched context this thesis contributes to consumer research by addressing three limitations to extant theories of possession and by presenting a framework for examining consumer-object relations in future studies of possession.

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DECLARATION OF AUTHORSHIP

I, Rebecca D. Watkins, declare that this thesis and the work presented in it are my own and have been generated by me as the result of my own original research.

Digital Possessions: Theorising Relations between Consumers and Digital Consumption Objects

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;

2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;

3. Where I have consulted the published work of others, this is always clearly attributed;

4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;

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Signed: ....

Date: ....

This thesis is dedicated to my grandparents.

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Chapter 1: Introduction

The objects we call our own increasingly exist in digital form, a trend that has been well documented (Denegri-Knott and Molesworth, 2010; Lehdonvirta, 2012; Molesworth and Denegri-Knott, 2012; Belk, 2013). In this thesis I adopt the term 'digital consumption object' (DCO) to describe objects that possess no enduring material substance, but rather exist within digital space (computer-mediated electronic environments) and may be accessed and consumed via combinations of hardware (e.g. laptops, mobile phones and videogames consoles) and software (e.g. operating systems, application software). Scholars have observed the 'dematerialisation' of many objects such as photographs, books and music recordings, as they develop digital equivalents (Siddiqui and Turley, 2006; Belk, 2013). However, we are also witnessing the emergence of a broader range of DCOs that may lack direct material equivalents, such as social networking profiles, text messages, blogs, avatars, and wishlists. Market data indicates that consumers are engaging with a diverse array of DCOs. For instance, in 2011 teens aged 12–17 were found to send an average of 60 text messages every day (Lenhart, 2012), whilst 47% of UK adults, and 75% of those aged 16–24, have created profiles on social networking websites (Ofcom, 2014). Similarly, a recent survey of UK adults found that 50% had a digital music collection, with an average collection amounting to 2,387 tracks (Ofcom, 2014). Thus this is not a niche phenomenon – engagement with many DCOs is widespread.

DCOs have been acknowledged to present companies with significant opportunities for profit and here they are constructed as lucrative digital assets. For instance, in 2013 digital goods accounted for 50% of UK music and video revenue for the first time in the industry's history, and whilst sales of physical music are declining, the market for digital music in the UK is forecast to reach £970m by 2019 (Mintel, 2014a). Similarly, the less mature eBook market, currently valued at £340m, is forecast to reach £522m in the same year (Mintel, 2014b). A substantial body of scholarly work has examined the ways in which companies may attempt to transform DCOs into profitable digital goods. Scholars have discussed pricing models, distribution networks, technological protection via digital rights management, and the financial implications of piracy and file sharing networks (e.g. Sundararajan, 2004; Peitz and Waelbroeck, 2006). The sale of DCOs within 'virtual worlds' (e.g. Habbo Hotel, Second Life) and videogames (e.g. Xbox Live, Entropia) has also received substantial attention; whilst the mainstream media appear baffled at the purchasing of digital goods such as magical weapons for 'real' money (see for example Shiels, 2009; Miller and Stone, 2009), scholars have examined the creation and management of economies within these digital spaces (Castronova, 2005, 2006; Lehdonvirta and Castronova, 2014). Furthermore, DCOs are fuelling a number of related markets including, for instance, a prosperous digital storage market; online storage company Dropbox surpassed 100 million users

in November 2012 after quadrupling its user base in just a year (Wortham, 2012). Furthermore, DCOs also create markets for the related hardware and software involved in their consumption (Denegri-Knott and Molesworth, 2010; Maguadda, 2011). The UK market for video game consoles, for instance, was last year valued at £676 million and is forecast to reach £1.94 billion by 2019 (Mintel, 2014c). Thus the relevance of DCOs to companies has not been overlooked, yet literature examining these items from a consumer perspective is more limited.

As consumers engage with an increasingly diverse array of DCOs, it raises the question of whether these items may become digital possessions. Material possessions' significant role in consumers' lives, particularly in relation to constructing, maintaining, and expressing identity, has been a key concern within consumer research since the 1980s (e.g. McCracken, 1986, 1988; Belk, 1988; Belk *et al.*, 1989) and continues to be a prominent topic of study (e.g. Ahuvia, 2005; Epp and Price, 2010; Lastovicka and Sirianni, 2011; Bardhi *et al.*, 2012). Yet despite the growing proliferation of this emerging category of consumption object, and recent recognition of the importance of this topic within consumer research (Watkins and Molesworth, 2012; Denegri-Knott *et al.*, 2012; Belk, 2013), our understanding of DCOs as possessions remains underdeveloped. Such items have been presented as potentially liberating consumers from the burdens of ownership, championed as candidates for communal sharing, short-term access and transient, liquid possessory relationships (Rifkin, 2000; Giesler 2006; Belk 2010, 2013, 2014a; Bardhi *et al.*, 2012; Bardhi and Eckhardt, 2012). Indeed, recent years have seen the emergence of various access-based models in the digital realm. Video streaming service Netflix, for instance, reached 44 million subscribers in January 2014 (Garrahan, 2014), whilst the number of paying Spotify subscribers doubled to 10 million in the eighteen months prior to May 2014 (Cooks, 2014). Yet recent research within the fields of both consumer research (Watkins and Molesworth, 2012; Denegri-Knott *et al.*, 2012) and human-computer interaction (Odom *et al.,* 2011) illustrates that DCOs have the potential to become highly valued possessions of personal significance.

With DCOs demonstrated to be of importance to consumers, they present a compelling area of study for consumer research. Not only does the possession of DCOs present a gap in our understanding of possession, which is grounded in studies of material consumption objects (MCOs), but these items also challenge our understanding of possession. DCOs highlight that current theories of possession within consumer research are limited by 1) assumptions of physical materiality, 2) the privileging of human agency at the expense of the non-human, and 3) assumptions of full ownership, which have resulted in the purification of the 'cultural' level of possession from the market sphere. It becomes apparent that in order to understand digital possessions, existing theories must be extended, and principles stemming from actor-network theory (ANT) present a means to achieving this by re-conceptualising possession as enacted in the relations between consumers, consumption objects, and broader networks of human and non-

human actants. The aim of this thesis is therefore to understand the enactment of possession in the context of DCOs by examining consumer-object relations and tracing the networks of actants in which they are embedded. In order to do so, this research employed a method assemblage that aimed to make present those actants made absent in prior studies of possession in order to answer the study's research questions, drawing from multiple in-depth interviews with twenty UK consumers conducted over a two year period ($\leq$ 3 interviews per participant, 69 hours of interview data in total) and subsequent interrogation of relevant actants (e.g. software, hardware, contractual agreements). This study does not focus on a particular type of DCO (e.g. digital music), but consistent with prior studies of material possessions (Csíkszentmihályi and Rochberg-Halton, 1981; Ahuvia, 2005; Miller, 2008) observes a broad range of digital possessions that emerged during data generation. Reflecting upon these findings this thesis presents three distinct theoretical contributions to consumer research's understanding of possession.

Firstly, it moves beyond the context of MCOs to note ways in which the characteristics of DCOs may produce distinctive enactments of possession, responding to Zwick and Dholakia's (2006a) call for consumer researchers to turn their theoretical attention to the consumption objects themselves. Distinct from the singular and enduring MCOs documented within prior research, upon which theories of possession are premised, the DCOs studied exhibited multiplicity and transience, characteristics that were found to hold implications for their relation to consumers. These findings demonstrate that variations in enactments of possession may be produced not only by the characteristics of the consumer (e.g. age, gender, and lifestyle) but also by the characteristics of consumption objects.

Secondly, I respond to critiques of consumer-centric approaches in consumer research (Moisander *et al.,* 2009a, 2009b; Askegaard and Linnet, 2011; Bajde, 2012), drawing from ANT sensibilities to make present the 'missing masses' (Latour, 1992) of possession. This thesis highlights the role of actants beyond the end consumer in enabling, restricting and mobilising processes central to theories of possession, alongside displacing consumers' agency in such processes and disrupting consumer-object relations. In conceptualising possession not as something 'done' by consumers to consumption objects, but as enacted by networks of both human and non-human actants, this thesis presents a fruitful lens for future studies of possession to move beyond consumer-centric accounts.

Thirdly, this thesis demonstrates that DCOs blur the states of possession and commodity that have previously been purified (for instance, Kopytoff 1986; Campbell, 2005). Highlighting the limitations of the current trend towards dichotomising full ownership and access-based consumption (Chen 2009; Bardhi *et al.,* 2012), it recognises a broader, more complex array of 'fragmented' ownership configurations in the context of DCOs and illustrates ways in which they

may shape enactments of possession. This thesis demonstrates that due to such fragmented ownership configurations, DCOs may be simultaneously enacted as possessions in relation to consumers and as assets in relation to companies, highlighting the potential consequences of this ontological multiplicity; conflicting ontologies may produce consumer ensnarement, alongside restricted consumer agency and unstable consumer-object relations. In doing so, this thesis provides insight into the under-theorised relation of ownership and possession, exploring the enactment of possession in the context of fragmented ownership configurations, whilst more broadly it provides insight into the interrelation of multiple, conflicting ontologies.

Thus rather than simply re-producing established narratives of possession in the context of DCOs this thesis draws from ANT sensibilities to highlight aspects of consumer-object relations that have previously been obscured. In doing so this thesis develops an understanding of possession that moves beyond the affective dimension that has dominated prior studies (see Belk *et al.*, 1989; Tobin, 1996; Price *et al.*, 2000; Ahuvia, 2005; Lastovicka and Sirianni, 2011) to document the ways in which possession is enacted or 'done'. Thus in addition to exploring the enactment of possession in an under-researched context, this thesis contributes to consumer research by addressing three limitations to extant theories of possession.

1.1   Thesis Structure

Chapters 2 and 3 contextualise the present study by reviewing an expansive body of prior literature in order to communicate the conceptual framework that informs the study and to establish the need for the present research. Chapter 2 begins by reviewing extant theories of possession, identifying common understandings of possession within consumer research, considering the role of material possessions in consumers' lives in relation to symbolic meanings and to identity projects. The chapter then considers how possession is 'done', discussing the ways in which MCOs become possessions and mapping out the biographies they may follow. In doing so, it becomes apparent that a significant body of literature has examined possession in the context of MCOs, and that many theories of possession are, understandably, rooted in this context.

In Chapter 3, I proceed to reflect upon the more limited literature on the subject of digital possessions. After establishing a definition of DCOs, I proceed to critically discuss the extent to which extant theories of possession reviewed in Chapter 2 are applicable in the context of DCOs. This chapter not only highlights that our understanding of digital possessions is under-developed, but also demonstrates that DCOs bring into sharper focus three key limitations to the field's understanding of possession. Firstly, since much extant theory is rooted in studies of MCOs, theories of possession that assume that consumption objects are not only tangible and tactile but also singular and enduring may become problematic in the context of DCOs, which do not

necessarily exhibit these characteristics. Secondly, consumer researchers typically portray an active consumer who 'possesses' inert, passive objects, privileging the agency of the human subject as 'possessor'. However, it becomes apparent that in understanding DCOs we must account for a broader range of actants (e.g. hardware, software, end user licence agreements) that are not accounted for within these theories. Thirdly, researchers have engaged in an act of scholarly purification that opposes possessions and commodities, separating the cultural sphere of possession from the market sphere of exchange. However, the MCOs studied are typically assumed to be fully owned. In the context of DCOs, such distinctions cannot always be so clearly drawn since many are not fully owned by the consumer, with various rights to these items retained by companies. Thus this chapter demonstrates that DCOs present an opportunity to revisit theories of possession in a way that offers a broader theoretical contribution to the field of consumer research.

Chapter 4 then introduces the research design of the present study, beginning by introducing the underpinning research philosophy. I argue that drawing from the actor-network theoretical principles of relational materiality, ontological symmetry and ontological multiplicity better equips consumer researchers to overcome current limitations to theories of possession identified in Chapter 3 by granting all actants equal ontological footing, breaking down a priori distinctions, and accounting for multiplicity. I then outline the specific research questions this thesis aims to answer and explain the method assemblage developed in order to do so, describing in detail the iterative processes of data generation, analysis, and interpretation.

I contextualise the study's findings in Chapter 5 by providing a brief introduction to the broad array of digital possessions that emerged and the key actants that punctuate the study's findings, before explaining the purpose and scope of each of the three findings chapters.

Chapter 6, the first findings chapter, begins by documenting various ways that relations between DCOs and consumers emerge. Within prior literature, consumer-object relations are often assumed to emerge when an object is acquired or created by the consumer. However, this chapter illustrates that the consumer cannot acquire or create alone but is afforded the ability to act by a range of actants including hardware, software, and contractual agreements which enable, shape and restrict these processes. Furthermore, we shall see that in some cases the consumer is not active in establishing consumer-object relations; consumers described large quantities of DCOs that were not actively sought, but rather accumulated. In documenting the varied ways that relations between consumers and DCOs emerge, we can observe that even in the formation of these relations, agency is distributed across networks of human and non-human actants.

In Chapter 7, the most extensive findings chapter, I document the various ways that consumers and DCOs proceeded to relate. Focusing upon aspects of these relations that presented

a significant departure from the theories of possession documented in Chapter 2, I examine the way that processes of transforming, ordering, protecting, and moving DCOs took place. In doing so, I highlight the role of networks of actants in performing such processes (in particular the role of software in enabling, constraining, and even displacing consumers' agency), document ways that DCOs exhibit distinct characteristics (including multiple and transient enactments) that shaped consumer-object relations, and examine ways in which companies' ongoing enactment of DCOs as assets may interfere with and disrupt consumer-object relations.

In the final findings chapter (Chapter 8), I examine the ways in which the dissolution of consumer-object relations may occur. Firstly, I examine processes of divestment. Unlike material possessions, which may have long, complex biographies as they pass between people, re-enter and exit the commodity sphere, and find new uses and meanings, DCOs' biographies often ended at the point of deletion (although other enactments of a DCO may persist elsewhere). I observe the movement from selective, careful divestment to mass divestment processes, noting the ways that the characteristics of consumers' DCOs and the design of software facilitated this, and examine instances where consumers were unable to achieve divestment. Secondly, I document new manifestations of loss; consumer-DCO relations broke down where passwords were forgotten, internet connections were absent, data became trapped and devices were lost, stolen or broken.

In Chapter 9, I reflect upon the theoretical significance of the study's findings, demonstrating the ways in which this thesis addresses the three core limitations of extant theories of possession identified in Chapter 3. I propose that in conceptualising possession as enacted, this work de-centres the consumer, acknowledges the blurring of possession and commodity, market and culture, and highlights the ways that consumption objects' characteristics may shape enactment of possession. Consequently, I argue that a perspective informed by actor-network theoretical sensibilities can extend our understanding of possession.

Finally, I conclude in Chapter 10 by summarising the theoretical contribution of this thesis to the field of consumer research before reflecting critically upon the limitations of the study and presenting a number of avenues for future research, including design-oriented, policy-oriented, and critical perspectives.

Chapter 2: Possessions and Possessing

The past thirty years have witnessed profound changes in consumer research, heralded by Belk (1995a) as the emergence of 'the new consumer behaviour'; in contrast to an earlier focus on buyer behaviour, of which purchase was the climax, the 1980s saw the focus of some marketing scholars shift from 'buyers' to 'consumers' (Belk, 1995a; Schau, 1998). What may appear to be a minor shift in terminology resulted in a vastly expanded academic domain, conceptualising consumption as an ongoing process and drawing attention to consumption phenomena occuring both pre- and post- acquisition such as desire (Belk *et al*., 2003), possession (Belk, 1988), sharing (Belk, 2010) and divestment (Lastovicka and Fernandez, 2005). In the socio-cultural accounts that explore such processes, the consumer is acknowledged to play an active role in the complex social phenomenon of consumption. This shift can also be linked to a movement from a focus on studies of consumer behaviour with managerial relevance towards studies aiming to generate knowledge about the role of consumption in everyday life whether or not this research produces direct marketing applications, akin to studies of consumption in fields such as sociology and anthropology (Thompson *et al.,* 2013).

Various terms have been used to refer to this growing branch of consumer research - postpositivist, interpretivist, humanistic, naturalistic and postmodern, for instance - whilst Arnould and Thompson (2005) have attempted to unite such work under the academic domain of 'consumer culture theory' (CCT). This body of work provides insight into the relation between consumption and consumers' broader life projects. Consumers are seen to embark on the complex process of constructing and expressing coherent identities, a project for which the marketplace can provide useful resources, often in the form of material goods (Arnould and Thompson, 2005). A significant body of literature examines the ways in which the material goods that consumers acquire are appropriated as possessions (e.g. Kopytoff, 1986; Belk, 1988; McCracken, 1988; Kleine and Baker, 2004), become receptacles of personal and public meanings (e.g. Wallendorf and Arnould 1988; Belk 1991a; Richins 1994a, 1994b) and are utilised in constructing and expressing consumer identities (e.g. Belk, 1988; Kleine *et al,*. 1995; Ahuvia 2005). This chapter reviews and critiques prior literature on the subject of possession within consumer research, where appropriate drawing also from related work in fields such as psychology, sociology and anthropology.

Whilst material possessions have been the subject of significant study within consumer research and beyond, there remains a lack of conceptual clarity surrounding the term 'possession'. Consequently, the chapter begins with a review of dominant understandings of possession within the field of consumer research. Subsequently, the chapter proceeds to consider why consumers'

material possessions have been deemed to present an important topic for consumer researchers, asking why it is that consumers desire to possess and reviewing the significant body of extant literature that documents material possessions' public and personal meanings and their role in consumers' identity projects. Finally, in a third section, I consider how possession is 'done' and demonstrate the potential for material possessions to develop long and complex biographies in which consumers play an active role as they transform possessions' meaning and move them from one stage of their biography to the next. In doing so, this chapter establishes the theoretical framework that informs the present study of digital possessions and the body of literature to which this thesis intends to contribute.

2.1   Defining Possession

In our day-to-day lives the roles of both possession and ownership are significant, since almost everything we do involves some consideration of possessory relationships and property rights (Rudmin, 1988). Consequently, these concepts have been the subjected to significant study across a range of disciplines including law, economics, philosophy, psychology, and anthropology (see Schlatter, 1951; Macpherson, 1978; Rudmin, 1988; Munzer, 1990). Within consumer research the role of material possessions has received conceptual elaboration (Kopytoff, 1986; Belk, 1988) and significant empirical exploration (e.g. Wallendorf and Arnould, 1988; Price *et al.*, 2000; Ahuvia, 2005; Lastovicka and Sirianni, 2011). However, little attention has been devoted to explicitly defining the terms 'possessions', 'possession' or 'possessing', although such terminology is frequently employed. The colloqial meanings of these terms are so well-established in the context of material possessions, they they may not appear to warrant any special attention, yet this becomes problematic when we attempt to understand possession in other less established contexts. What would constitute a 'digital possession'? In order to answer this question it is first necessary to more carefully reflect upon the meaning of these terms. In this section, I shall discuss two dominant understandings of possession that underpin studies of possession within consumer research, before distinguishing possession from ownership.

2.1.1   Dominant Perspectives

Colloquial use of the term 'possession' may include reference to those items that we have in our physical possession, or to things we that we legally own. For instance, the Oxford English Dictionary (2015) defines possession as "The state of having, owning, or controlling something". Yet in consumer research the term has come to hold a distinct meaning that is rarely explicitly defined. Literature on material possessions draws from understandings of possession developed in the work of Kopytoff (1986) and Belk (1988) and I shall therefore examine these dominant perspectives.

Studies of material possessions within consumer research frequently draw from anthropologist Igor Kopytoff's (1986) theory of the cultural biographies of things. Kopytoff proposes that objects, defined as non-human entities, are caught up in social interactions both within and outside the marketplace and consequently develop their own histories or 'biographies.' As items progress through these biographies, they come to hold different values and meanings and Kopytoff (1986) highlights the distinction between commodity and possession status. Possessions are considered distinct from commodities, which are defined by their exchange value, since they have become 'singularised' and thus separated (at least temporarily) from the commodity sphere (Kopytoff, 1986). Belk (1991a) illustrates Kopytoff's concept of singularisation with the example of a new puppy – upon acquisition the puppy may be interchangeable with its littermates, yet after spending months, weeks or even days with this animal, the consumer comes to regard their pet as unique, irreplaceable, and therefore singular. The same phenomenon is understood to occur in the context of material consumption objects (MCOs), and drawing from Kopytoff's (1986) concept of singularisation, consumer researchers have examined the ways that consumers imbue MCOs with personal meanings that strip them of their commodity status (Belk *et al.*, 1989; Grayson and Shulman, 2000; Curasi *et al.*, 2004). Here commodities and singular possessions are perceived to represent opposing object states and a range of rituals (possession/decommoditisation rituals and recommodification rituals) are employed in order to move items between these states as their biographies unfold.

A second common understanding of possession stems from the work of of consumer research scholar Russell Belk. Rather than defining possessions in direct opposition to commodities, Belk (1988) instead defines possession as proprietary feelings experienced by a consumer towards an entity. For Belk (1988, p.139) the term possession is understood to refer to "things we call ours"; items towards which consumers experience a sense of ownership, regardless of whether they legally own the item. This use of the term possession is akin to discussions of 'psychological ownership' in psychology, defined as "the state in which individuals feel as though the target of ownership, or a piece of that target is "theirs" (i.e., "It is mine!")" (Pierce *et al.*, 2003, p.85). Whilst Kopytoff's (1986) work specifically examines the biographies of MCOs, Belk (1988) argues that possession is not exclusive to MCOs. Subsequent research illustrates that consumers can develop proprietary feelings towards pets (Hirschmann 1994) and digital consumption objects (Odom *et al.,* 2011; Watkins and Molesworth, 2012; Denegri-Knott *et al.*, 2012) whilst Belk (1988) suggests that consumers may also experience proprietary feelings towards places visited and activities engaged in, alongside intangible entitites such as ideas, stories and names. Thus whilst Kopytoff's (1986) definition appears rooted in the context of MCOs, Belk's (1988) conceptualisation of possession as proprietary feelings

encompasses a wider variety of consumption objects. However, consumer research has nevertheless studied possession almost exclusively in the context of MCOs.

More recently, Belk (2014b, pp.33-34) has reflected that "To possess something, whether legally or not, involves proprietary feelings. But to acquire these feelings it may be necessary to perform certain possession rituals." Here Belk indicates that possession is more than a psychological experience of proprietary feelings by the consumer – consumers interact with MCOs in certain ways in order for these feelings to develop. As we shall see in Section 2.3, coming to possess MCOs is seen to involve processes of cleaning items and removing associations with previous possessors (McCracken, 1986; Gregson and Crewe, 2003), active personalisation of items to mark them as ours (Campbell, 2005), and singularisation over time as MCOs' histories become interwoven with our own as they are habitually used (e.g. the chair in the classroom that is 'my' chair) (Grayson and Schulman, 2000). Thus possession is seen to involve processes of using, controlling, caring for, and managing MCOs that assume a level of control. Central to both Belk's (1988) and Kopytoff's (1986) definitions are acts performed by the consumer that transform consumption objects into possessions.

In summary, whilst consumer research rarely explicitly defines 'possession', studies tend to draw from two prominent theoretical approaches; Kopytoff's (1988) understanding of possession as a MCO singularised and separated from the commodity sphere and Belk's (1988; 2014b) understanding of possession as a proprietary feeling towards an entity. Much research aligns with both of these views simultaneously without acknowledging any distinction between the definitions of possession each approach implies. Indeed, Belk (1988) draws from Kopytoff's work in his own account of possession. However, whilst in the context of MCOs these approaches are complementary, it is important to note that these approaches are distinct in their definition of possession.

2.1.2   *Possession and Ownership*

There has been a tendency to use the terms possession and ownership interchangeably; as noted above, in common parlance the terms are blurred. However this conflation can also be found in consumer research. For instance, Bardhi and Eckhardt (2012, p.2), drawing from Snare (1972), propose that "ownership expresses the special relationship between a person and an object calling 'owning,' and the object is called 'personal property' or a 'possession.'" Here ownership and possession are conflated, with the terms possession and property (an object of ownership) treated as synonymous. In defining possession, there is therefore a need to clarify its distinction from the related concept of ownership.

The term 'ownership' is typically used to refer to legally or socially recognised rights to use an object in certain ways and the term 'property' to refer to an object of ownership. Within consumer research's study of material possessions, questions of ownership are largely absent, and where considered ownership is commonly equated with full legal ownership. For instance, Belk (2014b, p.34) proposes that:

> From a legal and economic point of view, when we own something, it is our property and we have certain rights and responsibilities regarding it. These include the rights to use, sell, give, or otherwise dispose of the property as well as the right to exclude others from doing so and to receive the fruits or benefits that the property may produce.

Belk's definition draws parallels with full liberal ownership perspectives whereby ownership involves exclusive, unrestricted rights to use an object and to manage its use by others (Honoré, 1961). Indeed, literature on the topic of possession has largely focused upon MCOs which are often fully owned and can be exchanged and used freely (e.g. Ahuvia, 2005; Epp and Price, 2010). The prominence of such perspectives within consumer research has led to scholars declaring the emergence of a 'post-ownership economy' (Belk 2014a) or 'age of access' (Rifkin, 2000) whereby access-based consumption represents "transactions that may be market mediated in which no transfer of ownership takes place" (Bardhi and Eckhardt 2012, p.1). These more transient access-based models are proposed to present a viable alternative to traditional ownership-based consumption, potentially reducing consumers' desire to own (Belk, 2010, 2014b; Rifkin, 2000; Chen, 2009). Such claims are based on an essentialist position that dichotomises full ownership- (complete, exclusive control over goods) and access- (temporary and highly regulated use of goods) based models of consumption. However, this dichotomy may inadvertently obscure established forms of fragmented ownership.

Three decades prior to the popularity of access-based observations, legal scholar Grey (1980) discussed the 'disintegration' or 'fragmentation' of ownership. Ownership, he argues, can more easily be understood as a 'bundle of rights', a miscellany of legal relations or property rights that can be divided amongst various parties in numerous ways. From this perspective, many parties may simultaneously hold bundles of rights to an object, and thus the question 'who is the owner?' may be answered equally by 'no-one' or 'many' (Gauss, 2012). Of course, full ownership may still occur whereby individuals hold unrestricted, exclusive rights to an entity. However, a 'bundle' perspective recognises the additional existence of a range of fragmented ownership models. Thus in drawing from bundle theories we see that the apparent reduction in the importance of ownership noted within consumer research (Chen, 2009; Bardhi and Eckhardt, 2012; Belk, 2014a) might alternatively be interpreted as evidence of an ongoing fragmentation of ownership. My aim here is not to digress into a legalistic analysis that is beyond the scope of this thesis, but to move beyond the emerging dichotomy of full ownership versus access (no

ownership) by recognising the potential for a broader array of fragmented ownership configurations. We shall see in the following chapter that this distinction is particularly important in the context of digital consumption objects.

Returning to the focus of this thesis, we can ask how the absence of, or restrictions on, ownership of items may relate to possession. Consumer research offers only a limited theorisation of this relationship. Given that many of the MCOs consumers previously possessed tended to also be owned 'in full', ownership and possession are often equated within prior literature, with any relationship between them unproblematic and therefore made absent. Despite acknowledgement that consumers may legally own a good but never view it as truly belonging to them (McCracken, 1986), or may view goods as possessions despite a lack of legal ownership (Belk, 1988; Etzioni, 1991; Pierce *et al.*, 2003), our understanding of the inter-relation of ownership and possession in consumption is limited.

Linkages between possession and ownership have been implied in research into access-based consumption and renting. Bardhi and Eckhardt (2012) find that limited access and market-mediation inhibits the appropriation of Zipcars. They find that when renting cars there is an emphasis on use value and a lack of psychological appropriation in comparison to consumers' previously documented relationships with purchased cars. Acts that might facilitate appropriation such as caring for and cleaning the vehicle and adjusting its seats and mirrors were not performed, and Bardhi and Eckhardt (2012) propose that such possession rituals are inhibited by short-term access and market mediation. Furthermore, they find that this lack of appropriation of Zipcars as 'mine' results in a lack of care when using these rented cars, with participants admitting to driving and parking more recklessly than when using their own cars. Furthermore, consumer research illustrates ways in which ownership structures may not restrict use as intended. For example, Visconti, *et al.* (2010) illustrate that limited ownership rights to public spaces do not prevent some individuals from transforming targeted objects with graffiti or 'street art'. Similarly, Giesler (2008) documents an ongoing struggle between corporations imposing legal restrictions on digital music consumption and consumers' attempts to resist them. This work illustrates that ownership configurations may be ignored or rebelled against, but does not unpack in detail the inter-relation of ownership and possession.

Thus ownership and possession present distinct but related concepts, yet this relationship is little theorised. Despite suggestions that ownership and possession may be linked, we lack theoretical or empirical elaboration on their relationship. However, we shall see in the course of this thesis that understanding this relationship becomes particularly important as complex, fragmented ownership models emerge in the context of digital consumption objects. Having now defined possession, and distinguished this concept from the related notion of ownership, the

following section proceeds to review the expansive body of literature that has examined the role of material possessions as meaning receptacles and resources for consumers' identity projects.

2.2   Possessions, Meaning and Identity

Why is it that consumers desire to acquire large quantities of objects that they come to consider their own? What role do these items play in consumers' lives? Research across many disciplines has examined humans' motivation to possess, and although the definition of possession adopted in such work is different from that adopted here, it is helpful to reflect upon dominant perspectives across eras and disciplines in order to provide historical context to current understandings within consumer research. Early work from the nineteenth century until the 1950s was dominated by instinct-oriented investigations that examined the extent to which possessive behaviour can be attributed to a universal 'acquisitive' instinct. Advocates argued that the human desire to possess emerges from a biologically rooted acquisitive disposition; humans, like other animals, are motivated to control as many resources as possible in order to increase their likelihood of survival (e.g. McDougall, 1908; Drever, 1917; Bernard, 1924).

Many scholars, however, have come to criticise the instinctual approach. Litwinski (cited Rudmin, 1990), for instance, differentiates possession from the pure acquisitive behaviour and transient opportunistic use often used as evidence for instinct theory, and instead argues that possession is utilitarian. The utilitarian perspective is largely rooted in economics, and views possession as the retention of goods as a means of maximising utility and increasing future well-being and happiness. Bentham (1931/1894) and Smith (1910/1890) analyse the objective functions of possessions (seen largely as private property) as utilitarian instruments that provide for humans' physical needs. Drawing from Bentham's work, Litwinski (cited Rudmin, 1990) proposes that humans are future orientated and therefore accumulate things (material goods, ideas, social relationships) because of their expected utility in anticipated future situations. Unlike the acquisition and use behaviours exhibited by animals, possession here refers to the intentional acquisition and retention of goods in order to maximise future utility. However, once again the emphasis is not on possessions as singularised objects (Kopytoff, 1986) or possession as proprietary feelings (Belk, 1988).

In the 70s and 80s, the possession of MCOs became a key topic of research in the behavioural sciences. Developmental psychologist Lita Furby (1991) reflects that when commencing her research into possessive and acquisitive behaviour, she found that whilst there was existing literature on the topic from political, economic, legal, philosophical, and historical perspectives, this work was largely non-empirical. Consequently she embarked upon a series of work that led her to identify 21 motivations for possession (Furby, 1976, 1978a) and two key

themes emerge prominently; (1) personal competence and control and resultant feelings of efficacy and (2) self-concept. As infants'motor skills develop, items they can control become regarded as 'self' and items they can't are 'not self' (Lewis and Brooks, 1978; Seligman, 1975). The ability to control the things around us, to do things with or to the environment, produces feelings of competence (Furby, 1980), mastery (White, 1959), and efficacy (Lichtenberg, 1989). Indeed, according to Furby (1980) we develop a stronger sense of self by learning to actively control objects in our environment, as opposed to feeling controlled *by* them. Thus research in developmental psychology has indicated that control is critical to feelings of possession and we shall see that it is with this work that current perspectives within consumer research draw the clearest parallels.

In summary, outside the field of consumer research, a significant body of work has examined motivations for possession, portraying the desire to possess as human instinct, utilitarian, and more recently as rooted in a desire for control and effectance (for a comprehensive review of these approaches see Rudmin, 1988; Dittmar, 1992) However, rather than following this trajectory by attempting to understand consumers' underlying desire to possess, consumer research (along with related disciples including sociology, anthropology, and material culture studies) has adopted a different approach by examining the role of possessions in consumers' lives, identifying the role of possessions as receptacles of public and personal meanings, and as resources for consumers' identity projects. In this section, I provide a concise review of this vast body of work.

2.2.1   *Possessions as Meaning Receptacles*

> We cannot hope to understand consumer behavior without first gaining some understanding of the meanings that consumers attach to possessions.
>
> (Belk, 1988, p.139)

The topic of 'meanings' is central to the field of consumer research. Consumer goods have been described as 'symbols for sale' (e.g. Levy, 1959), whilst Shankar *et al.* (2009, p.79) propose that "consumer culture can be represented as a smorgasbord of symbolic resources that people interact with, deliberately or not, to (re)produce their identities." Indeed, Douglas and Isherwood (1979) consider symbolic consumption not only as communication with others, but also as a means of imposing order and meaning on the world, making visible and stable the categories of culture. Through amassing a collection of meaningful items, the individual creates an intelligible universe and makes a statement regarding the values to which they ascribe which other consumers well versed in these symbols can read and interpret (Douglas and Isherwood, 1979). Possessions are here understood as 'meaning receptacles' (Richins, 1994a) or "storehouses of personal meaning" (Wallendorf and Arnould, 1988, p.531), and these symbolic meanings may lead consumers to

value possessions beyond their functional benefits (Csíkszentmihályi and Rochberg-Halton, 1981; Belk, 1988; Richins, 1994b). What meanings do possessions come to hold?

Firstly, possessions may become receptacles of 'public meanings', defined by Richins (1994b, pp.505-506) as "the subjective meanings assigned to an object by outside observers (non-owners) of the object, that is, by members of society at large." Sociological literature has long considered material possessions as communicators of wealth (Veblen, 1899) and taste (Bourdieu, 1984). How do possessions come to hold such public meanings? McCracken (1986) proposes that meaning initially resides in the culturally constituted world, and is transferred to consumer goods via advertising and the fashion system. McCracken (1986) proposes that it is through consumer rituals (e.g. possession rituals, grooming rituals, divestment rituals, exchange rituals) that the consumer is able to transfer meaning from goods to themselves. However, possessions may also hold meanings that are not shared by society but are specific to the individual. For instance, Grayson and Shulman (2000, p.17) note that:

> A retiree treasures a book his wife gave him on their wedding day. A college student saves the ticket stub from a recent concert. A restaurant owner frames the first dollar his business ever earned. A university professor keeps a bottle of champagne given in thanks by a graduating student.

How are such meanings accounted for in prior literature? Alongside discussions of the public meanings, possessions may hold 'private' or 'personal' meanings, which Richins (1994b, p.506) defines as "the sum of the subjective meanings that object holds for a particular individual. Such meanings may include elements of the object's public meanings, but the owner's personal history in relation to the object also plays an important role." For instance, within consumer research there is much reference to cherished, sacred or loved possessions (Belk *et al.*, 1989; Tobin, 1996; Price *et al.*, 2000; Ahuvia, 2005; Lastovicka and Sirianni, 2011) that hold personal meanings such as associations with other people, places and experiences alongside past, present or imagined future selves (Kleine *et al.*, 1995; Ahuvia, 2005). Such meanings may develop over time through the use of and engagement with objects (Grayson and Shulman, 2000) whilst alternatively consumers may more actively transform homogenous commodities into meaningful possessions and charge them with personal significance, processes that have been referred to as 'possession rituals' (McCracken, 1986). There may be a tendency to resist replacing possessions with positive personal meanings "even when an exact replica is offered, because the consumer feels that the replica cannot sustain the same meaning as the original" (Grayson and Shulman, 2000, p.17), and whilst many possessions are kept long after their instrumental value has been lost (Schultz *et al.*, 1989; Kleine and Baker, 2004).

Thus we see that possessions are considered within consumer research as receptacles of private and public meanings and it is from such meanings that their value to consumers may stem.

However, why are such meaningful possessions valued? What purpose do they serve? In the following section, I review the large body of work that documents ways in which these 'meaningful' possessions may relate to consumers' identity projects.

2.2.2   Possessions as Resources for Identity Projects

> It seems an inescapable fact of modern life that we learn, define, and remind ourselves of who we are by our possessions.

<div align="right">(Belk, 1988, p.160).</div>

Within consumer research the consumer subject is painted as an active identity seeker, constructor and manager, and much prior literature acknowledges the role of meaningful possessions in the construction and maintenance of an always evolving identity (Arnould and Thompson, 2005). Material possessions have long been acknowledged to play a role in communicating consumers' identities to others. Douglas and Isherwood (1979), for instance, consider the role of possessions in communicating information about their possessor – people use their material possessions to make statements about themselves, their family, and their friends. Similarly, Dittmar (1992) considers possessions as material symbols of identity – people convey a message through their material possessions that is then interpreted by those around them. Possessions can locate us, for example, within social groups, subcultures and classes (Dittmar, 1992). Through various ensembles of possessions consumers are able to convey consumption meanings that define their perceived personalities, affiliations, and lifestyles. However, the relation of possessions to consumers' identity extends beyond their role in self-expression; consumer researchers acknowledge that possessions also play a role in constructing and maintaining consumers' identities.

Miller (2010) rejects the idea that objects are simply signs or symbols, proposing that MCOs can play a role in creating us in the first place; objects make people just as much as people make them. Indeed, material possessions as an extension of the self has been a key principle in consumer research for over 25 years. Belk (1988, p.139) proposes that "knowingly or unknowingly, intentionally or unintentionally, we regard our possessions as parts of ourselves." In developing this argument in his conceptual paper, Belk (1988) cites prior research indicating that, second only to our own minds and body parts, we view possessions as highly central to our sense of self (McClelland, 1951; Prelinger, 1959). Additionally, he draws from evidence indicating that where possessions are regarded as more central to our sense of self, we tend to take better care of them, make more effort to protect them, become less open to sharing them with others, and become more aggrieved if these items are lost, damaged or stolen (Belk, 1988). How does such self-extension occur? Belk (1988), drawing from the work of Sartre (1943), describes various processes via which objects may be cathected as a part of the self, intentionally by (1)

appropriating them through controlling or mastering them (here we can see links to Furby's (1978a) earlier studies), (2) creating them, and/or (3) knowing them intimately, and (4) unintentionally in instances of (sometimes unwanted) contamination. Possessions can literally extend the self, enabling us to perform actions we couldn't otherwise, and symbolically extend the self, enabling us to 'be' someone we couldn't otherwise (Belk 1988, 2000). The latter has been a central focus within consumer research, which has explored the role of material possessions in constructing and maintaining identity.

A significant body of work considers the role of material possessions in cultivating identity (Schouten, 1991; Kleine *et al.,* 1995) and resolving identity conflicts (Ahuvia, 2005). Here, possessions are more than functional items retained for future use, acknowledged to play a significant role in broader life projects as they help us to discover, define and maintain our identity and develop a sense of belonging. Material possessions may serve as markers for individual and collective memory, prompt recollections of prior experiences, and link us to other people, and to our past selves (Belk, 1991a; 2010). Maintaining stable attachments to material possessions may therefore provide individuals with a sense of permanence in the world, maintaining the continuity of the self through time (Belk, 1988; Kleine *et al*., 1995; Schultz *et al*., 1989; Tobin, 1996; Kleine and Baker 2004). In particular, MCOs are discussed as identity anchors that tie consumers to a particular time and place (e.g. Mehta and Belk, 1991; Belk, 1992) In contrast, changes in relationships with material possessions can assist 'self-cultivation', facilitating identity transition (Csíkszentmihályi and Rochberg-Halton, 1981; Kleine *et al.*, 1995; Schultz *et al.*, 1989; McAlexander 1991; McAlexander *et al.,* 1993). For example, detaching oneself from a possession associated with a 'no longer desired' past self allows us to disconnect from this past self, whilst forming an attachment to a possession that reflects a desired future self can aid the process of becoming the person we would like to be (Kleine *et al.*, 1995).

It is worth noting that a large body of work considers whether we should indeed place so much emphasis on possessing objects. Possessiveness can be frowned on as materialistic "the belief that having or not having desired possessions is a primary source of happiness or unhappiness in life" (Belk, 2010, p.223). Marx (1848 [1964]) proposes that an emphasis on 'having' produces a false path to happiness through commodity fetishism, imbuing consumer goods with the potential for happiness, whilst Fromm (1976, p.76) similarly attacks a focus on acquiring and retaining since "If I am what I have and if what I have is lost, who then am I?" Miller (2010), however, is critical of discussions of materialism's negative impact on society, and calls for a more nuanced discussion. He roots such discussions in a form of primitivism that assumes that simply because tribespeople may have had less material possessions that they were therefore less materialistic, whereas it has been demonstrated that many cultures, not only the

modern Western world, have highly sophisticated and complex relationships to material things. Indeed, Miller (2010) argues that our use and identification with material culture can have positive consequences, enhancing our humanity. Resolving such debates is beyond the scope of this thesis, however.

In summary, this section has demonstrated the importance of possession as a topic within consumer research by reviewing prior literature that demonstrates that possessions play a significant role in consumers' lives, becoming repositories of personal and public meanings and utilised in constructing, maintaining and expressing consumers' identities. In the following section I consider ways in which consumers' relationships with material possessions may vary.

2.2.3   Variations in the Meaning and Role of Possessions

In reflecting upon prior literature on the topic of material possessions it becomes apparent that 'possession' can take different forms, characterised by distinctions in consumers and their relation to MCOs.

Firstly, our relationships with possessions have been suggested to vary by age and gender, amongst other consumer characteristics. Csíkszentmihályi and Rochberg-Halton (1981) find that younger consumers may become more attached to possessions that reflect skills in use or that can be controlled, those in pre-retirement adulthood are most likely to value those items that represent their power and status, whilst older consumers, in contrast, tend to be most attached to those items that remind them of the past and of important others, such as photographs and mementos. Dittmar (1991) finds that whilst men reported that they were primarily concerned with instrumental and use-related features of possessions, women emphasised possessions that symbolised emotional attachment and interpersonal relationships. Similar variations have been noted elsewhere (Furby, 1978b; Rudmin, 1994), whilst variations between cultures (Furby, 1976; Rudmin, 1988; Wallendorf and Arnould 1988; Mehta and Belk 1991; Eckhardt and Houston, 2001) and socio-material status (Dittmar 1992) have also been noted. Here distinctions in the characteristics of the consumer themselves are seen to produce different types of relationships with material possessions.

More recently Bardhi *et al.* (2012) have illustrated a distinction between 'solid' and 'liquid' relationships between consumers and their possessions, shaped by their lifestyles and identity projects. The authors note that studies of possessions have presumed solidity and stability as key (and preferable) attributes of possession, whereby consumers develop enduring attachments to objects as identity anchors that tie them to a particular culture, place and time and to enduring identity projects. However, they find that such enduring attachments are undesirable to

contemporary global nomads since they inhibit the fluidity of the geographical movement that is central to their lifestyle. Indeed, Bardhi *et al.*'s (2012) participants limited their material possessions and formed liquid relationships to the items they did acquire, defined by a focus on situational value, use value and immateriality. Digital consumption objects such as ebooks, mp3 files and digital photographs were valued for the immateriality that made them easily portable, presenting less of a burden on nomads' frequent movement. Such liquid relations to possessions were distinct in that the curation processes integral to transforming possessions' meanings and incorporating them into the extended self (Belk, 1988; Marcoux, 2001; Curasi *et al.,* 2004), such as caring for and displaying items, were absent, as were appropriation and divestment rituals (Bardhi *et al.,* 2012). Thus whilst possession has become associated with strong, enduring and meaningful relationships with consumption objects, this is not always the case and consumers relationships' with their possessions are shaped not only by factors such as consumers' age and gender but also by their lifestyles and identity projects.

In line with a broader tendency to focus on the spectacular in studies of consumption, many studies of material possessions have documented 'favourite possessions' (Wallendorf and Arnould, 1988; Schultz *et al.,* 1989), 'cherished possessions' (Tobin, 1996), 'loved possessions' (Ahuvia, 2005; Lastovicka and Sirianni, 2011), 'special possessions' (Myers, 1985; Richins 1994a; Price *et al.*, 2000) and 'sacred possessions' (Belk *et al.*, 1989), examining keepsakes, mementos, collections and heirlooms (for instance Csíkszentmihályi and Rochberg-Halton, 1981; Belk, 1991a; Belk, 1991b; Belk, 1995b). Yet consumers may possess a much broader range of items that are more mundane – the very notion of favourite possessions implies that there are other possessions less favoured, whilst the concept of sacred possessions necessitates profane items (see Belk *et al.,* 1989). Anthropologist Daniel Miller (2008) and human geographer Nicky Gregson (2007) document consumers' relationships with more mundane possessions that are often overlooked in consumer research's focus on the special and the sacred. Whilst dominant perspectives understand possessions as items that are singular (Kopytoff, 1986), or experienced as 'mine' (Belk, 1988), this does not necessitate that they are sacred, special, cherished, or irreplaceable. Possession can occur in different ways and consumers possess a broad spectrum of objects that each hold distinct meanings and whose meaning changes over time. Epp and Price (2010) demonstrate the ability for possessions to move in and out of activity even once singularised, documenting a cherished family table that is displaced and forced into storage, for example. Additionally, despite a tendency for studies to emphasise positively valenced possessions (e.g. Wallendorf and Arnould 1988; Belk *et al.*, 1989; Tobin 1996; Ahuvia 2005; Lastovicka and Sirianni 2011), research has also considered consumers' relationships with negatively valenced possessions that may be unwanted, for instance, items associated with

disliked past selves and consumption experiences (Schultz *et al.,* 1989; Lastovicka and Fernandez, 2005).

Finally, whilst possession is often studied as the relationship of a particular individual to a consumption object, possessions may also be shared or joint; multiple consumers may possess an item simultaneously. Belk (2007, p.126) defines sharing as "the act and process of distributing what is ours to others for their use, and/or the act and process of receiving or taking something from others for our own use." Sharing is distinct from lending or giving our own possessions to others since multiple consumers can use items with no invitation, incurring no debt or obligation (Belk, 2010). Multiple consumers have rights to the item, as well as joint responsibilities such as taking care not to damage or overuse shared possessions and leaving items in a suitable state for others' use. Scholars have examined various instances of sharing, including shared possessions within the home (Epp and Price, 2010), sharing via toy libraries as a form of anti-consumption (Ozanne and Ballantine, 2010), meal sharing as a means of maintaining familial bonds (Cappellini and Parsons, 2012), the division of joint possessions following divorce (McAlexander, 1991), and the sharing of public spaces and the conflicting ideologies that may arise (Visconti *et al.*, 2010). Thus whilst much work examines possession at an individual level (e.g. Myers 1985; Price *et al.,* 2000; Ahuvia, 2008), possession may also be joint, and in such instances additional complexities and conflicts may arise.

Within consumer research the term possession is often associated with enduring attachments to cherished possessions. However, emerging work indicates the potential for possession to take different forms. Much of this work examines the ways in which consumers form different types of attachments to these MCOs; however, might different types of objects encourage, enable or deny certain types of possession? This question remains to be answered.

Whilst a great deal of work has considered the role of material possessions in relation as meaning receptacles and resources for consumer identity projects, of which a concise summary is presented here, a question of greater importance to this thesis is how it is that possession takes place. The following section therefore traces the biographies MCOs might follow and the ways in which consumers' relations to these items may change over time.

2.3   The Biographies of Material Consumption Objects

Consumer research has drawn upon Kopytoff's (1986) biographical approach to possession in order to trace the biographies of MCOs. This approach shifts our view from the role that possessions may play in terms of symbolic meanings and identity projects and instead fixes our attention on the processes that negotiate the status of objects and move items between commodity

and possession, between places and between consumers. Beyond processes of acquiring consumer goods, a substantial body of work sheds lights on pre-acquisition processes of desiring and anticipating acquisition, post-acquisition processes of singularisation that move items from possession to commodity, ongoing acts of curating possessions, disruptions whereby items move between consumers or are displaced from active possession networks, and instances of divestment and loss. In this section, I shall review literature that deals with each of these pivotal moments, noting in particular the role of the consumer in guiding objects' biographies.

2.3.1   *Acquisition and Creation*

For Kopytoff (1986) the biographies of MCOs typically begin with the object as a commodity that is later acquired (usually purchased), appropriated and singularised by the consumer. Consumer-object relations may begin to emerge prior to acquisition and consumers may experience desire whereby they imagine and anticipate acquiring an object. Desired goods hold "magical meaning" (Belk *et al.,* 2003, p.327) for consumers, often symbolising desired lifestyles or identities that consumers hope to realise or move towards through acquisition, and must be beyond the consumer's current reach but not entirely unobtainable in order to inflame desire whilst sustaining hope (Campbell, 1987; McCracken, 1988; Belk *et al.*, 2003). Belk *et al.* (2003) recognise consumer desire as a cyclical, highly pleasurable experience; anticipation and longing make desire enjoyable and therefore acquisition may trigger a new cycle of desire, this time with another focal object.

How are items, desired or otherwise, acquired? For Belk (1982, p.185) the term acquisition is used in a broad sense whereby buying an item is but one means of acquiring something. He notes that "In addition to purchasing a good or service we can find, create, trade, be given, beg, borrow, or steal them." In many instances, however, the consumer is seen to actively perform a process of acquisition – to seek out and obtain an object. In some instances the process of acquiring an object is relished since it provides an opportunity to demonstrate skill and knowledge and to experience achievement in a successful 'hunt', as in the case of collecting (Belk, 1995b), thrift shopping, and bargain hunting (Bardhi, 2003; Bardhi and Arnould, 2005). Indeed, whilst consumption research initially located purchase in stores, with a focus on high-streets, malls, and department stores, it has since come to recognise a range of second-hand markets whereby goods are placed back into circulation (Gregson and Crewe, 2003; Belk *et al.,* 1988). Thus the potential for objects to follow complex biographies and develop histories of their own that may shape their meaning and value is increasingly recognised. Furthermore, whilst most accounts of acquisition assume the transfer of a pre-existing object produced by someone other than the end-consumer, Belk (1982) notes that objects may also be created. Campbell (2005, p.27) has drawn attention to

acts of craft consumption, which he defines as "activities in which individuals both design and make the products that they themselves consume", such as gardening, cooking or DIY. Craft consumption, according to Campbell, is distinct from acts of appropriating acquired items by personalising or customising them since the 'product' itself is crafted by the end-consumer, albeit often from an array of mass-produced entities. For instance, in baking a cake the consumer may use an array of purchased ingredients, cooking utensils, and appliances. However, the cake itself emerges only from the consumer's act of investing effort and knowledge in combining these resources. For Campbell (2005), craft consumption is a creative act performed by the consumer as craftsman who combines inert objects in a creative manner that provides ample opportunities for self-expression.

The consumer is presented as 'doing' acquisition, whereas the objects in these accounts appear largely inert; passive entities to be acted upon by consumers. A recent exception is found in the work of Watson and Shove (2008) who note that in DIY practices, competence may be distributed between human and non-human actants, drawing from theories of practice (see Schatzki, 1996; Reckwitz, 2002; Warde, 2005) and to a lesser extent from the work of actor-network theorist Bruno Latour (Latour, 1987, 1992, 1993). They propose that in the act of painting a door, the invention of fast-drying non-drip water-based paints that 'know' how to go onto a door in a desirable way reduces the need for consumers to be skilled painters themselves, whilst power tools have enabled tasks that would previously have been contracted to paid tradespeople to instead be performed by less skilled consumers (Watson and Shove, 2008). Here it is acknowledged that consumer goods play a role in 'doing' craft consumption; acts of crafting or creating are not performed solely by a creative consumer but by a host of actants that each play a role, and between which competence can be distributed. Furthermore, we might also note instances of more passive acquisition by consumers as in the example of receiving an unanticipated (as opposed to requested or self-gifted) gift from a friend. Whether appreciated or undesired (see Sherry *et al.*, 1992, 1993), gifted items are accumulated and must be dealt with; the consumer must find a use for these items, somewhere to store them, or an appropriate route for divestment. However, such items have received little attention – prior work is primarily concerned with active acts of acquisition performed by consumer subjects.

2.3.2   Singularisation

Once a MCO is acquired, how then do consumers come to possess these items and how do some MCOs develop the personal significance that leads consumers to regard them as irreplaceable? Scholars have examined how it is that MCOs come to be perceived by the individual as 'mine', a process that Kopytoff (1986) terms 'singularisation' and that has also been referred to as

psychological appropriation (Kleine and Baker, 2004). According to Kopytoff (1986), MCOs are singularised when they are pulled from the commodity sphere, and here we see singularisation as an act of severing connections to the market, seperating an MCO from its exchange value. Once singularised, material possessions are valued for their personal meanings, whilst any exchange value remains latent (Kopytoff, 1986). However, an object's status as a singular possession is by no means permanent; even 'irreplaceable' possessions may eventually be willingly and even eagerly divested as they lose their sacred status over time (Belk *et al.*, 1989), develop negative associations with undesirable past selves (Lastovicka and Fernandez, 2005), or simply become displaced from the network by other forces such as spatial limitations or competing objects (Epp and Price, 2010).

Singularisation may occur when personal history develops between an individual and a MCO, transforming a commodity into an indexical possession associated with experiences, places, important others, and past selves (Grayson and Shulman, 2000). In other cases, individuals may actively engage in possession or decommoditisation rituals (Rook, 1985; Kopytoff 1986; McCracken, 1988; Sherry and McGrath, 1989) in order to actively "appropriate standardized or mass-produced commodities to their own individual world of meaning" (Campbell, 2005, p.29). Contemporary possession rituals include holding a housewarming party to mark their possession of a new home (McCracken, 1988; Campbell, 2005), or customising a new mobile phone with a personal wallpaper or ringtone. Such possession rituals have the power to singularise mass-produced commodities, transforming them into singular possessions with personal significance (Kopytoff, 1986). The emphasis here is upon the agentic consumer subject as the locus of meaning making, transforming possessions and actively imbuing them with meaning, often in relation to ongoing identity projects.

2.3.3 Curation

Investing MCOs with meaning is not exclusive to initial acts of appropriation. Prior research documents acts of maintaining items' special stature through various curatorial processes – cleaning, storing, grooming, and displaying these items (Csíkszentmihályi and Rochberg-Halton, 1981; McCracken, 1986; Belk *et al.*, 1989, 1995b). Evidence suggests that we better care for and safeguard highly appropriated possessions to which we have become strongly attached (Belk, 1988), and MCOs may demand a level of care and attention. MCOs may break down or deteriorate, requiring repair or replacement/substitution, whilst many require ongoing processes of maintenance and preservation (Gregson *et al.,* 2009). Although substantially less documented, such processes might include defrosting our freezer, dusting collections of ornaments, or washing our car. For instance, Gregson *et al.* (2009) describe the history of a cherished family table

subjected to an extensive process of restoration that involved stripping the varnish from the table, eradicating stains or marks, and then restoring the table using a mix of beeswax and turpentine. Whilst the table was not broken as such, the family felt it demanded to be cared for, maintained, and ultimately treated with the respect it deserved.

In addition to physical maintenance of MCOs, acts of organising these items may enable consumers to produce a sense of order and establish or reinforce their meanings. Highly 'sacred' objects, for instance, may be treated with reverence, with boundaries, rules and rituals for their use that set them apart from other objects (Belk *et al.,* 1989; Akhtar, 2005). Spatial boundaries emerge here as key to meaning; in order to experience an object as sacred we must label others as 'non-sacred' or 'profane' and keep these items separate in order to maintain and reinforce the distinctions in their meaning (Belk *et al.,* 1989). Religious buildings that separate worship and religious items from everyday life demonstrate the effort invested in the spatial accommodation of the sacred (Akhtar, 2005). However, within our own homes we often create spaces for sacred objects. For instance, collections may be stored in display cabinets away from everyday items and prominently displayed in order to demonstrate their elevated status (Belk, 1995b). Such processes of ordering possessions are not exclusive to sacred items; researchers have examined broader processes of imposing order upon material possessions. Scholars have long discussed the ways in which consumers attempt to impose order on their environment and Douglas (1967) describes threats to consumers' imposed order whereby things are 'out of place' as 'symbolic pollution'. More recently, Dion *et al.* (2014) have studied consumers' attempts to conform to the norms of cleanliness and tidiness, whereby untidiness is seen as a form of symbolic pollution to be avoided, and other work has similarly documented consumers' desire for ordered and tidy homes (Belk *et al.,* 2007) and the negative associations linked to cluttered and mess (Cwerner and Metcalfe 2003; Maycroft 2009).

Thus beyond initial singularisation, consumers may engage in extensive processes of caring for, maintaining, protecting, organising, storing, and displaying possessions that I have drawn together under the heading of curation.

2.3.4   Disruptions

In recent years, research has demonstrated that the status of a singularised possession is by no means stable – between the processes of singularisation and divestment a number of disruptions may be observed. For instance, documenting the history of one family's table Epp and Price (2010) illustrate that circumstances such as spatial limitations, changes in identity practices, or the introduction of competing objects can displace MCOs from the active possession network. They propose that consumers may engage in reincorporation attempts that, if successful, may

result in the good's re-engagement with the network. However, following a number of failed reincorporation attempts, the consumer may choose to divest even treasured possessions. Furthermore, we can observe disruptions to possession as items are passed between consumers; consumers may lend possessions to friends or family on a temporary basis, granting them rights to use the item in certain ways. Jenkins *et al.* (2014) propose that practices of lending/borrowing may produce messy biographies as items are possessed both by the borrower and the lender. Here it becomes apparent that even whilst possessed, the biography of a MCO is not always straightforward:

> Goods are usually seen as being in one state or another (commodity, or singular; sacred or profane; owned, or not) because the focus in such categories tends to be the individual, or single network (for example the home). Borrowing (and lending) shows us that goods may also be two things at once as they inhabit different networks at the same time.
>
> (Jenkins *et al.,* 2014, p.138).

Thus unlike the fairly linear biographies implied by Kopytoff (1986), we must recognise that objects' biographies may be messy and complex, particularly where objects are present in multiple networks simultaneously.

2.3.5 *Divestment and Loss*

How do possessions come to be dispossessed? Prior literature documents acts of deliberate dispossession or 'divestment' alongside instances of accidental dispossession whereby items are lost or stolen. Divestment has been described as a process of detachment from self (Young and Wallendorf, 1989). Items are typically recognised to be divested when they fall out of use (Belk *et al.,* 1989) or where consumers are reluctant to commit to the ongoing effort involved in possession (Ekerdt, 2009). In some instances, decisions to divest are rooted in changes to the objects themselves as their deterioration over time affects their capacity to fulfil their intended purpose. For example, clothes may become stretched and faded, whilst toys may be broken (Gregson *et al.,* 2007). In other instances it is the consumer who changes, resulting in possessions that no longer represent current identity projects (Kleine and Baker, 2004). Consumers are often keen to divest negatively valenced possessions and to forget the negatively charged private meanings with which they are associated (Lastovicka and Fernandez, 2005), whilst divestment has been found to aid consumers' role transitions (Young, 1991). However, whilst much work focuses upon the dispossession of negatively valenced and unwanted possessions, in some cases we may be forced to divest even when we do not truly wish to be separated from the objects in question, for instance, due to spatial limitations or broader life transitions (McAlexander, 1991; McAlexander *et al.,* 1993).

The divestment strategies employed by consumers are varied. Divestment may involve the realisation of a possession's latent exchange value, and research documents second-hand markets

fuelled by MCOs repeatedly re-entering the commodity sphere (Belk *et al.,* 1988; Gregson and Crewe, 2003; Lastovicka and Fernandez, 2005; Denegri-Knott and Molesworth, 2008). Here divestment or recommodification rituals are implemented, removing personal meanings in order to avoid an unwanted 'mingling of identities' (McCracken, 1986) whilst emphasising the item's more widely held public meanings in order to indicate its exchange value (Lastovicka and Fernandez, 2005). The role of liminal spaces in such rituals has been highlighted, with attics or basements often used to 'cool' possessions, removing their singularised meaning, before divestment (Lastovicka and Fernandez, 2005). However, divestment does not always involve a return to the market sphere, and treasured possessions with significant personal meanings may be passed on to others. For instance, Gregson (2007) finds that children's' unwanted clothing may be passed along social networks of parents to provide for their own children, distributed to charity shops, and donated via charity doorstop collections. Heirlooms are another common means of passing on meaningful possessions, and Price *et al.* (2000) find that older consumers engage in processes of transferring these items' private meanings to heirs. Collectors in particular desire to pass on collections to others who appreciate their meaning (Belk *et al*., 1991; Belk, 1995b). Here the emphasis is not on removing personal meanings but on transferring these meanings effectively to the recipient (Price *et al.,* 2000). Where divested goods do not have significant personal meanings or latent exchange value they may simply become rubbish, but even here their biography does not necessarily come to a close. Material things do not simply disappear, but linger somewhere even as rubbish with the potential for rediscovery (Thompson, 1979; Parsons, 2008).

In addition to intentional dispossession, items may be unintentionally lost, although this has received less attention within consumer research. Loss may be a consequence of natural disasters (McLeod, 1984 cited Belk, 1988) or theft. However, at other times we simply misplace items when we are rushed, inattentive, or preoccupied (Akhtar, 2005). Loss can be particularly painful since, unlike divestment, dispossession takes place before we have come to terms with our separation from the object (Belk, 1988; Akhtar, 2005). Indeed, loss of possessions has been found to be traumatic and detrimental to the self, potentially causing individuals to reduce the importance placed upon remaining possessions in an attempt to protect themselves from the distress of possible future possession loss (Ferraro *et al.,* 2007).

In summary, although it is not possible to account for every route a good's biography may take, this review recognises the long and often cyclical biographies of MCOs in their ability to repeatedly be passed on, recommodified and rediscovered. Furthermore, we can observe the role of the consumer in actively guiding these biographies, creating and acquiring MCOs, imbuing them with meaning, caring for and organising them, lending them, and eventually divesting them. Despite recent recognition of the role of non-human actants in crafting possessions (Watson and

Shove, 2008), and disrupting possession (Epp and Price, 2010), it becomes apparent that the consumer's agency and experience is the focus of most prior accounts whilst the MCOs themselves remain inert. In the following chapter, I will consider the limitations of this focus, highlighting those aspects of possession that may be obscured by this approach.

2.4 Chapter Summary

This chapter has reviewed an expansive body of literature in order to establish the theoretical framework that informs this thesis. It has established dominant understandings of possession that inform prior literature, distinguished possession from ownership, considered their (rarely acknowledged) relation, and demonstrated the importance of possessions as they become receptacles of symbolic meanings and play a significant role in consumers' identity projects. This study is most concerned, however, with how possession takes place, and this chapter has reviewed the ways in which MCOs become possessions and the biographies they may follow. In doing so, it became apparent that the consumer is largely seen to 'do' possessing, engaging in an array of processes that shape the meaning and status of MCOs that themselves are largely assumed to remain passive entities moulded by consumers' actions. Despite some recent exceptions (Watson and Shove, 2008; Epp and Price, 2010), the consumer's actions and experiences emerge as the focus of prior studies. However, in the following chapter we shall see that this perspective can be limiting.

Whilst there is a significant body of literature that examines possession in the context of MCOs, how might possession take place in different contexts? Given both the demonstrated importance of possessions to consumers' identity projects and consumers' growing accumulations of digital consumption objects as illustrated in Chapter 1, digital possessions present an important area for consideration. However, the following chapter demonstrates that the extant theories of possession reviewed above do not adequately equip us to understand possession in this context, as this emerging category of consumption object highlights several limitations to this body of literature.

Chapter 3: Digital Consumption Objects as Possessions

Things are disappearing right before our eyes […] Today our information, communications, photos, videos, music, calculations, messages, "written" words, and data are now largely invisible and immaterial until we choose to call them forth. They are composed of electronic streams of ones and zeroes that may be stored locally or in some hard to imagine cloud. For example, rather than a row of records, CDs, or DVDs that we can handle, rearrange, examine, and dust, our music has come to reside somewhere inside our digital storage devices or on servers whose location we will never know.

(Belk 2013, p.478)

An expansive body of consumer research has examined material possessions and their role in consumers' lives. However, many of the objects we call our own now exist in digital form. Reference to digital consumption objects (DCOs) tends to conjure images of digital versions of material consumption objects (MCOs), such as digital music, digital photographs and ebooks. However, we are increasingly witnessing the emergence of a broader array of DCOs that lack a direct material equivalent, such as emails, text messages, social networking profiles, blogs, avatars, wishlists, and bookmarking tools. Despite the growing proliferation of this emerging category of consumption, object research on DCOs within consumer research remains underdeveloped, yet we shall see in this chapter that DCOs problematise the established understandings of possession reviewed in the previous chapter.

This chapter begins by establishing a definition of digital consumption objects. In reviewing theorisations of digital 'artifacts', we can observe a tendency to theorise these items in isolation, reducing them to strings of ones and zeros that hold certain inherent characteristics – yet I argue that this is not what is 'consumed'. As we shall see in the course of this thesis, the digital items that people consume (such as mp3 files, Facebook profiles, and avatars) bear little resemblance to the 'bitstrings' described by this body of work. I therefore establish a definition of DCOs, drawing from prior consumer research to acknowledge the importance of MCOs in accessing and using these items. I then proceed to consider extant literature that positions DCOs as assets for companies. We shall see that companies' business models involve employing various mechanisms in creating profitable digital assets that shape the characteristics of DCOs. Literature on digital possessions from a consumer perspective is limited, however. An emerging body of literature demonstrates that consumers can identify digital possessions – DCOs regarded as 'mine' – and that despite some initial doubts consumers can and do come to develop emotional attachments to digital possessions which may come to hold significant personal meanings. However, can the extant theories of possession reviewed in the previous chapter account for such digital possessions? We shall see that limitations to our current understanding of possession are highlighted as we attempt to understand possession in the context of DCOs which exhibit distinct characteristics when compared to MCOs that may never be fully separated from market forces,

and where a range of actants beyond the end consumer are brought to our attention. I argue that the possession of DCOs not only presents a gap in our knowledge but also presents an opportunity to re-think our understanding of possession in a way that offers a broader theoretical contribution to the field of consumer research.

3.1   Digital Artefacts as Consumption Objects

> What we have currently are *pretheoretical* understandings of these artifacts. We might know what a "blog," a "wiki," or a "webpage" is, but we do not have theories of these and numerous other entities that are increasingly populating not just our computers but our daily life at home, at work, and in leisure. What we have, in other words, is a plurality of answers such as "A blog is . . . ," "A wiki is . . . ," "A webpage is . . . ," and so on. The question is, can we have a unitary answer of the form "A digital artifact is..."?

(Ekbia, 2009, p.2555)

What are digital objects? More specifically, what are digital consumption objects? Whilst we may understand what is meant by a blog, a text message, or an mp3 file, there is value in theorising 'digital consumption objects' more broadly. What characteristics do DCOs typically have in common, and how are they similar or different to MCOs?

In recent years, scholars from fields such as information systems (Kallinikos and Mariátegui 2011; Kallinikos *et al.,* 2013), computer science (Ekbia, 2009) and economics (Faulkner and Rund, 2011) have acknowledged that digital objects or 'digital artefacts' deserve theoretical attention. Within this body of work, digital artefacts are understood as entities consisting of computer code. Kallinikos and Mariátegui (2011, p.79), for example, propose that "digital pictures and images are just patterns of pixels or equations, ultimately numbers (digits)" whilst Faulkner and Rund (2011) refer to the bitstrings, series of ones and zeroes, that make up digital artefacts, the most common form of bitstring being a computer file. These files vary widely; data files can store a variety of information, from text to video, whilst program files consist of instructions for the computer to carry out in relation to data files. Whilst there is a tendency to conflate digital artefacts with the material items upon which they are stored (e.g. hard disk drives, CD-ROMs and memory cards), and via which they are accessed (e.g. monitors, computers, mobile phones), Faulkner and Rund (2011) argue that they are distinct entities. This body of work therefore examines digital artefacts in isolation.

A number of distinct characteristics of digital artefacts can be identified in this body of literature. Firstly, digital artefacts exhibit pure 'non-rivalry in use' since use of a digital artefact by one person does not affect its simultaneous use by others (Faulkner and Rund, 2011). Once a digital artefact exists, the cost of providing this non-rival object to an additional user is zero – sending an mp3 file to ten friends does not, in principle, prevent the consumer from continuing to use the item themselves. Indeed, neither does sending this file to one million consumers.

Secondly, digital artefacts are non-tactile – unlike MCOs they cannot be touched since they are intangible (Leonardi, 2010). As Leonardi (2010) puts it "You can't touch data. You can touch the paper (an object) upon which data is written; you can touch the screen (an object) upon which data is displayed; but you can't touch the data itself." Thirdly, Ekbia (2009, p.2554) argues that digital artefacts are largely unstable and unbounded; they lack the stability and fixed identity of MCOs as they undergo ongoing change and thus for any digital artefact it is possible that "a large number of copies or renditions of it are available which are rarely, if ever, exactly alike (different platforms, browsers, monitors, resolutions, etc.)" Others have similarly demonstrated that digital artefacts such as files, images, and videos are fluid and editable (Kallinikos *et al.,* 2010; Kallinikos and Mariátegui, 2011). Kallinikos *et al.* (2013, p.357) conclude that digital artefacts are "intentionally incomplete and perepetually in the making", lacking durability since they are merely rendered momentarily into a form that resembles an object.

In this brief review of literature on digital artefacts, we can observe already distinct departures from the MCOs that permeate studies of possession. Here digital artefacts are immaterial, non-tactile, non-rivalrous and infinitely reproducible, as well as unstable and immanent, in a continual state of becoming that lacks the enduring, stable characteristics of MCOs. However, this work is not located within the field of consumer research and therefore does not directly address digital artefacts as consumption objects. The question this work raises is how these these distinct characteristics of digital artefacts may shape their consumption. Although digital artefacts themselves remain under-theorised within consumer research, an emerging body of work has studied their consumption, which has alternatively been termed 'digital', 'virtual' or 'digital virtual' consumption. Whilst some scholars term such items 'virtual', referring to 'virtual possessions' (Odom *et al.,* 2011, 2012, 2014) or 'virtual goods' (Martin, 2008; Lehdonvirta, 2012; Lehdonvirta *et al.,* 2009; Huang, 2012), the common association of the term 'virtual' with notions of 'virtual reality' and 'cyberspace' indicates that these items are somehow less 'real' than MCOs, that they are simply simulations of the 'real thing'. Such comparisons lead scholars to question why it is that consumers would buy 'virtual' items with 'real' money that could instead have been used to purchase 'real' items that could be used in 'real' life (e.g. Lehdonvirta, 2009). Yet scholars have come to recognise that these 'virtual' items are experienced as real by consumers and are able to fulfil very real desires, although their utility may be limited to particular digital spaces (Denegri-Knott and Molesworth, 2012; Lehdonvirta, 2012).

Denegri-Knott and Molesworth (2010) argue that MCOs, ideas and digital items simply present different forms of reality; material consumption is 'actually real' and virtual consumption (in this context referring to consumption in the imagination, including daydreams and fantasies) is 'ideally real', whilst 'digital virtual consumption' falls somewhere between the two. In other

words, they conceptualise 'digital virtual consumption' or 'DVC' as "a hybridization of the material and the virtual-as-imagination" that "may contain the actualizing potential of the material with the idealizations of the virtual" (Denegri-Knott and Molesworth 2010, p.115). Here the digitial virtual, free from the boundaries of material reality, is seen to present a range of exciting and exotic 'ideal' consumption objects that may previously have only been present in abstract, virtual form; a magical sword not only exists in our imaginations but can be used within a videogame and observed by other videogamers. The link to virtual consumption is key to Denegri-Knott and Molesworth's (2010, p.121) conceptualisation of DVC – they propose that "digital virtual consumer practices may be helpfully separated into two kinds: ones that simulate consumption of material goods but on digital virtual platforms, and those practices that are embroiled with more abstract fantasies." Here DVC is considered largely in relation to the actualisation of daydreams and fantasies, reflected in the use of the term 'digital virtual consumption' as opposed to simply 'digital consumption'.

Such theorisations are perhaps most applicable to activities within videogames and virtual worlds, and indeed the authors draw from a review of a digital spaces such as *World of Warcraft, Grand Theft Auto, Second Life, Gran Turismo, Neopets* and *Habbo Hotel*, and to a lesser extent websites such as eBay and Amazon. Yet many of the digital items that we consume are less interwoven with imagination and fantasy and are grounded in activities of importance to our physical world (e.g. taking a digital photograph of a friend, listening to a Spotify playlist at a party). Thus whilst an understanding of digital consumption as distinct from virtual and material consumption is undoubtedly useful, in this thesis I wish to avoid reducing digital consumption to a place for the actualisation of the virtual. Furthermore, granting the digital virtual the ontological status of 'ideally real' indicates that, as with consumption in the imagination, anything can be possible in digital form. However, whilst digital spaces may not be bound to the contraints of material reality they are subject to their own constraints, in particular the constraints of code (as we shall see in Sections 3.2 and 3.3). Consequently, whilst in my previous research on possessions within videogames I have refered to 'digital virtual goods' and 'digital virtual possessions' (Watkins and Molesworth 2012; Denegri-Knott *et al.,* 2012), within this thesis I instead adopt the broader term of 'digital consumption', and subsequently the terms 'digital consumption objects' (DCOs) and 'digital possessions' which I shall define below.

We must not overlook the relation of digital consumpion to material consumption. Often discussions of DCOs are coupled with accounts of 'de-materialisation' (e.g. Belk, 2013), yet as Lehdonvirta (2012, p.22) points out "there is no such thing as completely immaterial consumption." A number of scholars point out that digital materiality is non-autonomous in that it must be sustained by physical materiality, including artifacts such as computers, cables and screens (Denegri-Knott and Molesworth, 2010, 2012; Leonardi, 2010; Maguadda, 2012; Kedzior,

2014). For instance, in his analysis of music consumption Maguadda (2011) illustrates that in the consumption of digital music files a range of MCOs remain integral, such as headphones, mp3 players, iPod cases, computers, and USB flash drives. Reducing DCOs to a series of 1s and 0s is common, yet DCOs are not mere bitstrings. For instance, it is only in bringing together hardware (e.g. laptop, speakers) and software (Windows OS, iTunes) in addition to these strings of code that consumers are able to experiece and listen to a digital music album. Thus this digital album cannot be reduced to code alone. Indeed, Denegri-Knott and Molesworth (2010) note that digital consumption is sustained by, and fuels markets for, hardware (e.g. computers, videogame consoles) and software (videogames). In other instances objects transition between material and digital forms. Consumers can purchase 3D printed figurines of their digital avatars to give these items physical presence (Kedzior, 2014), whilst conversely they may take digital photographs of material items and upload them to social networking websites to provide them with greater visiblity (Odom *et al.,* 2011). Thus there is a need to recognise the relation between physical materiality and digital materiality, including the potential for movement between these ontological states.

In this thesis, I introduce the term digital consumption object (DCO) to describe consumption objects that possess no enduring material substance, but rather exist within digital spaces (computer-mediated electronic environments) and may be accessed and consumed via combinations of hardware (e.g. laptops, mobile phones and videogames consoles) and software (e.g. operating systems, application software). Thus in contrast to prior discussions of digital artefacts the term 'DCO' narrows our focus to the way in which these items are consumed; DCOs are not mere strings of ones and zeroes but are produced in the relation of code, hardware and software, amongst other entities. Within this thesis, I use the term 'digital possession' to refer to those DCOs that are regarded by the consumer as 'mine', in line with Belk's (1988) definition of possession as proprietary feelings. However, not all DCOs may come to be digital possessions. In summary, in this section I have drawn from prior literature both within and beyond consumer research in order to establish the definitions of DCOs and digital possessions that inform this thesis. In the sections that follow, I shall proceed to briefly review existing literature that conceptualises DCOs as company assets before examining the more limited body of literature that examines DCOs as possessions.

3.2   Digital Consumption Objects as Company Assets

A range of business models have emerged in relation to DCOs. Firstly, consumers can pay to purchase DCOs (e.g. ebooks from Amazon and albums from the iTunes store) and download a local copy for their personal use, whilst consumers may also purchase items within virtual worlds

and videogames (e.g. chairs within Habbo Hotel or avatar clothing within Second Life) that may remain hosted online on companies' servers. However, some businesses have moved away from the sale of digital goods towards subscription models whereby consumers pay an ongoing fee for continued access to DCOs. For instance, in the case of Netflix the consumer doesn't buy copies of films but instead pays for ongoing access to Netflix's library of streamable content. Bardhi and Eckhardt (2012) refer to this as a form of access-based consumption. Whilst consumers may pay for access in other instances, the consumer accesses DCOs for free and companies profit either by selling advertising space that enables companies to target these consumers or by selling consumers' data to third parties. For instance, whilst Spotify offers a premium, paid music streaming service, consumers can also access this service for free where music streaming is interrupted by advertisements. Furthermore, prosumer-reliant business models have emerged whereby the consumer or 'prosumer' largely produces the DCO they subsequently consume. For instance, although social media platform Facebook provides the infrastructure within which consumers may create their profiles, owns the servers on which they are hosted, and pays the website developers who create and maintain the platform, the value of the platform ultimately lies in the user who uploads and tags multiple photographs, fills out personal information, and continuously provides up-to-date and socially valuable information. Here consumers' creation and cultivation of their social media platforms presents a major contribution to the value of the platform and to the company's revenue. Whilst some scholars see this as companies presenting a resource for 'prosumers' to work with in order to create mutually beneficial value (Prahalad and Ramaswamy, 2004; Tapscott and Williams, 2006), others perceive companies establishing new ways to extract value from consumers' free labour (Terranova, 2000; Bonsu and Darmody, 2008; Ritzer and Jurgenson, 2010).

Thus prominent business models include selling digital commodities, service models that charge for access to DCOs, and profiting from advertising revenue and the sale of consumer data, whilst we can also observe strategies of co-creation or prosumption whereby consumers largely create the DCO they and others consume. However, much must be done in order to transform these DCOs as profitable company assets. As noted in Section 3.1, DCOs are infinitely reproduceable and therefore non-rivalrous (Faulker and Rund, 2011). From a company's perspective this has significant consequences, resulting in abundance as opposed to scarcity (Lehdonvirta and Castronova, 2014). Where DCOs can be duplicated indefinitely these objects hold no exchange value; why would consumers pay for an mp3 file when another consumer can duplicate a copy for free? Companies have therefore been faced with the challenge of how to produce profitable digital assets. Consequently, we have observed the emergence of artificially scarce digital goods within virtual worlds (Lehdonvirta *et al.,* 2009; Hamari and Lehdonvirta, 2010; Lehdonvirta and Virtanen, 2010; Lehdonvirta and Castronva, 2014) whereby mechanisms

are put into place to limit the number of items available. For instance, Lehdonvirta *et al.* (2009) observe the emergence of 'super rares' within virtual world Habbo Hotel that became desirable since only small quantities were placed on sale for limited periods of time, rendering them sought after markers of status. However, rather than limiting the quantity of digital goods available, companies may simply remove their reproducability by implementing mechanisms that prevent consumers from producing copies and engaging in unauthorised sharing (Koiso-Kantilla, 2004).

In acquiring, using and accessing many DCOs consumers must agree to terms set out in end-user license agreements and terms of use/service contracts, which typically include a range of restrictions on their ownership of these items. Such contractual agreements are common in access-based consumption of MCOs, for instance when renting a car (Bardhi and Eckhardt, 2012). However, this is not the case only for services such as Spotify and Netflix where consumption is clearly positioned as access-based. Indeed, even in cases where consumers purchase and download DCOs, this may be regarded by the company as part of a service. Kindle ebooks, for instance, are "licensed, not sold, to you by the Content Provider" (Amazon, 2014), and consequently in order to access these DCOs consumers must agree to the service's terms and conditions. Similarly, consider the following excerpt from the iTunes Store's Terms and Conditions:

> THIS LEGAL AGREEMENT BETWEEN YOU AND APPLE INC. ("APPLE") GOVERNS YOUR USE OF THE ITUNES STORE SERVICE (THE "ITUNES SERVICE"). […] Apple is the provider of the iTunes Service, which permits you to access, purchase or rent digital content ("iTunes Products") for end user use only under the terms and conditions set forth in this Agreement.
>
> <div align="right">(Apple, 2015)</div>

Consumers cannot use these services unless they agree to these contractual agreements, which include a series of restrictions on their interactions with 'their' DCOs. Similarly, DCOs that are created in part by the consumer may not be fully owned. Whilst arguments justifying private property often recognise the link between investment of one's labour and ownership (Locke, 1690 [1967]), in practice, ownership may be limited. For instance, whilst Facebook's terms of service declare that "You own all of the content and information you post on Facebook" the consumer simultaneously grants Facebook a "non-exclusive, transferable, sub-licensable, royalty-free, worldwide license to use any IP content that you post on or in connection with Facebook" (Facebook, 2015). Similarly, within virtual world Second Life, users have been granted intellectual property rights over the items they create, including the ability to sell these items for profit. However, Bonsu and Darmody (2008) describe this as a veneer of consumer empowerment that encourages the consumer creativity that enables the platform to thrive, generating profit for its corporate owners. In this analysis, offering consumers intellectual property rights is presented simply as a means of effectively mobilising free consumer labour, whilst real control remains with the corporate owners of the platform who regulate behaviour and may terminate the platform at

any time. Thus companies' business models involve a fragmentation of ownership in order to transform DCOs into profitable assets, and consequently many DCOs are not fully owned by the consumer.

The exception is locally stored DCOs created by the consumer using their own devices, outside of contractual agreements that limit their ownership. For instance, consumers may have full ownership rights to a photograph that they have taken themselves and stored locally on their laptop. They may view this photograph as many times as they like, transfer it to a number of devices, transform it using (licenced) photo-editing software, print it, send it to whom they like, and sell the rights to the photograph to others for profit; their rights to this DCO are unrestricted. However, aside from such instances the consumption of DCOs is typically subject to restrictive contractual agreements and here the distinction between sold commodities and services becomes blurred. Whilst Chapter 2 illustrated that these two extremes are often dichotomised, we see that between full ownership and access-based consumption a range of fragmented ownership configurations emerge as consumers are granted some rights but denied others.

As noted above, a core purpose of such agreements is to restrict the reproduction of DCOs. Restrictions within these agreements therefore frequently relate to the transfer of accounts or individual items to other consumers. For instance, the Kindle Store Terms of Use state that "You may not sell, rent, lease, distribute, broadcast, sublicense, or otherwise assign any rights to the Kindle Content or any portion of it to a third party." Such terms help to protect Kindle ebooks against piracy that can be detrimental to the company. Apple (2014) doesn't entirely prohibit the duplication of iTunes Store content, but rather restricts interactions with its content to personal, non-commercial use by restricting the number of copies that can be made ("You shall be authorized to burn an audio playlist up to seven times") and the number of devices that can access iTunes content ('You shall be authorized to use iTunes Products on five iTunes-authorized devices at any time'). Thus the supposedly inherent characteristics of non-rivalry-in-use and infinite reproducibility identified by Faulkner and Rund (2011) are not always applicable to DCOs since they may be removed by companies in order to better adapt these entities to their own commercial interests.

Extant literature indicates that contractual agreements are rarely read, however. In Chee *et al.*'s (2012) study of online gamers, only 3% reported that they read the entire contractual agreement and 62% read none of its content, a finding echoed in a range of contexts including social media (Gross and Acquisti, 2005; Debatin *et al.*, 2009), smartphone applications (Cotton and Bolan, 2012) and a broad array of third party software (Bakos *et al.*, 2009). However, this is less problematic for companies than it may seem since these rights do not exist solely at an abstract level. Indeed, ownership rights are perhaps more easily enforced in such markets where

surveillance and monitoring are possible and access can be withdrawn or modified without a reliance on legal professionals (a World of Warcraft account may be closed and in game content 'reclaimed' by Blizzard Entertainment without any call to law enforcement agencies or bailiffs). Furthermore, coding itself presents an additional means of enforcement. Lessig (1999) has long proposed that 'code is law':

> In real space, we recognize how laws regulate – through constitutions, statutes, and other legal codes. In cyberspace we must understand how different "code" regulates – how the software and hardware (i.e. the "code" of cyberspace) that makes cyberspace what it is also regulate cyberspace as it is.
>
> (Lessig, 2006. p.5)

Thus rather than relying on legal enforcement of contractual agreements, companies may encode restrictions into software and DCOs themselves. It has become commonplace to employ digital rights management (DRM) technologies to control the use and distribution of intellectual property in digital form using data encryption, digital watermarks, and user plug-ins (Manley and Holley, 2012). The 1998 Digital Millennium Copyright Act (DMCA) in the US developed existing copyright laws to prohibit unauthorised access to a work by circumventing technological protection measures (such as DRM) put into place by the copyright owner (Freeman, 2002). Consumers agree to the use of such technologies when they agree to these contractual agreements. For instance, consider this excerpt from iTunes' Terms and Conditions:

> You agree that the iTunes Service and certain iTunes Products include security technology that limits your use of iTunes Products and that, whether or not iTunes Products are limited by security technology, you shall use iTunes Products in compliance with the applicable usage rules established by Apple and its licensors ("Usage Rules"), and that any other use of the iTunes Products may constitute a copyright infringement. Any security technology is an inseparable part of the iTunes Products.
>
> (Apple, 2015)

Thus the ways in which ownership is enforced in the context of DCOs is distinct from the ownership material of goods, with code presenting a high level of efficiency in regulating behaviour than would otherwise be possible since "The controls needed to regulate this access are built into the systems, and no users (except hackers) have a choice about whether to obey them" (Lessig, 2006, p.179). However Lessig's (2006) concern is the power of code as an actor that renders other agencies increasingly impotent, in particular those relating to legislation and social norms. In particular, we see that contractual agreements and enforcement mechanisms currently implemented by companies restrict more than acts of copying DCOs, including restrictions on their ability to use, transform and transfer digital possessions, and terms granting companies the ongoing rights to modify and terminate platforms and content.

Restrictions may also be placed on transfer even where transfer does not involve duplication. Consider the following excerpt from massive-multiplayer-online-game World of Warcraft's Terms of Use:

> Blizzard Entertainment either owns, or has exclusively licensed, all of the content which appears in World of Warcraft. Therefore, no one has the right to "sell" Blizzard Entertainment's content, except Blizzard Entertainment! So Blizzard Entertainment does not recognize any property claims outside of World of Warcraft or the purported sale, gift or trade in the "real world" of anything related to World of Warcraft. Accordingly, you may not sell or purchase virtual items for "real" money or exchange items outside of World of Warcraft. Please note that Blizzard is entitled to and will prevent any such illegal sales.
>
> (Blizzard, 2012)

Thus consumers may exchange items such as equipment or weapons within the game itself but may not sell in-game items for value outside of the game. Restrictions may also dictate how DCOs can be accessed and used. Such measures are commonplace in the eBook market, for instance. Both Amazon and Apple apply DRM technologies to the ebooks they sell that, amongst other restrictions, makes them incompatible (unusable) with competing devices and applications. The Kindle Store Terms of Use grants the consumer the right to use Kindle content 'solely on the Kindle or a Reading Application or as otherwise permitted as part of the Service' (Amazon, 2014), a restriction enforced by the DRM technology encoded within the eBook itself rather than by legal or law enforcement professionals.

In entering into these agreements, consumers also typically agree to regular updates in the 'service' that may impact their relationships with their digital possessions. For instance, iTunes notes that continued use of digital possessions may require software updates.

> Use of the iTunes Service requires compatible devices, Internet access, and certain software (fees may apply); may require periodic updates; and may be affected by the performance of these factors. […] The latest version of required software is recommended to access the iTunes Service and may be required for certain transactions or features and to download iTunes Products previously purchased or acquired from the iTunes Service. You agree that meeting these requirements, which may change from time to time, is your responsibility.
>
> (Apple, 2014)

Indeed, companies may reserve rights to change the terms set out in these contractual agreements without consumers' consent. For instance, the iTunes Store Terms and Conditions notes that "Apple reserves the right to modify the Usage Rules at any time" (Apple, 2014) and most contractual agreements include a similar clause. In addition to the potential for changes to platforms and software, and changes in terms, companies such as Facebook (2015), Instagram (2013) and World of Warcraft (Blizzard, 2014) stipulate in their contractual agreements that they retain the right to terminate users' accounts and thus eliminate their right to their profile and the content they have uploaded and cultivated. World of Warcraft provider Blizzard, for example, retains the right to terminate accounts "for any reason or no reason, with or without notice"

(Blizzard, 2012). Termination may be due to the consumers' violation of the company's terms, but might also result from the company's collapse, or from technical error.

In summary, DCOs may present valuable assets to companies, which have found ways to transform them into saleable commodities and especially as services (although due to the introduction of contractual agreements and enforcement mechanisms this distinction becomes blurred), as well as ways in which to leverage consumers' own effort in doing so. In order to create profitable digital goods, however, companies increasingly alter the characteristics of DCOs and in particular strive to restrict their reproduceability. A key mechanism via which this is achieved is the withholding of ownership rights, agreed to by consumers in contractual agreements and often enforced by coding and surveillance. Consequently, current business models involve complex, fragmented ownership structures whereby companies retain certain rights with regards to DCOs, not only where access is clearly via a service but also in instances where DCOs appear to be 'sold' to the consumer, and even in instances where they are created in part by the consumer themselves. As we turn our attention in the following section to the central focus of this thesis, DCOs as possessions, we shall see that these business models may play a significant role.

3.3   Digital Consumption Objects as Possessions

Earlier scholarship within marketing and related fields largely considered DCOs from the company's perspective, and where the consumers' standpoint was considered these items were discussed as goods to be purchased (Lehdonvirta, 2009; Huang, 2012) rather than as possessions. How might consumers relate to and experience DCOs post-acquisition? The public meanings of DCOs within virtual worlds have been explored, particularly with regards to the communication of wealth and status (Hirsch and Bloch, 2009; Lehdonvirta *et al.*, 2009; Wang *et al.*, 2009) and the marking of group identity (Martin, 2008). However, this work is largely limited to items within virtual worlds and videogames, and the public meanings of many DCOs have yet to be explored. Furthermore, there was until recently less emphasis on possession. Do digital possessions come to be regarded as 'mine'? Do consumers form emotional attachments to these items? Do digital possessions develop personal meanings to consumers?

Bardhi *et al.* (2012) suggest that consumers may form 'liquid' relationships with DCOs where utility and convenience is key, whilst Bardhi and Eckhardt (2012) identify these items as prime candidates for access-based consumption. Earlier research indicated that consumers experienced little emotional attachment to DCOs. Participants in Siddiqui and Turley's (2006) ethnographic study were found to value digital replacements of tangible possessions, such as ebooks and digital photographs, for their functional benefits rather than for emotional benefits. For example, ebooks

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were valued for economy and ease-of-use, rather than the emotional value often associated with material books. Similarly within human-computer interaction (HCI) research digital family mementos such as maps, cards, photographs, and artworks have been found to be regarded as less valuable than physical mementos (Petrelli and Whittaker, 2010). Scholars have considered why this might be; when reflecting on DCOs in light of the extant literature on possession reviewed in Chapter 2 it appears unlikely that DCOs should be experienced as highly meaningful and valued possessions. Watkins and Molesworth (2012) note that in their intangibility and reproducibility, the patina or 'wear and tear' that distinguishes material items from one another may not emerge in this context. ebooks, for example, do not gain the worn, dog-eared appearance of well-read material books (McCourt, 2005) and thus whilst personal history may develop between consumers and ebooks the DCOs themselves may not show physical signs of this history. Furthermore, Belk (2013) notes that digital possessions lack the tactile nature of many material possessions such as clothing and furniture that makes them subject to contamination whereby the soul or essence of the person is seen to rub off on or 'contaminate' the object through physical proximity (Belk, 1988). Here we see how the concept of an irreplaceable, 'singular' possession becomes problematic as we enter the digital realm.

However, in contrast to earlier research that suggested a level of detachment from DCOs, other research has indicated that digital possessions may become personally meaningful to consumers. Wang *et al.*'s, (2009) netnographic study of Chinese gamers found that players became strongly attached to the first avatar they mastered and were reluctant to part with them, even when they no longer played the game (Wang *et al.*, 2009). Watkins and Molesworth (2012) found that consumers easily identified a range of 'special' and 'irreplaceable' possessions within the videogames they played, including not only avatars but also in-game items such as weapons and cars. Whilst exact replicas of DCOs within videogames could easily be produced, their participants explained that they would know that duplicates did not have the same history as their treasured digital possessions. Furthermore, prior research documents the devastation experienced when digital possessions are lost and the elaborate measures taken to protect them (Martin, 2008; Odom *et al.,* 2012; Watkins and Molesworth, 2012), whilst HCI research indicates that DCOs can serve similar functions to material possessions by extending our sense of self, connecting us to our friends and family as well as our past selves (Kirk and Banks, 2008; Kirk and Sellen, 2010). Thus an emerging body of work provides evidence that DCOs may indeed be imbued with personal significance, and may become objects of emotional attachment.

How then do these DCOs come to become perceived as singular possessions? Watkins and Molesworth (2012) found that in some instances digital possessions developed associations with important others, past events and past selves, whilst in other instances gamers more actively attempted to singularise items via possession rituals that typically involved customisation. HCI

research examining a broader range of digital possessions beyond the videogame context found similar instances of customisation; whilst ebooks will not become musty or dog-eared, and digital photographs do not yellow with age, Odom *et al.* (2011) propose that digital possessions gather 'digital patina' in the form of metadata. For example, digital photographs uploaded to social networking website Facebook were found to amass meaningful clusters of comments and 'tags', whilst one participant described customising a digital music playlist for his girlfriend by replacing album art with personal photographs. We might critique this analogy since unlike material patina this 'digital patina' may lack permanence, with metadata often easily removed at the click of a button. However, this research indicates that, despite suggestions to the contrary, digital possessions may come to be experienced as singular via acts of customisation and/or the development of personal history. That is not to say that prior theories of possession translate to DCOs unproblematically, nor that distinct forms of possession do not occur in this context.

As noted in Section 3.1 of this chapter, DCOs appear to hold distinct characteristics that differentiate them from the MCOs that consumers and consumer researchers have become accustomed to. It has been noted that theories that explore consumers' relationships with material possessions may be limited when it comes to understanding possession in the context of DCOs (Watkins and Molesworth, 2012; Belk 2013; Odom *et al.* 2014). Reflecting on a number of studies conducted over a five year period, involving in-home interviews with a total of 152 participants in the United States, United Kingdom, Spain and South Korea, HCI scholars Odom *et al.* (2014) summarise three qualities that characterise consumers' experiences of digital possessions; placelessness, spacelessness and formlessness.

Firstly, by placelessness they refer to the ability of DCOs to be accessed in multiple locations, often via different devices. In contrast to MCOs, which exist in a particular spatiotemporal location and may be organised and stored in ways that demonstrate and reinforce distinctions in meaning (e.g. Douglas and Isherwood 1979; Belk *et al.,* 1989; Belk 1995), consumers may struggle to point to the location of many DCOs. It is possible that consumers may locate DCOs in digital devices such as videogame consoles or PCs. However, Odom *et al.* (2014) note that this sense of placelessness is amplified by mobile technologies which enable many DCOs to be carried around with the consumer at all times, and by cloud computing technologies whereby increasing quantities of DCOs are not stored on any particular device but rather are accessed via online platforms, stored on some unknown server. Whilst such placelessness can be advantageous for consumers, enabling the engagement with digital possessions from any location, Odom *et al.* (2014) find that it may result in a lack of awareness of the digital possessions we have and where they are located. By spacelessness Odom *et al.* (2014) refer to the fact that DCOs do not take up physical space in the way that material possessions do and therefore are less subject

to spatial constraints. Consumers can acquire large quantities of DCOs without these items impeding their physical space; accumulations of digital possessions do not clutter consumers' homes in the way that material possessions have a tendency to. Odom *et al.* (2014) find that these spaceless DCOs may be easily forgotten – they lack the enduring presence of MCOs and much of the time remain invisible. Indeed, lack of ability to display digital music files has been cited as one reason for preferring CDs or records (Brown and Sellen, 2006). Lastly, by formlessness Odom *et al.* (2014) refer to the fact that DCOs are easily reproduced and highly malleable, often changing form between different devices. We might link this formlessness to discussions of the instability of digital artefacts (Ekbia, 2009; Kallinikos *et al.,* 2013). Such formlessness can be observed in discussions of ontologically open consumption objects within consumer research. Zwick and Dholakia (2006a; 2006b) consider the stock market as presented on screen as ontologically liquid and indefinite; any stability is merely temporary since the entity is never fixed but is instead continually unfolding and emerging. Whilst Zwick and Dholakia (2006a; 2006b) examine such items as epistemic objects that present continuous knowledge projects for consumers, the broader concept of ontological liquidity – the capacity for entities to unfold, evolve, change and morph indefinitely – is an important concept in the context of DCOs. The formlessness described within HCI studies of digital possessions (Odom *et al.,* 2014) might be seen as a form of ontological liquidity as the form of these items shifts and morphs, and we might compare this to the relatively stable MCOs documented in prior studies of possession (e.g. Ahuvia 2005; Epp and Price 2010).

Further distinctions arise in relation to constraints upon possession. Firstly, Watkins and Molesworth (2012) consider the restrictions presented by the limitations of available code. In some videogames, extensive customisation options enable the crafting of DCOs that come to feel 'unique'. Watkins and Molesworth (2012, p.160) describe an extensive process of customisation performed by one videogamer who spends hours redecorating her new house within The Sims to suit her own tastes and desires in order to experience it as her own, noting in contrast that "where 'customisation' involved simply choosing from a small menu of pre-determined options attachment was rarely formed." Thus the inevitable limitations of code itself emerge as a new restriction on possession that must be accounted for in the context of DCOs. Another potential for restriction emerges from the fragmentation of ownership discussed in Section 3.2. Whereas the MCOs in prior studies of possession are often assumed to be fully owned, we have seen that this is not the case for many DCOs. How might consumers' limited ownership of DCOs impact possession? Giesler (2008) documents an ongoing struggle between corporations imposing legal restrictions on digital music consumption and consumers' attempts to resist them. However he does not consider implications for possession. Indeed, the relationship between ownership and possession in the context of DCOs is largely overlooked, although prior work indicates that such

a relationship may exist. Online platforms such as virtual worlds and massive multiplayer online games typically retain the right to terminate the service without notice, and in doing so eradicate consumers' achievements, avatars and in-game possessions without a trace (Bonsu and Darmody, 2008; Watkins and Molesworth, 2012), and platform closures have been previously documented within consumer research. Scarabato *et al.*, (2013) illustrate that in investing significant effort in Disney's adverworld Virtual Magic Kingdom, users developed a sense of co-ownership over in-game content and an assumption of continued access. However Disney later terminated the platform (and consequently consumers' content) and the company was within its legal rights to do so. Watkins and Molesworth (2012, p.168) found that lack of ownership of DCOs in videogames produced concerns surrounding the potential for loss, rooted in consumers' lack of control over the safety of their digital possessions. Thus it seems that the fragmentation of ownership by companies as they attempt to create profitable digital assets may have potential consequences for the possession of these DCOs, although this relationship has yet to be explicitly explored.

In summary, despite their distinct characteristics, which may have initially led some scholars to doubt such relations, a small but growing body of literature indicates that DCOs may not only become digital possessions – regarded as 'mine' – but may also become personally meaningful and in some cases irreplaceable. Yet DCOs exhibit distinct characteristics that appear likely to produce distinct instances of possession and this presents an interesting area for further exploration not least because DCOs' distinct characteristics highlight limitations to extant understandings of possession.

3.4   Theoretical Limitations

Three interwoven limitations to our understanding of possession become particularly apparent as we look beyond the context of material possessions and consider instead DCOs. I shall illustrate that (1) our understanding of possession is bound up in assumptions of physical materiality, (2) that consumers' agency is privileged whilst consumption objects are seen to remain inert and passive, and that (3) assumptions of fully owned material possessions have led to the purification of the cultural sphere of possessions from the market sphere of commodities. Consequently, I propose that extant theories cannot fully account for consumers' growing arrays of digital possessions and therefore DCOs not only present an under-researched context for studies of possession but also provide an opportunity for theory building that expands our knowledge of possession by re-examining consumer-object relations.

3.4.1   Assumptions of Physical Materiality

In reviewing extant consumer research literature on the topic of possession in Chapter 2, it became evident that this work is grounded in an understanding of possessions as MCOs. Despite acknowledgements that possessions need not be material things (Belk, 1988), there is little empirical work that explores possession in other contexts. Within consumer research, possession has therefore become reified – associated with common forms of possession in the context of MCOs. There has been some recognition that consumers may form different types of relationships with possessions based on their age (Csíkszentmihályi and Rochberg-Halton, 1981), gender (Dittmar, 1991) and lifestyle (Bardhi *et al.,* 2012), yet we hold little understanding of how various consumption objects themselves might invite, encourage or prevent particular types of possession. Zwick and Dholakia (2006a) observe value in turning theoretical attention to the 'object' in consumer-object relations. They propose that when we study the relationship between consumers and objects we typically do so from the consumer's perspective (see Section 3.4.2, this chapter) and regard the ontological status of the object as dependent upon the desires and actions of the consumer, spending little time theorising the consumption object itself and failing to acknowledge variation in consumption objects. Zwick and Dholakia (2006a) argue that existing theories of consumer-object relations are limited in that they fail to conceptualise the ontology of the consumption object, tending to conceptualise objects as "'fixed', closed-box' commodities" (p.55) whilst "consumer goods increasingly are becoming ontologically indeterminate and emerging entities akin to life forms", as in their study of the stock market on screen as an epistemic consumption object (p.57). They propose that this recognition opens up new theoretical avenues for understanding consumers' relationships with consumption objects.

I propose that DCOs may hold distinct characteristics that vary from the characteristics of MCOs previously studied, and therefore may potentially produce distinct variations in possession. For instance, whilst MCOs are discussed by consumer researchers as identity anchors that tie consumers to a particular time and place (e.g. Mehta and Belk, 1991; Belk, 1992), we have seen that there may be less sense of 'place' where DCOs are stored online and accessible via multiple devices (Odom *et al.,* 2014). Furthermore, MCOs are largely assumed to be stable, in form if not in meaning, enabling them to provide continuity to the self over time (Price *et al.,* 2000; Kleine and Baker, 2004), yet DCOs may be ontologically liquid (Zwick and Dholakia, 2006a, 2006b) or formless (Odom *et al.,* 2014). How might this unstable quality shape the ways in which DCOs are possessed? Many such questions are not addressed in extant literature. There is therefore value in developing an understanding of the ways in which the characteristics of DCOs are similar or different to the MCOs previously studied, and how these distinctions may relate to the way in which possession takes place.

3.4.2   Consumer Centrism

> Stuff has a quite remarkable capacity for fading from view, and becoming naturalized, taken for granted, the background or frame to our behaviour. Indeed stuff achieves its mastery of us precisely because we constantly fail to notice what it does.

<div align="right">(Miller, 2010, p.115)</div>

Work that considers the role of possessions in consumers' lives has gradually moved beyond the perception of objects as representations of consumers towards a recognition that objects make us who we are (e.g. Belk, 1988; Miller, 2010). However, work that considers the *processes* involved in possession retains a focus upon consumer agency. Within the body of literature reviewed in Chapter 2, it became evident that to experience objects as possessed, consumers engaged in a range of processes such as using, caring for, transforming, and managing possessions in order to demonstrate their control over these objects. With limited recent exceptions (Epp and Price, 2010), possessions themselves are portrayed as inert, passive entities that are subject to such processes of 'possessing' by active consumer subjects. Here the consumers' agency is privileged, as they are portrayed in a position of control, cultivating possessions' meanings, employing possessions in ongoing identity projects, and moving them through various stages in their biographies. This is reflective of a broader tendency within interpretivist consumer research to take the individual consumer as the primary unit of analysis and to focus upon the micro level of rituals, meanings, identity, and symbolism (Askegaard and Linnett, 2011). Moisander *et al.* (2009a) argue that the commonly used phenomenological interview and the underlying research paradigm of existential-phenomenology described by Thompson *et al.* (1989) draws on the mentalistic tradition in social theory (see Reckwitz, 2002), locating the 'social' in the mind of the individual and consequently focusing primarily on the individual and first-person experiences.

Recent years have seen critiques of such accounts, arguing that they risk overlooking aspects of contemporary consumer culture that do not present themselves in consumers' lived experiences, such as structuring historical and sociocultural influences and non-human sources of agency (Moisander *et al.,* 2009a, 2009b; Askegaard and Linnet, 2011; Thompson *et al.,* 2013; Bajde, 2013). In response to such criticisms Thompson *et al.* (2013) argue that an array of studies within interpretivist consumer research have moved beyond the micro level of consumer experience and extensively addressed the institutional, historical, ideological, and sociological shaping of consumption (e.g. Arsel and Thompson, 2011; Giesler, 2012; Scarabato and Fischer, 2013). Furthermore, movement away from consumer-centric approaches within consumer research is reflected in the increasing prominence of post-phenomenological approaches, drawing in particular from practice theory (e.g. Arsel and Bean, 2013) and actor-network theory (e.g. Giesler, 2012; Martin and Schouten, 2014). Studies of possession have begun to consider forces beyond the agentic consumer – as noted in Chapter 2, Bardhi *et al.* (2012) consider how global

nomadism shapes consumers' relationships with their possessions, whilst Epp and Price (2010) explore the influence of a range of actants from identity practices to competing consumption objects. Yet despite these recent developments, our understanding of the role of non-human actants in possession is limited.

The role of non-human actants is unavoidable in the context of DCOs. Even in prior phenomenological studies of digital possessions within consumer research the role of software in shaping possession becomes evident. Watkins and Molesworth (2012) observe that possession rituals may be limited by customisation options enabled in-game by designers, and here we begin already to see that consumers do not perform such processes alone as videogame software emerges as key to this process. Furthermore, Maguadda (2011) highlights the importance of hardware in consuming DCOs. Indeed, we see the ways in which HCI designers are considering ways to better design DCOs, software and hardware in ways that shape consumers' relationships with digital possessions (e.g. Odom *et al.,* 2011, 2012, 2014); here we see that the ways in which the design of these items and the possibilities that are coded for can shape possession. Thus in order to account for possession in the context of DCOs it becomes apparent that we must account not only for distinctions in the characteristics of DCOs themselves but also for a range of further actants that may include entities such as software, hardware, and as we shall see in the following section, the ongoing role of the market.

3.4.3   Purification

Lastly, we can observe an issue of purification within consumer research whereby the 'cultural' realm of possession appears separate from the notion of markets. Kopytoff (1986) defines possessions as objects separated from the commodity sphere and, as we saw in Chapter 2, subsequent work on possession has focused upon the cultural realm of meanings, identity and relationships. Here material possessions are opposed to commodities, not only removed from locations of exchange but also subject to a range of possession rituals that aim to sever ties to market sphere (Kopytoff, 1986; McCracken, 1986). Consequently the role of the market, whilst prominent in studies of access-based consumption (Bardhi and Eckhardt, 2012), is absent from studies of material possessions. In particular, ownership remains largely overlooked within these analyses. Despite recognition that we may own without possessing and possess without owning, how 'ownership' may shape consumers' experiences of and relationships with possessions is little understood. This is reflective of broader distinctions within the field. Macro-level marketing research frequently takes place separately from micro-level studies of consumer experiences, to the extent that separate journals and conferences have been established for their study. Indeed, Slater (2011) proposes that marketing has been rendered impossible by a process of purification

that has led to divisions between economics and the cultural disciplines with economics largely ignoring cultural factors in its analysis of formal rationality, whilst cultural disciplines focus on marketing as ideology and meaning rather than marketing as a commercial practice. Within the field of marketing, ownership has typically been the domain of macro-marketing and possession the realm of consumer research, and consequently we lack an understanding of the ways in which ownership rights granted to consumers, and the ways that these rights are enforced, may shape the possession of consumption objects and vice versa.

In many contexts such divides may be unproblematic. For instance, consider the purchase of a dining table whereby consumers' ownership is full and unrestricted. Whilst societal conventions or issues of materiality may guide use (e.g. the room in which the table is placed and the objects placed upon it), restrictions on ownership do not; the consumer has permanent access to the table, can use it however, whenever and as frequently as they please, customise it as they wish, lend it to whomever they desire, and choose when and how to divest it. Such freedom is evident in Epp and Price's (2010) study of a family table moved between people, homes, and rooms with continually evolving meanings and uses. In such cases, overlooking ownership (or taking it for granted) may not significantly limit our understanding of possession. Indeed, it is likely that the absence of discussions of ownership from studies of possession may be rooted in the study of possessions in the context of MCOs that are fully owned, or are assumed to be fully owned, meaning that issues of ownership do not emerge. However, in order to better to understand the possession of DCOs that even when singularised and appropriated are rarely fully owned, we must find a way to reconcile possession and ownership.

This theoretical divide is also evident in studies of DCOs. We can observe studies on one hand of digital commodities and digital markets (e.g. Lehdonvirta and Virtanen, 2010; Lehdonvirta and Castronova, 2014) and on the other hand studies of digital possessions (e.g. Denegri-Knott *et al.,* 2012; Watkins and Molesworth 2012; Odom *et al.,* 2011, 2012, 2014). Yet we have seen that many DCOs are never fully owned by consumers as in order to create DCOs that can become profitable digital assets companies retain a level of ownership over these items and in turn offer consumers only limited rights (see Section 3.2, this chapter). Thus whilst existing theories of possession typically assume full ownership, in order to understand digital possessions it seems we need to consider the consequences of other ownership configurations. What happens when a DCO is not fully owned and is simultaneously a possession and a company asset? How might companies' ongoing influence over DCOs shape the ways in which DCOs are possessed? This relationship is not explained by current literature since it presents a blurring of the previously purified spheres of market and culture, possessions and commodity, and this presents a significant theoretical gap.

3.5   Chapter Summary: Need for Research

In reviewing available literature on possession in Chapter 2, it became evident this work is grounded in an understanding of possessions as MCOs; despite acknowledgements that possessions need not be material things there is little empirical work that explores possession in other contexts. However in this chapter we have seen that digital possessions are of particular interest since they draw our attention to the limitations of extant theories of possession. Firstly, we have seen that DCOs exhibit distinct characteristics, yet we lack a nuanced understanding of the ways in which DCOs are distinct from MCOs and the consequences this may hold for possession. Secondly, consumer-centric accounts have overlooked non-human sources of agency in possession, yet prior scholarship indicates that new actants such as hardware, code, and companies may play a role in the possession of DCOs, although this role is not explicitly documented. Lastly, DCOs are rarely fully owned, and yet prior work indicates that they may be experienced as possessions; here the distinction between ownership and possession discussed in Chapter 2 becomes evident and their relation presents itself as an intriguing area for exploration. More broadly, this absence of full ownership means that unlike MCOs in the home, which may be more clearly separated from the commercial sphere, many DCOs are never fully separated from the influence of market forces and consequently overcoming current purification becomes necessary in order to understand this phenomenon.

In line with Price *et al.*'s (2006) call for consumer researchers to select research contexts for theoretical insights, we see that the context of DCOs enables this research to re-examine and potentially challenge and/or extend prior theories of possession rooted in the context of MCOs, providing an opportunity for theory building that may expand our knowledge of possession by re-examining consumer-object relations. This research therefore aims to examine possession in the context of DCOs, in particular exploring a) the distinct characteristics of DCOs and their implications for possession, b) the role of actants beyond the end consumer, including non-human actants, and c) the ways in which companies' ongoing role may influence possession. In the following chapter, I illustrate that principles stemming from the actor-network theoretical tradition provide a means to achieving this and describe the method assemblage implemented.

Chapter 4: Methodology

This thesis explores relations between consumers and digital consumption objects (DCOs) in order to extend our understanding of possession with the intention of addressing prior limitations to extant theory identified in Chapter 3. It does so by drawing from principles stemming from the actor-network theoretical tradition and therefore the first section of this chapter is devoted to explaining in greater detail these key metaphysical assumptions. In a second section, I outline more precisely the aim of this research and the questions it seeks to answer, noting how my research philosophy shaped these goals. Finally, I shall explain the method assemblage developed in order to answer the study's research questions, describing in detail the processes of data generation, analysis and interpretation implemented.

4.1   Research Philosophy: Actor-Network Theory and Metaphysics

Before I begin to outline more precisely the study's aim and design, I must first explain the research philosophy that informed the planning and implementation of this research. Interpretivist consumer research emerged in opposition to positivist, often psychologically oriented, quantitative studies (see Belk, 1995a), and adopted what Thompson *et al.* (2013, p.7) describe as a 'humanistic/experientialist discourse' that conceptualised consumers as "emotional, creative, and inner-directed individuals who sought self-actualizing experiences" and "celebrated emotional spontaneity, consumer agency (as meaning makers), and the contextual nuances of consumption meanings and experiences." Within such discourses, and in particular within studies of possession (as noted in Chapter 3), methodological individualist assumptions are common whereby the consumer subject is regarded as the primary unit of analysis (Askegaard and Linnet, 2011; Thompson *et al.,* 2013). This body of work was highly influenced by both naturalistic inquiry (Belk *et al.*, 1988) and phenomenology (Thompson *et al.,* 1989), both of which served to produce emic perspectives, producing detailed accounts of consumers' experiences whereby the consumer serves as a sensemaking instrument (see Thompson *et al.,* 2013). In recent years, however, critiques of such approaches have emerged that move beyond humanistic/experientialistic discourse, including approaches that recognise the limitations of methodological individualism and acknowledge the role of the non-human.

Post-phenomenological approaches have emerged within recent consumer research, drawing from practice theory (Arsel and Bean, 2013), assemblage theory (Canniford and Shankar, 2013) and actor-network theory (Epp and Price, 2010; Giesler, 2012; Martin and Schouten, 2014), amongst other approaches (see Thompson *et al.,* 2013). Each of these perspectives presents a means of moving beyond an emphasis on consumer experiences. However, we shall see that

principles from actor-network theory (ANT) hold particular value for this research. Below I provide an account of the key metaphysical assumptions of ANT and the ways in which these principles have informed this research, noting in particular the ways that this approach equips me to address the limitations of extant theories of possession identified in the previous chapter.

Actor-network theory is an approach to social theory and research that emerged in science and technology studies (STS) developed most prominently by STS scholars Bruno Latour and Michel Callon alongside sociologist John Law. The body of work that we have since come to describe as actor-network theory began to emerge in the late 1970s-early 1980s in Paris, and the name itself was introduced by Michel Callon in 1982 (see Law, 2008, for alternate histories of ANT). Actor-network theory is difficult to define since, despite its misleading name, it is not (and does not aspire to be) an enduring theory (Law 2008); "There is no coherence to it. No overall scheme, no stable grid that becomes more and more solid as it gets more and more refined" (Mol, 2010, p.257). Rather, ANT is better understood as "a sensibility to the messy practices of relationality and materiality of the world" (Law, 2008, p.142). Although ANT is difficult to pin down, John Law (2008, p.141) provides a useful summary of the actor-network theory tradition and the key assumptions it entails:

> Actor network theory is a disparate family of material-semiotic tools, sensibilities, and methods of analysis that treat everything in the social and natural worlds as a continuously generated effect of the webs of relations within which they are located. It assumes that nothing has reality or form outside the enactment of those relations. Its studies explore and characterize the webs and the practices that carry them.

As the name suggests, actor-network theory is concerned with actors (or actants), which are seen to be produced by networks of relations between other actors. Henceforth I shall use the term 'actant' as opposed to 'actor', given the human connotations of the latter term. ANT is not a theory since it does not attempt to explain why networks take a particular form. Rather it beseeches researchers to thoroughly explore the relational ties in the actor-network under study and offers sensibilities and tools that enable them to do so. A common misunderstanding is for researchers to claim that they are going to "use actor-network theory" as though it were a microscope; however there is no consistent ANT perspective that can simply be applied (see Mol, 2010). Rather, ANT is best understood as a 'repertoire' (Mol, 2010) or 'toolkit' (Law, 2008), providing a number of sensitising terms, ways of asking questions, and techniques for looking at phenomena in new ways. I shall illustrate within this thesis that drawing from ANT presents a new way of looking at the phenomenon of possession by departing from a priori assumptions and simply tracing the actor-networks that enact possession, exploring relational ties within this network.

Work within the ANT tradition typically adopts a distinct set of principles, including most prominently the notions of relational materiality (reality is enacted or performed by actor-networks of heterogeneous actants, and it is in these relations that agency is located), ontological symmetry (divisions such as subject/object or nature/culture may exist but are themselves enacted and do not exist a priori), and ontological multiplicity (reality is not singular; multiple realities can be enacted simultaneously). I shall consider in turn each of these interwoven principles and in doing so I explain how these assumptions inform research practice, including calls to "follow the actants" and the necessity of black boxing as a means to avoid infinite regress, the importance of adopting a flat ontology in studying any phenomenon, and the notions of method assemblage and ontological politics which shape both the aims of research and the role of method.

4.1.1   Relational Materiality

> ANT treats entities and materialities as enacted and relational effects, and explores the configuration and reconfiguration of those relations
>
> (Law, 2004, p.157)

Actor-network theory may be understood as a 'semiotics of materiality' in that it takes the semiotic notion that entities are produced in relations and applies this ruthlessly to all materials rather than only those that are linguistic (Law, 2008). Relational materiality refers to the concept that entities have no a priori qualities, substance or essence (Law, 1999; Law 2004). ANT is anti-essentialist in that entities' characteristics are seen to stem from their relationships with other entities; actants are performed in and through those relations. Thus ANT's realism is a realism of relations, as opposed to the realism of objects that can be grasped 'out there', independent of their relations and deployments (Law, 2004). From this perspective, any actant can be understood as a network of heterogeneous relations. For instance, Law (1992, p.3) proposes that:

> People are who they are because they are a patterned network of heterogeneous materials. If you took away my computer, my colleagues, my office, my books, my desk, my telephone I wouldn't be a sociologist writing papers, delivering lectures, and producing "knowledge". I'd be something quite other -- and the same is true for all of us.

Bajde (2013, p.3) points out this means that "There is no 'finished', durable 'consumer' that can exist outside of patterned relations between people, objects and meanings." Consumers, and consumption objects, are enacted by heterogeneous and often highly complex actor-networks. However it is important to note that we are only sometimes aware of the networks that lie behind and make up an actant. In practice we do not cope well with endless network ramification; if a network acts as a single block then it disappears to be replaced by the action itself and the seemingly simple author of that action, whilst the complex relations that generate this effect become, at least for the time being, invisible. For instance, for most of us most of the time a

television set is a single and coherent consumption object that can be treated as such. It is only when it breaks down that we come to see the device as a complex network of electronic components. This simplification is referred to in ANT as 'black boxing' and is evident, and indeed necessary, within marketing and consumer research where markets and consumers are discussed as coherent entities. However black boxes can always be re-opened, often when networks break down.

The view of relationality has implications for how we understand possession. Whilst prior work has indicated that singularisation is a process that moves objects from commodity to possession (Kopytoff, 1986), we must be attentive to ongoing processes that continue to enact consumption objects as possessions. This has been recognised in the work of Epp and Price (2010), which acknowledges the potential for non-human actants to disrupt and destabilise possession. Thus a consequence of the notion of relational materiality is an attentiveness to process and precariousness. In ANT "A network is not made of nylon thread, words or any durable substance but is the trace left behind by some moving agent" (Latour, 2005, p.132); for the network to endure these traces must be continue to be left as actants continue to act. Since actants are generated by such networks of relations, an actant is always an event that happens only once and in one place; its qualities do not endure unless they continue to be enacted (Latour, 2005). Thus ANT would hold that possession is constantly emergent in the relations among actants; objects' status as possessions is not fixed and the web of relations that enact the object as possession may come unwoven as relations break down and actants fail to act. There is therefore a need not only to attend to disruptions that destabilise possession, but the ongoing action that enacts consumption objects as possessions in both transient and more enduring ways.

The notion of relational materiality also has consequences for our view of agency, which for actor-network theorists is not located in the actants themselves, but in their relations. It is only in its relation to other entities in an actor-network that the actant is able to act. Key to this understanding is that no actant can act alone. Mol (2010, p.258) proposes that "Actors are afforded their very ability to act by what is around them. If the network in which they are embedded falters, the actors may falter too. If they are not being enacted, actors are no longer able to do all that much themselves. They stop 'working'". Thus agency is not located in subjects or objects, but in relations between heterogeneous networks of actants. From this perspective a consumer cannot simply 'possess' of their own accord; it is their relationship to a range of other actants that enables possession to occur. Thus from the perspective of relational materiality, the view that possession is something 'done' by the consumer *to* consumption objects is limiting; there is a need to trace more carefully the networks of actants that play a role in the enactment of possession.

What implications does the assumption of relational materiality hold for the way we conduct research? In attempting to understand a phenomenon, Latour (2005) suggests that the researcher follows the actants, letting them determine what data is collected. ANT researchers must trace the actants within an actor-network and attempt to understand the work that goes into this enactment. How did network relations emerge? How it is that this network comes to hold? How does this network compete with other networks? However, a key concern is establishing where this process should end since blindly opening 'black boxes' can lead to a vortex of infinite regress (Harman, 2009). Indeed, this is a key criticism of ANT by Collins and Yearley (1992). Therefore, a key consideration for the researcher as they attempt to trace network relations is to decide what entities to black box. For instance, in the case of digital possessions do we 'black box' Facebook as a platform that can be considered within this research as a single entity? Or do we begin to unpack it by considering the company behind the platform? Do we 'follow the actants' to Facebook's headquarters in California where key strategic decisions are made? To a server in the Swedish town of Luleå where many users' Facebook data is stored? Do we stop at the contractual agreements involved in using the platform, or do we follow the actants to the legal teams that produced these agreements? Do we study the platform's source code? The internet connections that make accessing this platform possible for its end users? Thus one of the most difficult decisions involved in conducting ANT informed research is to decide which black boxes to leave unopened. As we shall see in the following section, integral to this process of following the actants is the principle of ontological symmetry, which calls for the adoption of a flat ontology that treats all actants studied equally a priori.

4.1.2 Ontological Symmetry

A consequence of ANT's relational materiality is the need for ontological symmetry; all actants are placed a priori on equal ontological footing since ontological categories (e.g. human/non-human, culture/economy, micro-macro, nature/society) are seen as effects or outcomes that are themselves enacted (Latour, 2005; Law, 2008). Latour (1993) proposes that modernity involves forms of purification that produce such divides, which are eroded by the ontological symmetry of an ANT approach. That is not to say these divides do not exist, but rather that they should not be assumed a priori but instead should be regarded as an effect. Notably, ANT treats human and non-human participants as ontologically equal since agency is seen to be distributed across networks of objects, bodies, and other heterogeneous entities (Latour, 1992, 2005). Reality is seen to be constructed not solely by human minds and inter-personal relationship but by a whole manner of entities. Nonhuman entities are no longer reduced to "hapless bearers of symbolic projections" (Latour, 2005, p.10), passive stuff subjected to the workings of the (exclusively human) 'social', but rather become full-blown participants in enactments of reality and knowledge (Law, 2004;

Latour, 2005). ANT prompts us to consider the role of non-human actants in enacting reality, turning our attention to the 'missing masses' (Latour 1992, 2005). Again, it is not that there are no distinctions between human and non-human actants. It is rather that any distinctions are understood as effects or outcomes, rather than foundational, assumed a priori (Law, 2004). ANT's 'posthumanism' has been controversial, particularly to those who understand the social in terms of meaning and intersubjectivity, and critics of ANT have questioned the notion of granting intentionality to non-human objects (Collins and Yearley, 1992). However, the term agency refers not to the psychological understanding of human intentionality, but to the capacity to cause an 'effect' and thus make a difference to a state of affairs.

How then does the assumption of ontological symmetry inform research practice? It calls for epistemologies that do not succumb to an a priori layering of reality, assuming instead that nothing is foundational and nothing is fixed (Law, 2004, 2008). This principle of generalised symmetry is methodological, requiring that we treat everything equally in the first instance. In other words, in an analysis of Facebook as a DCO, all actants, from Mark Zuckerberg to Facebook's Terms of Use, an end user of the platform to a computer mouse or an internet connection, must be treated as metaphysically equal and as possible actants. That is not to say that divides cannot emerge from an ANT informed analysis; however we must not impose them a priori. In particular, we cannot a priori assume that possession is an act performed by (active) consuming subjects upon (passive) consumed objects. Thus in studying possession, rather than beginning with the assumption of objects as independently acted upon (i.e. invested/divested of meaning) by meaning-making subjects, we must adopt a flat ontology and commit ourselves to simply tracing the actants that enact the phenomenon of 'possession'. This perspective therefore presents an opportunity to move beyond the consumer-centric approaches (see Section 3.4.2, previous chapter) and acknowledge, to use Latour's (1992) phrase, the 'missing masses' of possession by acknowledging the role of actants beyond the end-consumer in enacting possession, including non-human actants. Furthermore, since an ANT perspective rejects a priori assumptions and divisions it presents a fruitful approach for overcoming the purification of market and culture that limits extant theories (see Section 3.4.3, previous chapter).

4.1.3   Ontological Multiplicity

If we adopt the assumption of relational materiality and perceive reality as enacted, then we must also acknowledge that multiple realities can be enacted. Rather than ontology, actor-network theorists suggest that we should speak of ontologies since realities are multiple (Mol, 1999; Law, 2004). Mol (1999) notes that this view is distinct from pluralism. As opposed to perspectivalism, which sees multiple perspectives on a singular reality, and constructivism, which notes that

alternative constructions of reality may have been possible at one point but have now disappeared, ANT follows the assumption that multiple realities can be enacted simultaneously. In other words, we are not simply looking at different aspects of a single reality, but at multiple realities. This presents a fruitful lens for the study of digital possessions since it enables us to account for instances whereby DCOs are simultaneously enacted as assets (in relation to companies) and possessions (in relation to consumer), as identified in Chapter 3. The notion of ontological multiplicity has significant implications for research practice since it transforms the role of method.

Often, methodology is informed by empiricist realism; it is assumed that there is a real world with real attributes that social scientists can discover and consequently that if they want to understand reality 'properly' they must follow specific methodological rules and procedures. Whilst there is much debate in social science regarding particular sets of methodological rules and procedures, the need for such rules and procedures is significantly less debated (Law, 2004). Thus it is believed that we should apply the 'correct' methods else we shall end up with substandard knowledge that does not accurately represent what it aims to describe (Law, 2004). However actor-network theorists propose that methodological rules and practices don't simply describe but indeed play a role in *producing* the reality they're aiming to understand. For Law (2004, p.143) method "does not only 'report' on something that is already there", but "unavoidably produces not only truths and non-truths, realities and non-realities, presences and absences, but also arrangements with political implications." From this perspective, science does not describe the world 'out there' from 'nowhere' but actively partakes in enacting this reality (Law, 2004). The notion that method produces realities is perhaps most prominently illustrated in Latour and Woolgar's (1979) ethnography of a scientific laboratory, which documents the construction of scientific facts. They illustrate the ways in which particular realities are constructed, not by scientists alone but particular inscription devices and practices, which themselves involve a variety of actants (e.g. desks, scientific equipment, notes). They propose that the realities that are viewed by the scientists as existing 'out there' prior to study are indeed accomplished through scientific practice. For Latour (1988, 2005) truth isn't a starting point but an effect that is itself enacted.

How then might this view that method creates reality shape the way in which we conduct research? Law (2004) calls for researchers to abandon their desire for certainty, to embrace multiple, uncertain and diverse methods. More specifically, he proposes re-imagining social science research via what he terms a 'method assemblage'. For Law (2004, p.42) method assemblage is "The enactment or crafting of a bundle of ramifying relations that generates presence, manifests absence and Otherness, where it is the crafting of presence that distinguishes

it as a *method* assemblage." In other words, methods may strengthen particular realities and simultaneously erode others. Think for instance of consumer research, where the use of the phenomenological interview has strengthened the reality of the agentic consumer imbuing possessions with meanings; in doing so what realities of possession have been made absent? How might we make them present? Here we see that methods are not only descriptive but can be performative (Law, 2004; Law and Urry, 2004). Methods "make differences; they enact realities; and they can help to bring into being what they discover" (Law and Urry, 2004, p.393-4). If methods do not simply describe social realities but also serve to create them, then methods are always political and researchers must carefully consider the kinds of social realities they want to create. Research stemming from the ANT tradition does not aim to "finally, once and for all catch reality as it is" but "to make specific, surprising, so far unspoken events and situations visible, audible, sensible. It seeks to shift our understanding and attune to reality differently" (Mol, 2010, p.255). This study therefore aims to craft a method assemblage that makes present, to borrow Latour's phrase, the 'hidden masses' of possession that have for too long been neglected and thus made absent.

Critics claim that ANT can produce largely descriptive and apolitical accounts (Bloor, 1999; Restivo, 2010), noting that ANT's vocabulary and analytical tools are not capable of challenging power structures and can only describe them. However, this does not have to be the case. ANT doesn't ignore power; rather power is seen as an effect, enacted via networks of relations. In order to understand power, we must study up rather than down (Law, 2008). ANT underlines that reality is multiple, which enables us to consider how we might enact realities that produce power in different ways, referred to in ANT as 'ontological politics' (Mol, 1999; Law, 2004). If reality is not given, then it might be changed. Therefore, in considering enactments of possession in the context of DCOs I must ask in whose interests current enactments of possession have emerged. What realities have been made absent in making the current reality present? What consequences does the current enactment of possession hold, for instance, for consumers and for society? How might possession be enacted differently? It is asking such questions, in the notion of ontological politics, that ANT's political potential lies.

4.1.4   *Summary of Key Metaphysical Assumptions*

ANT approaches have increasingly emerged within marketing and consumer research, however they have tended to examine the enactment of markets (Giesler, 2012; Martin and Schouten, 2014) as opposed to the enactment of possession, with the exception of Epp and Price (2010) who draw from ANT to examine the ways in which various actants (e.g. space limitations, competing objects) may disrupt possession. Of course, a comprehensive review of the metaphysics of ANT

is beyond the scope of this thesis (see Harman's (2009) exploration of Latourian metaphysics). However, in this section I have outlined the key metaphysical assumptions of ANT that have informed the development and implementation of this study; we have seen that drawing from ANT, and in particular key assumptions of relational materiality, ontological symmetry and ontological multiplicity, better equips consumer researchers to overcome current limitations to theories of possession by granting all actants equal ontological footing, breaking down a priori distinctions and accounting for multiplicity. In line with the notion of relational materiality, I view possession as enacted by heterogeneous networks of actants; in order to develop an understanding of possession in the context of DCOs I must engage in a process of tracing the actants that enact possession, letting this process guide my data generation. In doing so I shall adopt a flat ontology that treats all actants as equal; rather than focusing on the experiences of the consumer as 'possessor' all actants, both human and non-human, must be understood a priori to be on equal ontological footing. In line with the view that realities are enacted and therefore multiple, and indeed consistent with existing interpretivist consumer research, I must reject the aim of producing an objective 'view from nowhere' that describes fully the phenomenon that is 'digital possessions'. Rather, I shall recognise that in conducting and communicating this research I am myself producing one of many realities, and in line with Law's (2004) notion of method assemblage my method is guided by a desire to make present that which has previously been absent within accounts of possession; the ways in which possession is enacted, in particular the way in which this enactment is influenced by the characteristics of DCOs themselves, actants beyond the end consumer, and the ongoing role of companies.

4.2   Aim, Scope and Research Questions

The metaphysical assumptions detailed above inform the aim of the study and the questions it aims to answer. This thesis intends to contribute to consumer research by exploring possession in the context of DCOs. This study does not focus on a particular type of DCO (e.g. digital music), but consistent with prior studies of material possessions (Csíkszentmihályi and Rochberg-Halton, 1981; Ahuvia, 2005; Miller, 2008) it observes a broad range of DCOs that emerged as digital possessions during the study. It is important to acknowledge the boundaries placed upon this research; the focus is not upon hardware such as mobile phones, laptops, or tablet devices as possessions, but upon the DCOs themselves, although as I noted in Chapter 3 these entities are often inseparable. Consumers' relations to text messages, for instance, will involve a mobile device via which these DCOs are accessed. However, the emphasis in this study is the enactment of the text message as a possession in which the mobile phone device is a key actant, rather than on the enactment of the mobile phone as a possession. Neither does this research focus upon DCOs that are not regarded as possessions but are experienced by the consumer as merely

accessed rather than 'mine'. Where there is no sense that a DCO 'belongs to me' these items are not considered possessions and are not studied. However, this study encompasses cherished possessions, mundane possessions, and even inactive possessions that are nonetheless regarded as 'mine'.

A complete, all-encompassing theorisation of digital possessions is unrealistic; as we saw in Chapter 3 these items are continually emerging and never complete, shaped by companies and by consumers, and as with material consumption objects (MCOs) they may exist in many variations. More importantly, an attempt to arrive at a concrete, final theory of digital possessions is inconsistent with the research philosophy described above. Rather, this study examines digital possessions with the intention of extending extant theories of possession by addressing the limitations identified in Chapter 3. I have established that perceptions of possession as something 'done' by the consumer to passive consumption objects is limiting, and that there is a need to trace more carefully the networks of actants that play a role in the enactment of possession. The aim of this study is therefore to trace enactments of possession in the context of DCOs by examining consumer-object relations and tracing the networks of actants in which they are embedded. It does so with the intention of theory building, employing a method assemblage designed to develop an understanding of those aspects of possession that are under-theorised in extant literature. Therefore, the study aims to answer three research questions that direct attention to aspects of consumer-object relations that have previously been obscured.

Firstly, this thesis responds to Zwick and Dholakia's (2006a) call for consumer researchers to turn their theoretical attention to consumption objects. In Chapter 2, I illustrated that we have little understanding of whether and how the characteristics of consumption objects may produce variations in enactments of possession (as the characteristics of consumers are acknowledged to). However, in Chapter 3 it became apparent that extant theories are rooted in the context of MCOs and may potentially be challenged by DCOs' distinct characteristics. Yet whilst scholars have attempted to theorise 'digital artefacts' (Ekbia, 2009; Faulkner and Rund, 2011; Kallinikos and Mariátegui 2011; Kallinikos *et al.*, 2013), we have a limited understanding of their enactment as consumption objects, the characteristics that they may exhibit, and the ways in which this may shape consumer-object relations. Consequently, the thesis aims to answer the following question:

RQ1- How may the characteristics of DCOs shape their relation to consumers?

Secondly, this thesis responds to critiques of consumer-centric approaches in consumer research (Moisander *et al.*, 2009a, 2009b; Askegaard and Linnet, 2011; Bajde, 2012), drawing from ANT sensibilities to make present, to borrow Labour's (1992) phrase, the 'missing masses' of possession. This thesis aims to draw our attention to the role of actants beyond the end

consumer including the non-human actants that have been obscured by consumer-centric approaches, asking:

RQ2- What actants beyond the end consumer shape consumer-DCO relations?

Lastly, DCOs may not be fully owned by consumers (see Chapter 3). However, our current understanding of possession does not account for this phenomenon. We saw in Chapter 2 that extant literature does not account for the ways in which possession may take place in such instances of fragmented ownership since ownership is typically assumed to exist either in full or not at all. Consequently, the market sphere appears absent from studies of possession, with possessions opposed to commodities and various rituals facilitating transitions between these states (see Section 3.4.3, previous chapter). Consequently, this thesis aims to explore this phenomenon, asking:

RQ3- How does consumers' limited ownership of DCOs relate to their enactment as digital possessions?

Thus rather than simply re-producing the established narrative of possession in the context of DCOs, this research draws from ANT sensibilities in order to make present those aspects of consumer-object relations that have previously been obscured. Below, I describe the method assemblage implemented in order to do so.

4.3 Method Assemblage: Generating, Analysing and Interpreting Data

If, as outlined above, realities are multiple and methods may produce different realities, aligning oneself neatly with an established and coherent set of research methods is less important since there is no single truth that must be obtained through the 'correct' set of research methods. Indeed, in attempting to understand a phenomenon, Latour (2005) suggests that the researcher should 'follow the actants', letting them determine what data is collected. What is essential is sensitivity to the productive nature of research methods, and an approach that enables the researcher to carefully trace the actants involved in enacting the phenomenon under study. In particular, I must develop a method assemblage that makes present those actants that have been made absent in prior studies of possession in order to answer the research questions outlined above, tracing both human and non-human actants, and noting the ways that the characteristics of DCOs and the ongoing role of companies might shape enactments of possession.

Often studies informed by ANT favour ethnographic methods in order to observe actants in action, and therefore give non-human actants a 'voice' as their actions are documented (e.g. Latour and Woolgar, 1979; Law, 1994). However, an issue faced in this research was how to

study possession through observation. How might one observe relations between DCOs and consumers? Some consumption processes are more tightly temporally and spatially bound. For instance, choosing to observe the weekly grocery shop, or music listening practices at a house party would be unproblematic – these processes have a clear location and a defined time frame. However consumer-DCO relations tend to be dispersed over time and across locations. How might one observe the enactment of possession in a way that captures key moments of action? A consumer might download an ebook in work to read on the train journey home, check Facebook whilst waiting for a bus, or 'pin' an image on Pinterest whilst on their lunch break. Furthermore, aside from shifts in consumer-object relations mobilised by the consumer, disruptions such as software updates or the theft or loss of devices are unpredictable. This is not unique to DCOs; when is possession 'done'? Possession often consists of fleeting moments of action dispersed across long periods of relative inactivity, and therefore long periods of participant observation were deemed to be an inappropriate and inefficient method for tracing the actor-networks that enact possession in the context of DCOs.

How then to fulfil the aim of this study, moving beyond the experiences of the consumer? Possession has been defined as proprietary feelings experienced by the human subject who feels that something is 'mine' (Belk, 1988), and therefore in order to first identify DCOs enacted as possessions I began by asking human participants to identify those DCOs they regarded as belonging to them. Thus it is through speaking to the consumers that digital possessions were initially identified. Over a two-year period (June 2012–July 2014) multiple in-depth interviews took place with twenty UK consumers. The use of in home interviews echoes prior studies of material possessions (Csíkszentmihályi and Rochberg-Halton, 1981; Ahuvia, 2005; Miller, 2008) and digital possessions (Odom *et al.,* 2011; Denegri-Knott *et al.*, 2012; Watkins and Molesworth, 2012). However, efforts were made to not only document consumers' phenomenological experience of digital possessions but to also attend to tracing broader networks of actants with the intention of addressing the inevitable loss of materiality within purely phenomenological accounts. Interviews are an established method within ANT informed consumer and marketing research and have proven effective so long as the researcher remains sensitive to the role of actants beyond the interviewee (see Epp and Price, 2010; Giesler, 2012; Martin and Schouten, 2014). The interviews used in the present research aimed to look beyond the mental world of individual experience and sensemaking, exploring not only what consumers think and feel, but also what both they and other actants *do* - upon the 'doing' or 'enactment' of possession. In asking consumers to not only describe experiences but to detail actions involved and where possible to show me how these actions are performed, it was possible to note in the analysis of interviews the presence of other actants in the accounts. This analysis then served as a starting point that led me to explore and familiarise myself, following the interview, with those entities in participants'

accounts such as iTunes software and Facebook pages, and in some cases actants such as end user licence agreements and DRM software that were absent from participants' accounts but nonetheless appeared to play a role in enacting possession. I shall provide a further explanation of my approach to data generation in Section 4.3.2.

The study's longitudinal approach, involving revisiting participants multiple times over a period of two years, enabled me to observe how enactments of possession changed over time, as new DCOs were consumed, as devices changed, and as issues arose and changes occurred (e.g. theft of devices, software updates). This study adopted an emergent design, engaging in an iterative process of data generation, analysis and interpretation that enabled a gradual narrowing of the study's focus. Such repeated iteration enabled earlier data generation, analysis and interpretation to inform later participant selection and data generation enabling a gradual refinement of ideas as areas of interest were explored in increasing depth. Data generation concluded once a point of theoretical saturation was deemed to have been reached and it was felt that additional data were unlikely to alter my interpretations. Below, I explain in greater detail the processes of generating, analysing and interpreting data.

4.3.1   Recruiting Interviewees

In order to identify digital possessions, I began by locating consumers and asking them to describe those DCOs that they perceived as 'mine.' Since the aim of this study was to trace in detail the ways in which possession of DCOs was enacted in a select number of cases, the aim was not to produce generalisable findings by producing a 'representative sample', but to generate rich data from multiple interviews with a smaller number of participants. As noted above, this study does not aim to examine any one particular category of DCO but to examine DCOs more broadly, just as previous studies have explored MCOs without narrowing their focus to a particular 'type' (e.g. Csíkszentmihályi and Rochberg-Halton, 1981; Miller, 2008; Bardhi *et al.*, 2012). It was therefore deemed important that participants between them possessed a broad variety of DCOs. Methods of participant recruitment and selection reflected this goal. Participants initially responded to an advertisement on Gumtree, a post on the Bournemouth Borough Council Intranet, and an email circulated on my behalf to the Bournemouth Photographic Society. Subsequently, snowballing occurred whereby other individuals expressed an interest in the study after being given my details by existing participants. Screening questions asked via email exchanges and telephone calls prompted prospective participants to provide information on themselves and their digital possessions and this information enabled participants to be selected purposively to include participants with varying engagement with DCOs.

Figure 1 – List of participants

	Pseudonym	Age	Sex	Occupation	Lifestage	Interview dates	Cumulative interview time
1	Melissa	29	F	PhD candidate & lecturer	Relationship	22/6/12 23/11/12 6/5/13	3 hrs 57 mins
2	Natalie	25	F	TV production	Single	11/9/12 26/3/13	3 hrs 15 mins
3	Leonard	80	M	Retired photographer	Married, empty nester	11/11/12 6/5/13 10/6/14	5 hrs 42 mins
4	Chloe	30	F	Researcher	Co-habiting	7/11/12 7/5/13	2 hrs 44 mins
5	Andrew	26	M	Film student	Single	5/11/12	2 hrs 4 mins
6	Richard	23	M	Sales executive	Cohabiting	9/1/13 12/3/13 23/5/14	4 hrs 46 mins
7	Alice	30	F	PR consultant	Married, 1 child	26/9/12 2/5/13 9/6/14	5 hrs 6 mins
8	Eve	35	F	Artist & part-time PhD candidate	Married	30/10/12 16/7/14	3 hrs 34 mins
9	Tom	18	M	Computing student	Single	29/9/12 25/4/13 19/7/14	5 hrs 14 mins
10	Louise	32	F	Part-time bookkeeper	Married, 1 child	9/11/12 17/4/13 9/6/14	5 hrs 20 mins

	Name	Age	Sex	Occupation	Lifestage	Interview Dates	Cumulative Interview Time
11	Stephen	24	M	Videogame developer	Single	18/4/13	1 hr 50 mins
12	Sue	45	F	Unemployed	Co-habiting	17/11/12	1 hr 35 mins
13	Lauren	22	F	Social media co-ordinator	Engaged	2/10/12 19/4/13 15/7/14	4 hrs 14 mins
14	Jane	43	F	Business analyst	Married 1 child	30/11/12	1 hr 46 mins
15	Charlie	23	M	Finance	Single	23/5/14	2 hrs 12 mins
16	Sophie	33	F	Accommodation officer	Co-habiting	14/11/12	1 hr 26 mins
17	James	23	M	Unemployed	Single	23/5/13	1 hr 25 mins
18	Holly	23	F	Customer service advisor	Engaged, 1 child	13/1/13 1/4/13 13/1/14	2 hrs 43 mins
19	Becky	17	F	A level student	Single	22/11/12 1/4/13 22/5/14	4 hrs 2 mins
20	Ben	41	M	Digital designer	Married, 1 child	23/6/14	1 hr 35 mins

In total, I conducted interviews with twenty UK consumers (see Figure 1, pp.66–67). Studies of possession within consumer research have used similar approaches; Ahuvia (2005) followed up 70 phone interviews with ten depth interviews, whilst Bardhi *et al.*'s (2012) on liquid relationships with possessions draws from interviews with eighteen global nomads. Participants spanned varying generations (the age range was 17–80) and varied in terms of family status (single and married; with and without children), education (from high school to graduate degrees), and occupation (full-time and part-time students, unemployed, part-time and full-time workers; service, managerial and academic careers). It is important to note, however, that this study was not comparative and whilst consumers' relationships with DCOs may well vary by age, occupation, gender or education this study does not aim to make this type of generalisation. As noted above, rather than demographic variables my concern was with heterogeneity within participants' engagement with technology and in particular with DCOs. Participants included an ex-IT worker who described herself and her husband as 'techies', a computing student specialising in hacking, a beauty blogger, and amateur DJs and photographers, alongside a number of participants who described themselves as having a fairly functional relationship with technology and worried that they would have little to say on the matter. Sampling purposively in this way produced highly varied accounts of digital possessions. Participants described a broad range of DCOs as possessions, including text messages, social media profiles, folder after folder of digital photographs, cherished digital car collections, numerous cluttered email inboxes, blog posts with sentimental value, and meaningful information stored on the iPhone's Notes function. Despite such variation, significant themes began to emerge in the way that possession was enacted.

4.3.2   Data Generation: Tracing Actants

In unstructured interviews lasting between one and three hours, participants were asked to discuss their digital possessions. In total 69 hours of interview data was generated from 41 interviews, with over three hours spent on average with each participant. A longitudinal approach was adopted, with up to three interviews per participant conducted over a period of two years, enabling further exploration of emerging themes and allowing me to document the ways in which consumer-DCO relations emerged, changed over time, and eventually dissolved.

The aim during the initial interviews was to cover topics key to enactments of digital possessions, rather than discussing set topics decided in advance. Earlier interviews were highly exploratory and used 'grand tour' questions. Firstly participants were asked to tell me about themselves and their lives and secondly participants were asked to describe those items they would consider as digital possessions, defined within the interview as all DCOs that they felt

belonged to them. The emphasis was not solely on consumer experience and individual sense-making; participants prompted to further describe processes (e.g. deleting, backing up – what did they do, when, where and how?) and incidents (software updates, data loss – what happened? When? What caused the incident?) mentioned. Prompts included specific grand tour questions asking participants to describe a recent example of the phenomenon mentioned (e.g. can you describe to me the last time you downloaded a song?). A further method of prompting included guided grand tours (e.g. can you give me a tour of your laptop, and what you have stored on there?). As suggested by Belk *et al.* (2014) all questions were followed by prompts for further information, both verbal (e.g. "Can you tell me more about that?", "Go on", "What do you mean by that?"), and non-verbal (e.g. encouraging nodding, interested facial expressions) with the aim of encouraging participants to provide rich, descriptive accounts.

Since the majority of interviews took place in participants' homes they were able to show me the items that they discussed. In the two instances where interviews took place on the university campus, I was able to observe those items that were stored on portable devices brought to the interview, such as mobile phones, tablets and laptops. The presence of digital possessions during interviews held significant advantages, enabling me to observe participants' methods of accessing, storing and organising digital possessions and highlighting those aspects absent in participants' own accounts, such as the hardware and software via which digital possessions were accessed. Such observations were recorded as field notes intended to supplement the interviewee's own narrative (e.g. What actants were present? What did the participant do in order to access DCOs? Where were they stored? Did the participant use passwords?) and photographs of devices and digital possessions were also taken to supplement these notes.

Four of the 41 interviews conducted took place via Skype where they could not take place face-to-face. A commonly cited limitation of using Skype as an interview tool is the difficulty that can be experienced in building rapport with participants (Rowley, 2012). However, all Skype interviews were these participants' second or third interviews and therefore a sufficient level of rapport was deemed to have been established prior to the Skype interview that this did not present an issue. One limitation, however, was that it was more difficult to observe the devices and DCOs discussed, particularly where the device discussed was being used for Skype; a participant using an iPad to conduct the Skype call could show me their mobile phone or laptop, but not the iPad itself. However, this limitation was deemed to have been outweighed by the benefits of a follow-up interview that enabled me to trace the ways in which consumer-DCO relations may have changed over time and to further explore emerging themes.

Following the interviews, audio recordings were transcribed verbatim and combined with my fieldnotes and photographs, after which I identified areas for further tracing of actants. I

interrogated those actants identified by, as well as those actants made absent by, participants. For instance in relation to the former, one participant noted that their Kindle ebooks changed in appearance depending upon the device used to access them, which led me to explore the role of ebook readers and e-reader software in greater detail through examining these actants. More difficult, however, was the identification of actants not mentioned in participants' own accounts. This was achieved via familiarisation with the DCOs discussed and the relevant markets, hardware, software, and contractual agreements. For instance, in interrogating most DCOs the presence of end user licence agreements (EULAs) or terms of service (ToS) becomes quickly evident. It is through such processes of tracing actants that the analysis moved beyond the end consumer and attempted to give a voice to the previously missing masses of possession.

The process of data generation, analysis and interpretation was iterative (see Section 4.3.3 for a discussion of the process of data analysis and interpretation), and thus where prominent themes began to emerge, follow-up interviews prompted participants to elaborate on these subjects in greater depth. In these follow up interviews I did not use fixed questions. However, an individual protocol was created prior to each follow up interview (see Belk *et al.,* 2014) that listed key areas for further exploration. Follow up interviews began by asking the participant to describe anything that had changed since the last interview, prompting an unstructured discussion. Subsequently, based upon the aforementioned protocol, participants were asked questions regarding any changes that had occurred since the last interview (e.g. "Have you purchased any new devices since the last time we spoke?" and "Last time we spoke you were planning to digitise some of your photographs, did that happen?"). The protocol also typically prompted me to discuss in more detail smaller aspects of particular experiences and processes (e.g. "Last time you mentioned that you don't need to back up your mobile phone, can you tell me more about that?"), enabling further exploration of areas that had been discussed in previous interviews yet were deemed to warrant further exploration following initial analysis. For instance, a number of participants mentioned in passing in their initial interviews that they rarely deleted DCOs, but they did not elaborate significantly upon this point. However, following an initial analysis of this data the absence of selective divestment processes began to emerge as a recurring theme and therefore in later interviews these participants were asked to discuss this lack of divestment in greater detail.

Protocols also included aspects of possession that had not been discussed in the prior interviews but that I felt may be important. For instance in examining a number of the platforms and software described by participants (e.g. iTunes, Kindle Store, World of Warcraft, Twitter) I noted that in order to access and use them, consumers were required to agree to a number of terms set out in contractual agreements. Furthermore, I noted that often these terms were enforced via digital rights management (DRM) technologies (in the case of ebooks, for example) or

surveillance (in World of Warcraft for example, accounts may be terminated where users are deemed to have breached these contractual terms). However, participants rarely mentioned these contractual agreements during their interviews and in follow up interviews were questioned on this topic. As I shall discuss in the findings chapters, it became evident in participants' responses to such prompting that these actants simply weren't present in their experience of their digital possessions; contractual agreements were made absent until issues arose that brought them into focus. Another instance relates to the realisation following initial analysis that processes such as sharing, lending, passing on or selling DCOs were largely absent from participants' accounts – in later interviews participants were asked whether they did indeed engage in any of these processes in order to establish whether such phenomena had simply been omitted (and if so, why this might be) or whether they simply didn't occur (and if so, why this might be). In using a protocol in this way, I may have made present aspects of consumer-object relations that might otherwise have been made absent by the consumer. However, this is the purpose of a method assemblage (Law 2004); presence was crafted in line with the study's research objectives, although care was taken to be sensitive to the potential effect of the protocol upon participants' accounts during the analysis and interpretation of generated data.

A central issue, as discussed in Section 4.1, is to decide when to stop opening black boxes. In order to avoid the problem of infinite regress, whereby actants may be traced indefinitely as the researcher unpacks infinitely nested actor-networks, I was required to make judgements as to which actants are important within a network and which are not. Such decisions cannot be made in advance but must emerge empirically. Where it was deemed possible to arrive at an understanding of the enactment of DCOs as possessions, and answer the study's research questions whilst treating an actant unproblematically as a single entity, then they were treated as such.

4.3.3   Analysis and Interpretation: Comparing Networks and Developing Theory

Whilst there have been significant discussions of the process of data analysis and interpretation in interpretivist consumer research, particularly in relation to grounded theory and to phenomenology (see for example Spiggle, 1994; Thompson, 1997; Goulding, 1999), consumer research studies drawing from ANT have not described the processes of analysis and interpretation employed (see Bettany and Kerrane, 2012; Giesler, 2012; Martin and Schouten, 2014) whilst in his exploration of ANT's relevance to consumer-culture theory Bajde (2014) provides little insight into how one might generate, analyse, and interpret data. In this study the process implemented was informed by ANT's emphasis on rich description of actor-networks (Latour, 2005), the capacity of method assemblages to craft presence in line with the study's

research questions, and with the intention of the thesis to develop extant theories of possession. The procedure implemented consisted of three stages between which I iterated until a point of perceived theoretical saturation.

As noted above, all interviews were audio recorded and later transcribed in full and combined with my field notes and photographs. The first stage of analysis was to examine specific consumer-DCOs relations and provide rich, descriptive accounts of various actor-networks and their evolution over time. The focus during this first stage was on producing rich description, as Latour (2005) suggests. These networks were then considered in relation to the study's research questions with initial observations noted in relation to each question. Actants to further explore were identified and later pursued during future data generation. These accounts were then further extended as additional data was generated. In a second stage such accounts were then compared, identifying similarities and differences in the networks observed. The focus during this stage of analysis was identifying commonalities; common actants, common shifts in networks, common breakdowns, and common conflicts of agency. Emerging themes were noted and later further explored during future data collection. In a third stage the focus was interpretation and theory building. Emerging themes were considered in light of the extant literature reviewed in Chapters 2 and 3, identifying similarities and differences and identifying ways in which the findings of this study extend theories of possession.

As mentioned above, the process of analysis and interpretation was iterative. I iterated between these stages until I had discerned key themes in the actor-networks documented that provided answers to the study's research questions. In writing the findings sections of this thesis, the emphasis was on describing those aspects of the actor-networks studied that spoke to the research questions posed.

4.3.4 Ethical Considerations

Participants read and signed a letter of consent (Appendix 1) prior to participation, which reiterated the study's purpose and reassured them of their anonymity and freedom to withdraw themselves and their data from the research at any time. The letter also reminded participants that interviews would be recorded and that photographs would be taken (and included in my PhD thesis and any resulting publications). Anonymity was offered to encourage participants to be open in their accounts, guaranteeing that pseudonyms will be used not only for participants' own names but also for any online accounts, characters and usernames, and that photographs and screenshots would be edited appropriately to ensure anonymity.

4.4   Chapter Summary

In this chapter I have outlined the key metaphysical assumptions that informed this study, which are in line with the actor-network theory tradition. I have explained the ways in which the inter-related assumptions of relational materiality, ontological symmetry and ontological multiplicity present a route to extending extant theories of possession by conceptualising possession as enacted by a heterogeneous actor-network and making present those aspects that are absent in prior literature. Furthermore, I have described the ways in which these principles have informed the method assemblage developed, discussing the methods implemented in order to trace the actants central to enactments of possession and the processes of analysing and interpreting the data generated via these methods.

Chapter 5: Digital Possessions - Introduction to Findings

In order to contextualise the study's findings presented in Chapters 6 to 8, this chapter briefly introduces the types of digital consumption objects (DCOs) that emerged as possessions during interviews, identifies the key actants involved in enacting possession, observes consumers' tendency to 'black box' DCOs and to make absent both the role of other actants in enacting possession and the enactment of DCOs in other networks, and explains the structure of the findings. In doing so, this chapter lays the foundations for the findings chapters that follow.

5.1 Digital Possessions

During their interviews participants described a wide range of DCOs as possessions – collections of digital music purchased from iTunes, playlists created via music streaming service Spotify, avatars in videogames, digital photographs, social networking profiles, YouTube subscriptions, blog aggregators, work documents, and emails and text messages, amongst other things. They discussed items stored locally on their own digital devices but also items stored online. They described things that they had created and things that they had bought, as well as those that they accessed online. In other words the DCOs identified by consumers as digital possessions that they felt were 'theirs' were highly varied. As with material consumption objects (MCOs) (see Chapter 2), the meaning and value consumers attributed to these digital possessions also varied significantly. During the interviews it became evident that consumers had many possessions that were not actively used, considered, or even remembered, yet were regarded as 'mine'. For example, participants identified old, forgotten homework assignments on external hard drives, unwanted junk emails accumulating in inboxes, blurred digital photographs stored in rarely opened folders, and even current text message or instant message exchanges that held little value or meaning to the consumer yet were not deleted. Thus digital possessions included mundane items, forgotten items, and even unwanted items. Yet participants also described highly valued, irreplaceable possessions such as a prized collection of digital cars in a videogame, treasured digital photograph collections, and sentimental text message exchanges, whilst one consumer described a blog documenting her daughters' childhoods as a treasured digital scrapbook. Others were actively used and held use value yet lacked significant personal meaning – for instance, participant's collections of digital music purchased from iTunes that represented a significant financial investment but held no sentimental value and were ultimately replaceable.

Thus, as with material possessions, possession in the context of DCOs may take place in a variety of ways. Furthermore, conducting repeated interviews with participants over a number of months enabled observation of shifts and changes in possession; as has previously been noted in

the context of MCOs, consumers' relationships with DCOs were not stable but changed over time. In presenting the findings of the study in subsequent chapters the aim is not to 'pin down' possession by focusing on a particular 'type' of possession or attempting to categorise enactments of possession. Rather it is recognised that possession is not a 'thing' and can be enacted in a multitude of different ways. Thus rather than attempting to reify 'digital possessions', the findings presented below explore the enactment of possession with the aim of extending theory by making present the role of actants beyond the end consumer, including the ongoing role of companies and the role of the DCOs' characteristics.

5.2   Prominent Actants

If we adopt Belk's (1988) definition of possession as proprietary feelings, then two actants are central to enactments of possession – firstly the consumer who experiences proprietary feelings and secondly the focal consumption object towards which these feelings are directed – and it is this relation between these two actants that is classed as 'possession'. Yet these entities do not relate in isolation. In documenting the relation between consumers and DCOs, a range of further actants, both human and non-human, emerge as key to enactments of possession. Since these actants play a recurring role in the accounts presented in the findings chapters below it makes sense that they are briefly introduced.

Firstly, we can observe the role of hardware and software in enabling consumers to relate to DCOs since they are necessary in order for these items to be accessed by the consumer. The term 'hardware' is used here to refer to the collection of physical, tangible elements that constitute computer systems and includes items such as computers, monitors, keyboards, mobile phones, and gaming consoles via which DCOs are accessed, but also storage such as external hard drives, and the series of cables required to connect and use devices. In contrast, software consists of machine-readable instructions that direct computers to perform specific operations, for example operating systems and computer programmes such as word processors, media players, web browsers, and games. Unlike hardware, software is not tangible – it cannot be touched but consists of intangible code, and is itself a type of 'digital artefact'. Software and hardware cannot function without one another. For instance, a mobile phone device (hardware) without an operating system (software) has no function, yet a mobile phone operating system cannot function without a device on which to run – without the correct combination of hardware and software, accessing text messages, digital photographs, and games via the mobile phone is not possible. Thus networks of hardware and software are central to enactments of possession since it is only in these complex networks coming together that DCOs are enacted.

Furthermore, where DCOs are hosted online internet infrastructures become important in order for consumers to access DCOs. Thus an avatar in World of Warcraft or a YouTube channel requires not only access to hardware and software but also to an internet connection. These actants are central to enactments of possession and hardware software, code, and internet connections permeate the accounts presented in subsequent chapters (although we shall see that the role of such actants was not always recognised by consumers). Indeed, where these items are absent and networks break down we can observe the dissolution of possession as items are lost (see Chapter 8). Thus these actants are necessary in order for consumer-object relations to occur. However, more than this we shall see in the subsequent finding chapters that software in particular can shape these relations since software enables, provokes and restricts these relations (see in particular Chapter 7). Furthermore, it became apparent that in many cases companies remain a key actant in enactments of possession. As noted in Chapter 3, consumers often hold limited ownership rights to DCOs according to terms set out in contractual agreements, and consequently DCOs remain present in the networks of companies who enact them as assets and may retain the ability to act upon and change them, and may also restrict the ways in which consumers do so.

In summary, a range of actants shape enactments of DCOs as possessions, most notably hardware, software and companies. These actants present complex actor-networks in their own right. Hardware might be further broken down into individual components such as the hard disk drive, system unit (graphic cards, sound cards, memory, motherboard, and chips), and so on, (operating systems, programmes). Companies present complex organisations with their own goals and their own methods of enacting DCOs as assets. However to avoid the problem of infinite regress associated with ANT, noted in Chapter 4, decisions have been made as to which black boxes it is necessary to open and which can be left closed for the purpose of this thesis.

5.3   Black Boxing and Absence

Consumers exhibited a tendency to privilege their own agency in their accounts whilst making various other actants absent. The role of software and hardware was rarely mentioned in consumers' narratives of their digital possessions. For instance, participants typically didn't discuss the role of software in accessing digital photographs since their laptops and PCs arrived with photo viewing software already installed, and digital photographs automatically opened with various programmes. It is only in the absence of the appropriate software that its importance becomes apparent. Alice is a thirty-year-old PR consultant and mummy blogger and lives in the Bournemouth with her two young children, of whom she and her husband take many photographs. Alice discussed her frustration at not being able to access photographs taken by her husband since she does not have, or know how to use, the relevant software.

My husband, we've got an SLR camera, and I just use it in normal auto mode, so I can just download the files onto my computer, and I don't need any special Photoshop sort of program to be able to access them. But my husband takes photos in raw format, and 'cause he's far more into photography he's got the software to read the raw files, and to be able to edit them. And that's another thing that really annoys me, is that, you know, he's taken some really good photos of my daughter, but I can't get them, because they're in raw, and I don't know how to use his photography software.

Here we see Alice's frustration at being unable to access her digital photographs – in its absence it becomes apparent to Alice that this software plays an important role in enabling access. Similarly, the importance of devices was only occasionally referred to (despite these devices being used in the interview to display DCOs) and once again their role became most apparent to consumers in instances where devices broken or lost. Thus where these actants came together to enable consumer-object relations to unfold unproblematically, they faded into the background and were easily overlooked. It is in instances where actor-networks broke down, or where other actants restricted the consumers' own agency or disrupted consumer-object relations, that they became present in their accounts.

Furthermore, the notion of legal ownership and the terms set out in contractual agreements were often absent from participants' accounts entirely. Participants did not discuss these topics unprompted, and after noting this I brought up these topics in later interviews. In doing so it became clear that my participants had limited knowledge of their legal rights to 'their' digital possessions. For instance 30-year-old researcher living in the south of England responded "No! I've never even read them. Why? Has Facebook got access to everything I've put on there?" This was a fairly typical response. These agreements were simply not present in consumers' experience of these possessions. Natalie, 25, works full time in TV production but has kept a beauty blog for the past several years where she reviews beauty products, as well as including more general 'lifestyle' posts. Although she initially began the blog as a hobby during her university studies, she now makes a small amount of money from advertising and affiliate links. When asked about the legal ownership of content on her blog, however, she stated:

I hope it's mine! [Laughter] I guess I don't know, because yeah, if my photos are hosted… well, sitting on Flickr, I guess I don't know what their kind of agreement is. Um… and in terms of the actual data… I mean, I'd like to think it's *mine*, because I pay and I signed up for all of the other bits I've used, but it depends on what their policies are on what I do actually own […] I'd like to say I scan it, but I don't anymore. I used to back in the day, but you get knocked with so many things, all the terms and conditions, that you just assume they have your best interest at heart and that you can do what you want when you're on the site, so I usually just click "OK" and then if I notice a problem down the line, then I'll leave. But so far I haven't. [Laughs]

Indeed it becomes evident that Natalie, like many other participants, avoided reading contractual terms entirely – these terms were agreed to without a full understanding of the conditions they entailed. In the discussion chapter (Chapter 9) I provide further explanation of the process of 'black boxing' and the tendency for consumers to make certain actants absent in their

accounts, including their potential consequences for consumers, however for now I simply wish to note that many of the actants discussed above were made absent by consumers in their narratives of their digital possessions – consequently the accounts provided in the findings chapters below include recognition of actants that have been 'made present' by the method assemblage described in Chapter 4. In the following findings chapters, I build not only on consumers' accounts but also on my observations during the interviews (e.g. hardware and software used, online platforms accessed, passwords entered) and subsequent interrogation of these actants (reading of contractual agreements, exploration of software) to better understand their role in the enactment of possession.

5.4   Findings Structure

The study's findings are divided into three chapters, reflecting key moments in consumer-object relations- how they emerge, unfold, and dissolve – however in adopting this structure I am not attempting to document a biography. Indeed, I shall argue that the notion of a linear biography becomes problematic in the context of DCOs. Chapter 6 considers the various ways in which relations between DCOs and consumers emerge. Chapters 7 is the most substantial chapter of the findings since it explores various relations between consumers and DCOs, focusing on the key processes of transforming, ordering, protecting and moving. Finally, Chapter 8 notes the ways in which enactments of possession may dissolve, documenting instances of loss and divestment. In Chapter 9 I proceed to reflect on these findings in relation to extant theory, discussing the ways in which this study advances our understanding of possession. Finally, Chapter 10 summarises the contribution of this thesis to our understanding of digital possessions and possession more broadly, before acknowledging its limitations and presenting numerous avenues for further research.

Chapter 6:   The Emergence of Consumer - DCO Relations

In order to better understand how digital consumption objects (DCOs) come to be enacted as digital possessions, I first consider the ways in which relations between DCOs and consumers emerge. When and how do these entities meet and develop the capacity to act upon one another? Within prior literature, consumer-object relations are often assumed to emerge when an object is acquired by the consumer; as illustrated in Chapter 2, the biographies of material consumption objects (MCOs) are typically seen to begin in their production as a commodity, to be actively desired, sought out, purchased and singularised (Rook, 1985; Kopytoff, 1986; Sherry and McGrath, 1989). However, it is also recognised that objects may be created by the consumer (Belk, 1982; Campbell, 2005). In both cases the consumer is presented as 'doing' acquisition or creation, whereas objects appear as inert, passive entities acted upon by consumers (with some exceptions, e.g. Watson and Shove 2008). Thus representative of the broader focus upon the consumer agent within consumer research there has been a tendency to over-privilege the consumer who is seen to actively establish relations between themselves and an object. However, in documenting processes of acquisition, creation, and accumulation, this chapter illustrates that whilst the consumer sometimes takes an active role in forming relations with DCOs, agency is always distributed across a broader network of actants that enable these relations to emerge.

6.1   Acquiring

Within much prior work on possession there is an assumption that there is a pre-existing 'something' of which the consumer can acquire and take possession – commodities that are acquired and later singularised (Kopytoff, 1986). Many of the MCOs consumers describe as possessions are actively acquired, such as purchased furniture (Epp and Price, 2010) or collections of mass-produced toys and ornaments (Belk *et al.,* 1991; Belk 1995). Many of consumers' digital possessions were indeed produced by someone other than the end-consumer who actively sought out these items, such as downloaded mp3 files and ebooks, cars and weapons purchased in videogames, or images pinned on a Pinterest board. However, whilst within studies of MCOs acquisition involves the transfer of an object to the consumer – there is a singular object that passes hands and moves from one person or company to another – this notion of 'transfer' was less applicable in the context of DCOs. For instance, whilst a digital music album will have been recorded by the artist, edited by production teams, and approved for sale by managers, the copy of the song that the consumer downloads does not necessarily exist elsewhere awaiting transfer to the consumer in acquisition. There is no stockpile of albums waiting on Apple's servers that are individually transferred to the consumer when they make their purchase. Rather, the consumer's copy comes into being as it is downloaded; it is only through the act of acquisition

that this file comes to be. Thus already we see divergence from the linear biographies of MCOs, as acquisition becomes not a point of transfer in a digital object's biography but its point of emergence. The notion of a singular object progressing through varying stages in its biography becomes less applicable here as DCOs are copied and reproduced (albeit often within restrictions imposed by companies).

In other instances acquisition involved processes akin to gathering existing content, of pinning down items for further access but not necessarily guaranteeing exclusive or even continued use. Many instances of this occurred in relation to others' content hosted online whereby participants did not acquire local versions of content but grouped them together within an existing online platform. Louise, 32, lives in Bournemouth with her husband and their two daughters. During the course of the study the family moved house. In her third and final interview Louise described her use of visual bookmarking website Pinterest whilst moving home:

> When we were moving house, I used Pinterest. If I came across any wallpapers I liked, or chairs or sofas, or you know, knowing the kind of things I'd want when we moved into the house but not wanting to buy it while we were in the flat, I used Pinterest for that. Created a folder for each room, and then there's a bunch of Ikea lights that I like, so I saved them on Pinterest in the relevant room. Um, carpets, everything, 'cause it, using Pinterest you've got a picture and a link to where it was, sort of thing

Mirroring prior work Louise describes gathering 'pins' (photographs hyperlinked to relevant websites) as resources to aid in the achievement of a task (decorating a home) (Linder *et al.*, 2014), and these boards became a holding pen for desired items (see Denegri-Knott and Molesworth 2013). For Louise her Pinterest boards are 'hers' since she had spent time gathering together relevant images to serve as inspiration and information whilst re-decorating her new home, and consequently these Pinterest boards came to be seen as a kind of digital scrapbook. Yet here there is no transfer involved in this process of acquisition – Louise's Pinterest Boards consist of images brought together from across the internet (including those 're-pinned' from others users' Pinterest boards) that remain in their original location. Other common examples included following users on Twitter or creating YouTube playlists. Here acquisition involves duplication and repurposing as opposed transfer.

Often significant work went into processes of gathering content within online platforms. For instance, beauty blogger Natalie (25) discussed her use of Google Reader, an RSS feed aggregator that she used to keep track of other beauty blogs that she followed. She explained the effort that would be involved in re-acquiring each beauty blog on an alternative platform such as Bloglovin'.

> I think it's the fact that if I now go onto Bloglovin' that I have to re-follow all the blogs, I have to find their Bloglovin' page, click follow and then it comes up on Bloglovin' […] I think with Bloglovin' I have so many blogs that I follow, having to find them and re-follow them is a lot of hassle, I've kind of given up on that. […] I like to be systematic so I was going to go through

and re-add everyone on Bloglovin' but I got really bored [laughs] and I was like I like Google Reader, it does the job for me, and I'm happy to kind of stick with it, so I have done.

We see that acquiring each of these blogs and securing them into one coherent feed makes Natalie reluctant to leave the platform as this would mean repeating the work involved in acquiring these many beauty blogs within another platform (although as we shall see in Chapter 8, it emerges in a later interview that Natalie has been forced to do so when Google Reader is discontinued). Natalie's Google Reader account presents an interesting case – it is distinct from Natalie's Pinterest boards since after acquiring (following) each of these blogs their value stems from the accumulation of resultant blog posts in her Google Reader feed (I will deal with such instances of accumulation in Section 6.3 of this chapter). However important to note here is that similarly to Louise's Pinterest boards there is no 'transfer' of a singular object. Rather there is an element of multiplicity as digital items are reproduced in multiple digital spaces and enacted as possessions in multiple actor-networks simultaneously. Thus we see that the notion of a linear biography punctuated by points of transfer is less relevant in the context of DCOs. We must be wary of associating the term acquisition with the transfer of a singular object. Instead, acquisition is understood more broadly here and the term is used to refer to the formation of relations, with varying levels of permanence, between a consumer and a DCO whereby the consumer plays an active role in the emergence of these relations.

I propose that the process of acquisition, its experience by the consumer, and the meaning and value consequently attributed to DCOs are shaped by an array of actants, and I shall demonstrate this by documenting the ways in which DCOs can elude or enable acquisition. Consumer research has explored processes of actively searching for material goods and the 'thrill of the hunt' experienced as items are pursued, in particular in relation to processes of collecting (Belk, 1995b, Belk *et al.,* 1991), thrift shopping and bargain hunting (Bardhi, 2003; Bardhi and Arnould, 2005), transforming the act of acquiring from a task that must be performed into an entertaining activity, even a hobby. The scarcity of sought objects can position acquisition as a treasure hunt; indeed, thrift shoppers describe the discovery of 'treasures', 'gems' and 'jewels' (Bardhi and Arnould, 2005). Coveted objects may promise an escape from a dissatisfactory present to a more satisfactory future (McCracken 1988) and difficulty obtaining objects can produce experiences of pleasurable desire; as we save for an expensive car, search car boot sales for a rare record, or wait for a sought after item to be delivered, we may experience anticipation and excitement (Campbell 1987; McCracken 1988; Belk *et al.,* 2003). Here acquiring presents a challenge that is relished, providing an opportunity to experience achievement in a successful hunt. Difficult to acquire items once obtained communicate to others and to ourselves the skill, knowledge, and effort invested in doing so, and are often displayed with pride. Of course, not all acquisition takes place in such a manner. Although consumers may engage in more mundane

routines of acquisition, such as undertaking the weekly grocery shop, difficulty acquiring objects can produce pleasurable experiences of desiring, anticipating, pursuing, discovering and finally proudly possessing and displaying these items.

DCOs, however, were rarely found to present the challenge necessary to produce pleasurable anticipation, desire and pursuit since their acquisition was typically easily achieved and often instantaneous. A key exception within participants' accounts was digital possessions within videogames; participants who played videogames identified in-game items that were actively pursued and prized possessions obtained through skilful gaming. An example was provided by Richard, a 22-year-old sales executive and regular Xbox gamer from Cardiff. Richard described his car collection in racing videogame Forza 3 with a great deal of pride. Richard had aimed to own one 'top' car from each manufacturer that was 'fully upgraded' (full engine upgrades to maximise car's racing performance) and strove towards this goal for almost a year, earning in-game currency by racing less expensive, less desirable cars in order to finally afford his ideal collection.

> [I had] one from each manufacturer. And the highest level one from each manufacturer I could get. So literally I had a whole garage that could beat anything. So if my mate came on and said let's race with Ferraris for example, my Ferrari would be upgraded to such a level where there's no Ferrari he could have picked that would've beaten me. […] I was doing different events and you had to have a different car to do each event. And I just thought if I have one from every manufacturer done up as high as I can just go in and completely wipe the floor with these events.

Firstly, it is important to note that acquiring these digital cars required a range of actants to come together in certain ways – although these actants were largely absent in Richard's own account of his digital car collection, it became apparent when Richard showed me his car collection during the interview that an Xbox 360 device connected to a television via a HDMI cable, a power source, and in Richard's case an internet connection were necessary in order for their acquisition to occur[1] (see Figure 2). Richard would not be able to acquire these digital cars without the relevant hardware, and compatibility is important here since Forza videogames are produced by Microsoft Studios and only compatible with the company's Xbox, Xbox 360 and Xbox One consoles – if Richard were to own a PlayStation 3 device instead, for example, then

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[1] Whilst each piece of hardware can potentially be broken down further since each presents an actor-network in its own right (e.g. an Xbox might be broken down into a central processing unit (CPU), graphics processing unit (GPU), memory (RAM), USB ports, etc.) these items are black boxed throughout the analysis presented in thesis unless their role in enacting possession demands otherwise.

acquiring digital cars in Forza would not be possible. Thus we see that certain hardware is always necessary in order for relations between DCOs and consumers to form; although often in consumers' accounts their role is obscured, without these actants the actor-network would break down. Software is also central to Richard's process of acquisition, which involves both the Xbox 360's operating system and the videogame Forza 3 itself.

Figure 2 – Richard's Xbox 360, television, videogames and other items

Richard's story not only illustrates the distribution of agency in acquisition more broadly, but also provides insight into the ways in which DCOs can be enacted as elusive by software design. Having left behind his expansive collection of cars in Forza 3 when he later purchased Forza 4 (a more recent version of the game) Richard was forced to begin his collection afresh. During his third and final interview Richard discussed desired cars he was working towards obtaining within Forza 4, alongside the satisfaction felt with each new acquisition to his collection. It became evident that many cars were desired, but were currently beyond his immediate reach.

> This is showing all the ones I can actually afford at the minute. Like, look at that. I don't think I would ever drive a car from the 1940s, or a van. They tend to be all the smaller ones. And then when you get more money then obviously you'll see that this list grows to incorporate quite a few decent cars on here. […] I could quite easily, if I had double the money, go up to the S's or the R3 class, which is usually like the proper racers. Like, really fast cars. But at the minute I can only get up to about half way up the A rankings. […] Like there's some [cars] that I've seen around town or whatever and thought 'Ooh, yeah that's nice' and if I can afford them I'll get them like. Like that [*A Lamborghini Sesto Elemento which has just appeared on screen*] I can't afford to buy that at the minute, it's 2,500,000.

We see that it is in their inaccessibility that these expensive digital cars come to be desired by Richard. They are enacted as elusive – they resist and present obstacles to their acquisition. At the time of his final interview Richard had accumulated just over 40,000 in-game credits. However, the Lamborghini that he coveted cost 2.5 million in-game credits. In order to obtain such a top spec car he must invest significant effort and thus a delay emerges between initial desire and acquisition, as has been previously documented in the context of MCOs (Belk *et al.,* 2003). Thus these digital cars have been enacted in a way that makes them elusive, and consequently desirable, such that obtaining these items tangibilises consumers' agency, represents skill, knowledge and invested effort, and evoked pride. This is a common tactic in the design of videogames and virtual worlds. For instance, Lehdonvirta *et al.* (2009) discuss 'super rares' within virtual world Habbo Hotel, which are purchasable and exchangeable digital items made artificially scarce and consequently highly sought after and regarded as a mark of status, and Lehdonvirta and Castronova (2014) propose that the designers of these spaces use such mechanisms in developing virtual economies.

However DCOs were rarely enacted as elusive. Indeed, within this study instances of elusive DCOs resisting acquisition were limited largely to videogames. Typically DCOs were easily acquired and consequently did not provide a sense of achievement and did not come to represent consumers' skill, knowledge or status. Participants noted, for example, that whereas a large record collection would involve significant commitment to searching for and acquiring rare records, finding and downloading an mp3 file via iTunes was not difficult and was considered nothing to be proud of. An example comes from Ben, 41, a graphic designer from Cambridge who DJs in his spare time. Ben estimates his collection of digital music stored within iTunes to be worth over £1,000, yet he does not experience the same pride in this digital music collection as he does in his collection of records and CDs. He explains that digital music, once desired, is fairly quickly and easily obtained. Currently, digital music files are not made artificially scarce and therefore are never out of stock, available for Ben to download instantly so long as his MacBook device, iTunes software, payment method and internet connection are in place, and Ben has agreed to the iTunes store terms and conditions (although once again many of these actants were entirely absent from Ben's own account of acquisition). The notions of anticipating, desiring and pursuing so evident in Richard's account above are absent from Ben's stories of acquiring digital music. The digital songs and albums that Ben acquires are not elusive; they do not resist his attempts at acquisition but rather enable the emergence of consumer-object relations, making the process easy and almost effortless from Ben's perspective. For instance, as opposed to searching through boxes of records at car boot sales, or even through displays of CDs in stores, Ben is able to simply search the iTunes Music Store, which locates the item he is looking for. Thus whilst acquisition can involve a level of skill- knowing where to look for items, spending

time visiting specialist stores, carefully searching through merchandise- here some of the skill required in pursuing and locating items is performed not by the Ben but by the software itself. Consequently Ben has little opportunity to exert significant agency in acquiring digital music in a way that would demonstrate his capabilities. How might this lack of elusiveness shape the meaning and value attributed to these items?

Ben's CD collection was until recently given pride of place in his home, displayed in his living room, and he explained that he is proud of his CDs and records, which took significant effort to amass. This is not the case for his digital music collection, however.

> My CD collection used to be in the living room, just like a wall of CDs, which was really cool. I really liked it being there actually. My wife's just moved it all into my music room, so it's not on display anymore. I was quite proud that that was up there actually in my living room so other people could see it […] I think with records they're so much harder to get, well they are nowadays anyway, there's certain records that are super hard to get hold of now […] [people] may see this record and go "Wow, you've got that on vinyl" you know, "I can't believe you've got that, it's super hard to get." Whereas, you know, they may well have that on iTunes [laughs] they're not that bothered about their iTunes version of it, they would really like a seven inch record of this particular piece of music. […] It's do with the effort of finding it. It's a super rare piece of music, extremely hard to find, you know, you'd have had to dig through a whole pile of crates in a record shop to get it probably.

The effort involved in building Ben's physical music collections grants them an elevated status that has warranted processes of display, evokes feelings of pride, and demonstrates not only his taste in music but also his prowess as a collector. He explains that this collection would be difficult to replace since it contains rare and valuable items that would be hard to find again. In contrast, his iTunes collection was more easily obtained and he explains that although he would be upset and frustrated to lose his digital music collection, it would be fairly straightforward to repurchase these mp3 files as opposed to replacing scarce vinyl records. Thus we see that certain enactments of DCOs can result in an absence of desire where items are too easily obtainable, which may in turn shape the meaning these objects come to hold for consumers.

Where digital music was downloaded illegally a greater level of skill and effort was required on the part of the consumer. Tom, 18, is studying for a degree in computing, has built his computer from scratch and is developing his hacking skills. Almost all of Tom's 4.7 GB music collection, alongside a number of films and TV series, had been illegally downloaded. He explained that when downloading from torrent sites he had learnt a number of techniques to identify the best files to download, and which to avoid. During the interview he demonstrated these techniques.

> You will see if it has lots of feeds, which is what FE stands for, you can probably tell it's alright because lots of people have been downloading it. And also I know that they're a good upload people. Whereas if they've got pretty much no feeds the likelihood is it's going to be a fake one. Also if it's… let me find one for you… if it's quite a small file size for a video… Okay, this is a perfect example. It says it's a video of a TV show but that's going to be a virus […] And then you start to find which ones you want and then you read the comments left by users. So if I can

find one…. There are all these comments at the bottom. All of these are written by different people, "great", "appreciated". Yeah so that's a good one. […] So say someone was uploading an actual album, like say Jay Z's album, if they've uploaded the album completely you can just download it in full and normally that's all done for you. But some people are like real idiots and they've YouTube downloaded stuff off YouTube and they're doing it singly then you won't have that stuff, so you have to find out who it's by, full name etc. etc. It can be really time consuming. You know you've got like a really bad torrent when that happens. […] I've had a few, I can show you some actually. I've had a few where it's been like there's an Oasis example on here…. Okay, here's a good example. I downloaded this one, and I've had to do it all myself. I've had to find out each of these, all these said "Song1", "Song2", "Song 3."

Thus there is a level of risk involved in illegally downloading songs from Torrent websites such as Pirate Bay. A particular concern is that files may contain viruses. However, the downloader also risks downloading low quality recordings or files without the appropriate metadata (e.g. artist, song title, album artwork), which require amending else they become difficult to locate and organise, as in Tom's example of his recently downloaded Oasis album. This is not to say that only those that are highly skilled can download music illegally; a number of participants significantly less 'tech-savvy' than Tom described processes of illegal downloading. However, we see that a level of knowledge and effort is required in comparison to the purchasing of digital music from iTunes; Tom learns how to identify 'good' sources and spends time searching for the best file to download. He explains that friends who are more uncertain about how to safely torrent files often ask him to download albums. Thus there is a level of skill or competency required by the consumer in such processes of acquisition; and here this competency serves to set Tom apart from other less capable consumers in the way that Ben's downloading of music from iTunes does not.

In summary, we see that DCOs can be elusive and resist acquisition, and can consequently enable us as consumers to demonstrate agency in a way that is experienced as an achievement, an act that demonstrates our skill, knowledge, or persistence. However elusiveness is itself elusive in the context of DCOs. Where objects do little to resist acquisition, little pleasure can be taken in pursuing these objects, and consumers have limited opportunity to demonstrate skill and competence by exerting their agency over easily acquired objects. Elusiveness is not simply a characteristic of DCOs but is itself enacted. Within the videogame market designers have long recognised the need to make certain objects rare, expensive or otherwise difficult to obtain, sustaining consumer desire in the pursuit of these objects and producing feelings of achievement on their acquisition (Lehdonvirta and Castronova, 2014; Molesworth and Watkins, forthcoming), however this is not to say that such techniques cannot be implemented within other industries, and that processes of acquisition cannot be transformed. In reflecting on work on material consumption, we may observe instances where elusiveness is similarly orchestrated. For instance, in her work on novelty teapot collectors, Cheetham (2012) describes the work that goes into the enactment of teapots as orchestrated collectibles, designed to be pursued by collectors. More

broadly, we see that that the process of acquisition, its experience by the consumer, and the meaning and value consequently attributed to DCOs are shaped by an array of actants.

6.2   Creating

The notion of acquiring a pre-existing DCO is not always applicable, since they may be generated via a web of relations that includes the input of the consumer. For instance, digital photographs, social media pages, blogs, and some in-game content emerge only through the investment of consumer effort. Here we see links to the prior discussions of 'craft consumption' reviewed in Chapter 2. However, due to the association of 'craft' as something done by a human craftsman (see Campbell 2005), I use instead the broader term 'creation' to describe the emergence of DCOs in consumption. Building on the work of Watson and Shove (2008), which recognises that competence in DIY can be distributed across both human and non-human actants, I consider the creation of DCOs as something that is 'done' not by a consumer agent alone, but by an array of actants. Let us consider, for instance, the act of creating a blog. Natalie, 25, is a production co-ordinator for a visual effects company and has been running her own beauty blog, which features reviews of cosmetic, hair-care and skin-care products alongside occasional lifestyle post, for a number of years. Natalie's blog' currently features a white background, pink headings, grey text and a handful of photographs accompanying each post, with easy to navigate categories (e.g. Beauty Empties, Blast from the Past, Lifestyle, Nail Talk), popular posts featured in the sidebar, and links to her Facebook, Twitter, Instagram, Pinterest and Bloglovin' accounts and her YouTube channel. In all, the site appears well designed, and yet Natalie confesses that she has no understanding of programming, and indeed the code that is central to the blog is entirely absent in the account of creation given in her first interview. On my first visit to Natalie's home she spoke extensively of the process of initially of creating her blog a number of years ago using the Google's weblog publishing platform 'Blogger'.

> I noticed that a lot of the blogs that I was reading were dot BlogSpot, it seemed like the blogger norm, like I know that you can use WordPress and things like that, so I Googled comparisons and Blogger was very simple, you just create an account, set up how you do your blog posts, it was all very used friendly, whereas WordPress was a lot more html, a lot of coding things, and things like that […] So I kind of went into Blogger, set that all up, um, and then a lot of it is just a lot of Googling. Free templates, free layouts, free blog designs, and cutting and pasting different things, and putting it all together […] In the first stage... you kind of pick things up along the way the more blogs you read, like I saw someone who has really big pictures and I was like "Why are mine so tiny?" So I googled how to make pictures bigger on Blogger and then I find out how and make those little tweaks. You can do things like adding borders or taking them away, or changing widgets and spaced and things like that.

This process involved a small amount of online research, and the combining of free resources found online such as templates. However the role of code in enacting her blog is largely absent from Natalie's account. Indeed, it seems that for Natalie the Blogger platform is desirable

since it serves to obscure the role of code. However, in a second interview six months later Natalie had moved her blog to WordPress and in doing so the code behind her blog's interface is made present.

> You can go into the nitty gritty, like the CSS and PHP pages, and completely customise it and change any code you want for it to do whatever you want […] I tweaked a few things, but not very much. I wasn't very confident in what I was tweaking. It's very easy to break, whereas with Blogger, you can kind of undo and it goes back to normal. But with WordPress, if you break something, you just get a line in the code, "Syntax error on line 490," and I was like, "Hmmm! I don't know what it is" […] So I kind of got a bit scared and then I saw a lot of people have used a certain company […] I was like, "If I go to someone else, they can deal with all the problems and sort it all out, whereas otherwise, I'm going to have a headache and if I break it, I'm screwed. At least if they break it, they're… being paid to fix it." [Laughter] […] But I've got myself really too complex now with the whole WordPress thing. I'm like, "I don't understand what's going on!

Thus in seeing the code that her blog consists of, Natalie becomes aware of its fragility and therefore hires someone to redesign it for her, distancing herself from the role of code and once again making it absent. Schau and Gilly (2013) document the evolution of personal web space as a form of digital self-presentation from the 'free form' personal homepages that were prominent at the time of their earlier work (Schau and Gilly, 2003), to the highly structured templates provided by many blogging and social networking platforms, which they propose have enabled less technologically savvy authors to self-present online since they are less likely to be restricted by their coding abilities. Similarly, I find that competence is distributed across actants as DCOs are created not by consumers but by relations between consumers and other actants (in line with Watson and Shove's 2008 work on DIY practices), although consumers exhibit a tendency to make the role of other actants absent. Consequently the notion of 'co-creation' is tautological since no consumer can create alone – it is only in the relation of actor-networks that creation occurs.

Thus actants beyond the end consumer can serve to enable, shape, restrict, and prevent creation. In particular, in line with Watkins and Molesworth (2012), I find that code not only enables DCOs to exist but can restrict creation. James is 23 years old, unemployed and an avid player of roleplaying videogames. Within the videogame Dark Souls he built up a collection of 'characters' or avatars. His relationship with these avatars is by no means functional or transient; he has invested many hours in their creation. For instance, he described designing one character to look like a bride, using the limited customisation options available.

> I was playing on this one trying to make a bride. But it's quite hard to do 'cause there's no wedding dress looking stuff in the game. […] I just find something that will fit. In the first game when I was trying it there were a couple of armour sets that looked quite patched up. So I was thinking rather than just being an actual wedding dress maybe she'd like tried to make her own one so it's all like patched together. There was a bracelet or something like a little piece of cloth for the wrist and it had a crystal coming out of it so my head I was thinking that could be like a crystal flower thing the she had on with her wedding dress.

Here we see that James' creation of his characters within the game involves both the crafting of the character's visual appearance and the narrative behind the character. However, the former is constrained by the available code.

> The bride was meant to be more of an Asian looking character so that's where her story started. In Dark Souls they kind of stopped anything like that because there's no characters in the game that actually fit that. I thought that was weird so I wanted to add my own one. But the other one it was like an old granny taking care of some of the abandoned people there but you can't really make a decent looking old character. So I'm just struggling to make them how I wanted.

Thus unlike James' imagination the code of the videogame has limited options encoded, which prevent him from fully realising his visions. Unlike the virtual, the digital is subject to the constraints of code, which places boundaries around the possible DCOs that can be created.

This role of other actants in creation becomes particularly evident in photography where participants recognised a move from photography as memorialising important or unusual occasions to photographs 'capturing' potentially all aspects of everyday life. It appears this trend has been facilitated by the advancing technology market; in contrast to analogue photography, space restrictions are not a significant concern. Leonard, 80, was once a professional photographer and his interest in photography continues into his retirement. He reflects upon the decreasing restrictions on the taking of photographs and the consequent tendency to 'capture' more:

> I mean for one thing you take many more digital pictures freely because you don't have the cost of film to buy. The cost of film was a consideration at one time. Not only cost, but going on a trip abroad you had to think about weight and about how many rolls of film you could carry. So you know all that's gone. You now have these little memory cards to think about. Have you got enough capacity in the memory cards that you're carrying? You can click away merrily and just delete the 'not-so-goods' and keep the 'keepers' without thinking of the cost of it, so that is one aspect of taking pictures that has changed a lot.

Here we see how advancing technology in the photography market has led to less material restraints upon the creation of photographs – if we do come close to filling our memory card (increasingly uncommon as storage capacity grows) we can simply move this data elsewhere and start again, or alternatively we could fairly inexpensively buy a new memory card. Beauty blogger and project manager Natalie, 25, describes the extensive creation of digital photographs.

> I take a photo of anything and everything. People say I'm mental with a camera. Like, anything I can take a photo of, I do. Because I know I can then delete it. I can edit it. And I know I have the space to take that many. It's nice to have that many. Like, when I went to New York I came back with like four hundred photos and my friend was like "That's ridiculous," but it's nice to have them. I'd rather have that than just like two photos. On photos nights out and things like that, you're probably more likely to take photos like, if someone's doing something silly you'll take it anyway because you're like "If it's crap you can just delete it". You're more likely to take things because if you don't like it it's not permanently there.

Thus a single day or event may result in the accumulation of hundreds of photographs, which over time can amount to vast quantities. Other participants provided similar accounts. Louise, 32,

looks up the size of her photograph collection on her laptop during her final interview and it emerges that she has 25,000 digital photographs stored on the device, the majority of which have been taken in the past three years since the birth of her first child. Thus unlike pre-digital photography where film, its capacity, cost and weight, limited the number of photographs that could be taken, in an era of digital photography such constraints were lifted and consumers were able to create freely large quantities of digital photographs; the reduction of material constraints has produced a change in creation.

In summary, creation is not 'done' by the consumer but by a range of actants. Furthermore, creation was often an ongoing activity whereby DCOs were transformed and updated with surprising ease and regularity. Some acts of creation are temporally bound, for instance baking a cake or writing a letter; creation takes place and comes to a clear end. However in many cases participants' acts of creation were ongoing with no clear end or goal in sight. For instance, in the creation of a blog or a Facebook page where content is added and updated as time progresses. For instance, in the six months that passed between Natalie's two interviews she had re-designed her beauty blog, and added numerous blog posts each week. I shall consider this in greater detail in the following chapter as I describe the ways in which DCOs continue to be transformed, both by the consumer and by other actants.

6.3   Accumulating

In the emergence of consumer-object relations via acquisition and creation, consumers perform an active role in establishing these relations (in conjunction with an array of other actants). However, in conducting this research I observed many digital items that had accumulated despite consumers' passivity. Here object-consumer relations emerge without the consumer's input – DCOs accumulate. This is not unique to DCOs. Within literature on material possessions, passive accumulation is recognised in the receipt of unanticipated (as opposed to requested or self-gifted) gifts. Whether appreciated or undesired (see Sherry *et al.,* 1992, 1993) gifted items are accumulated and must be dealt with, whether this be in finding a use for these items, somewhere to store them, or an appropriate route for divestment. Furthermore, we may receive letters (from friends, work-related correspondence, and 'junk' mail) that are not actively sought. Thus although this phenomenon has received less theoretical attention than more active processes of acquisition and creation, upon reflection we see that in some cases MCOs may accumulate without being actively sought or created by the consumer.

Notable, however, in this study was the extent of accumulated DCOs. Participants described the accumulation of vast quantities of both valued and unwanted content on a daily basis. For instance, many had inboxes that held many thousands of emails and conversation

histories that contained a multitude of passively accumulated text messages alongside a whole host of other instant messages on platforms such as Blackberry Messenger, iMessage and WhatsApp. The increasing shift within the mobile communications market from 'pay as you go' to fixed contracts with included and often 'unlimited' text messages, alongside the introduction of free instant messaging apps have played a part in the sending and receiving increasing quantities of such messages. Here we see that what might have been transient conversations with friends if occurring face-to-face or via a telephone call now leave an enduring residue as they increasingly take place via these platforms and leave enduring traces. Tom (18) explains that he receives many text messages but never deletes them.

> Tom: I've never deleted messages, so I'm guessing from the start of my initial contract, which was 2011. So that's three solid years of conversations on this [phone]. So, yeah.
>
> Researcher: How many texts do you reckon that is?
>
> Tom: I actually can't tell you, um, we're probably talking tens of thousands, and that's just my phone messages. If you then looked on my social media messages, I've got tens of thousands of messages from my girlfriend, from the past year, no the past three years. So that's one person, tens of thousands of messages. Then I've got friends, that's a large data set.

Such text messages are not actively acquired as in Section 6.1, nor created by the consumer as in Section 6.2, but rather they accumulate. Similarly, a range of activities left enduring traces. Richard, for example, explains that the act of playing games on his Xbox accumulates an enduring gaming history:

> It's got a list of every game you've ever played on your profile, so you can go back and, like, you might have a look through this and see a game you haven't played in a long time and just think, "Oh, I might have a go of that." So, again, it just brings those memories back of the games, like some of these, like Rock Band and the Beatles Rock Band, and Kinect Sports, I haven't played in a long time, simply because they weren't my games, they were... The Rock Band's one of my friends' games, the Kinect games are my brother's games and I don't have anything like that, so, like, the furthest away is 2008.

Here the Xbox 360 software keeps a record of Richard's videogame play (Figure 3); without his input it accumulates something akin to a diary of his gaming experiences and achievements that hold unanticipated potential for reflection and reminiscence. In this instance the consumer is passive in the formation of relations to this DCO yet later comes to recognise value in this accumulated data.
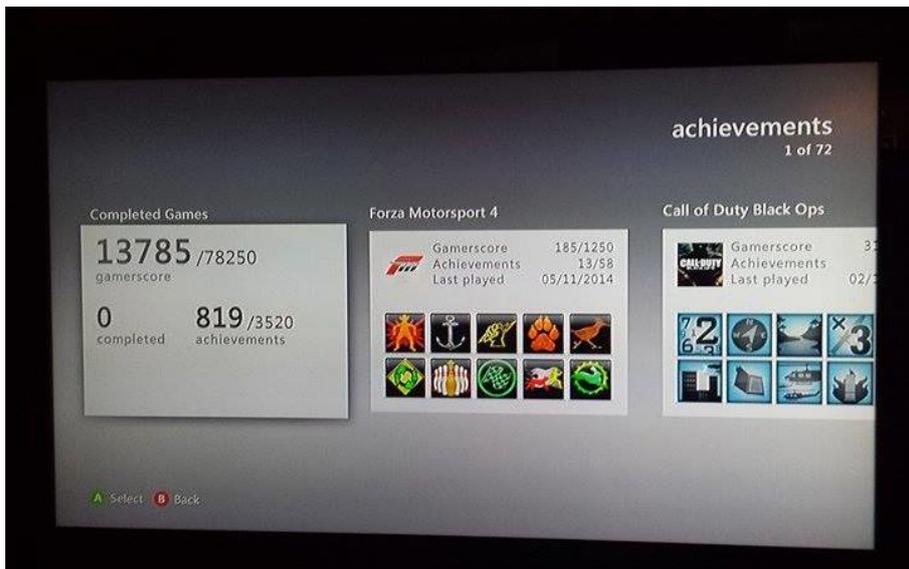
Figure 3 - Richard's Xbox Achievements and Gamerscore

Often we see a combination of acquisition and accumulation whereby the consumer plays a more active role in inviting accumulations. For instance, Twitter feeds would fill up with others' tweets and consumers would check their YouTube subscriptions to see if any new videos awaited them. Natalie's use of Google Reader provides an example; although above I proposed that Natalie 'acquires' other' blogs by subscribing to them via her Google Reader account, we can also observe that the value of Google Reader lies in the subsequent accumulation of blog posts, in which Natalie's role is less active:

> On Google Reader I follow over five hundred blogs, it's ridiculous, if I don't check the blogs for a day I have over three hundred posts that are unread, so there's a lot, you can go through and pick through the ones that you want to read and see all their most recent posts as well. So when it comes to that I'll probably go through and find my favourites and see what they've posted about. […] There's quite a few to read (laughs), so for example, anything that's bold that has a new post to read, and that's like how many are new.

Thus each time Natalie checks Google Reader an array of new blog posts from her favourite bloggers await her – there is always something new and potentially exciting or enjoyable to be discovered. Natalie's account demonstrates that such accumulations can be anticipated and desired. For instance, in the context of Twitter she notes:

> You'll see people Tweet saying "Is Twitter broke" 'cause no-ones tweeted for three minutes. It's like if you're bored and you check things constantly and there's no updates you always get frustrated, you're like "Come on people, say something!" You want someone to entertain you or to say something. It's like, if no-one tweets or Instagrams, what else are you going to do? What else can you check?

Here we see an instance of the ontological liquidity discussed by Zwick and Dholakia (2006a, 2006b); gathered feeds continue to unfold as new content accumulates over time, and can provide a source of entertainment. However Natalie explains that there is a need to manage the extent of this accumulation, otherwise she can become overwhelmed.

You can follow too much to keep up with. Like on Twitter I only follow two hundred people, more than that and I find it impossible. Reading what people say and... It's just so hard. I followed a few more American people and when you wake up in the morning there's so much more to look at. It takes up so much time, sometimes I'm like 'oh my god, there's so much to catch up on, I can't do this […] I want to look at everything. Not with Twitter. I've let go of that because it was impossible. Like, I can let twenty minutes go by and there's two hundred new tweets. I'm like, I can't sit and read all that. A lot of it is garbage as well, I can't do that. But things like Instagram and blog posts, I don't like to miss them.

Participants often attempted to curb the level of accumulation, even when desired, to a manageable level. Thus in addition to acquisition and creation, in which the consumer plays a more active role in establishing consumer-object relations, DCOs may also accumulate and enter into possession networks seemingly uninvited.

6.3 Chapter Summary

We have seen that consumers do not acquire or create alone but are afforded the ability to act by a range of actants including hardware, software and contractual agreements which enable, shape, and restrict these processes, although they may be made absent in participants' accounts of these processes. Furthermore, we have seen that consumers accumulate increasing quantities of DCOs that are not actively sought but accumulate, such as text messages, emails, and metadata, whereby the emergence of consumer-object relations has little to do with the agentic consumer. Whether valued or regarded as undesirable, these object-consumer relations may emerge with or without prior invitation by the consumer and must too be dealt with. In documenting the varied ways in which relations between consumers and DCOs emerge, it is apparent that even in the formation of these relations, agency is distributed across networks of both human and non-human actants that must not be overlooked. Although I have considered in turn acquisition, creation, and accumulation as means of presenting complex modes of emergence in a coherent manner, there is frequent overlap. Think, for instance, of the microblogging platform Twitter. An element of creation is involved as the consumer's account, profile, and tweets emerge. However, in 'following' other Twitter users there is an element of acquisition; yet in checking their Twitter feeds consumers access accumulations of Tweets. Here we see the messiness of possession networks even as they begin to emerge, something that John Law (2004) calls for social scientists to embrace rather than obscure. Furthermore, although in this chapter I have considered the emergence of consumer-object relations as the initial meeting of consumer and object that is necessary in order for possession to be enacted, in practice both DCOs and consumers are often in a continual state of emergence/becoming. DCOs are never quite complete or final; we shall see in the following chapter that not only their meaning and value but also their form may change over time as they are transformed by multiple actants. In this chapter, I have examined the various ways in which relations between objects and consumers form, and the actants that mobilise and

shape this emergence. Whilst this chapter has discussed ways in which relations between consumers and DCOs emerge – how these entities develop the capacity to relate to and affect one another – in the following chapter I shall proceed to document the ways in which consumers and DCOs were found to relate.

Chapter 7: Consumer – DCO Relations

The aim of this chapter is to explore aspects of the documented relations between consumers and digital consumption objects DCOs that present a significant departure from extant theories of possession reviewed in Chapter 2 and speak to the study's research questions. Firstly, in considering the ways in which DCOs change over time I shall illustrate that consumers do not transform DCOs alone; their capacity to do so is both enabled and restricted by software that dictates to a large extent the ways in which DCOs can be transformed, whilst companies and other consumers also mobilised the transformation of DCOs. In doing so, I shall illustrate that prior emphasis upon the consumer agent mobilising change is highly limiting as we become aware of complex networks of actants that may transform DCOs. Indeed we shall see that the notion of a singular, stable consumption object transformed from one state to another becomes problematic in the context of DCOs, which may be enacted in multiple ways (often simultaneously). Secondly, in exploring processes of ordering we see that consumers' capacity to order DCOs in desired ways can both be restricted and enabled by software whilst the transient enactments of DCOs limits their capacity for enduring display and consequently for self-reflection and self-expression.

In a third section I examine processes of protecting DCOs, illustrating the ways in which networks of actants enabled processes of simply protecting everything with little effort on the part of the consumer. Indeed, whilst in some instances consumers were displaced from processes of protecting DCOs as software automated such processes independently from their input, in others consumers lacked the capacity to protect possessions bound up in complex actor-networks. Here we see that the curation processes seen to be important to cultivating meaningful possession are shaped by a network of actants that have not been previously recognised, most notably by software. Lastly, I consider the movement of DCOs between people and places. In doing so it becomes apparent that the notion of a singular DCO following a linear biography becomes problematic. As opposed to the transfer or transportation of a singular DCO we can observe duplication as multiple distinct enactments emerge, alongside instances where interwoven enactments of DCOs emerge facilitated by internet connections. Thus we see that the process of moving here is distinct from the movement of singular material consumption objects (MCOs). However, I shall observe instances whereby companies attempt to constrain this multiplicity by binding DCOs to particular people (accounts) and places (devices).

In exploring four key processes that are central to prior theories of possession – transforming, ordering, protecting, and moving – in the context of DCOs I highlight ways in which the consumer-object relations observed in this study differ from those documented in prior literature. I shall now proceed to explore the processes in turn.

7.1 Transforming

Prior studies of possession document the ways in which consumers change over time, in particular the ways in which their shifting identity projects transform consumer-object relations (e.g. Csíkszentmihályi and Rochberg-Halton, 1981; Kleine *et al.*, 1995; Kleine and Baker, 2004). However, how might consumption objects change? In reviewing prior studies of material possessions it became apparent that the consumer is seen to play an active role in transforming inert, passive MCOs, both by physically changing and altering their form, and by imbuing them with meaning (McCracken, 1990; Grayson and Shulman, 2000; Campbell, 2005). How might DCOs change over time, and what actants may produce such change? In this section I examine the networks of actants that transform DCOs before noting that the potential for multiple enactments problematises the notion of a singular, inert consumption object that is subject to processes of 'transforming'.

7.1.1 Enabling and Restricting Consumers' Agency in Transformation

As noted in Chapter 6, creation was not simply the initial stage of a linear biography, but rather an ongoing process, with many DCOs such as blogs and Facebook pages continually transformed by consumers (see Section 6.2). Alongside those items that consumers were involved in creating, those DCOs acquired or accumulated could also be transformed by consumers. As acknowledged in prior work (Odom *et al.,* 2011; Denegri-Knott *et al*., 2012; Watkins and Molesworth, 2012) acts of transformation in which consumers invest time and effort were found to enable them to mark DCOs as their own and imbue them with personally significant meaning. For instance, Richard explained that within the videogame Forza players may choose to automatically upgrade cars to a certain specification or download versions that others have customised, yet he preferred to carefully upgrade the cars himself.

> You can either go on quick upgrade and choose what you want it to be and it'll put the ones [parts] on for that, or you can go into the shop and go into each part individually and upgrade them. So for example your filters, your pistons, your turbos and whatever else. And then you can do your upgrades, you can do the handling, your breaking, you can change your wheels, tyre compositions, the sizes, the style of them […] or you can buy full set ups. So, these are the ones that other people have done and you just sort of press on it, download it and it'll automatically go onto the car. So if someone's got it up to as fast as it can possibly go, just go yup, there, done […] I'd rather not do anything with it until I had the time and then just go through it all myself. 'Cause I know then that nothing will go wrong with it because what I've done is right.

Whilst Richard could have easily choose to automatically upgrade his cars and save himself a significant amount of time and effort, he preferred instead to undertake such activities himself, carefully crafting each car to suit his own personal preferences. Richard's account draws clear parallels with prior discussions of possession rituals in the context of both material and digital

consumption objects (Denegri-Knott *et al.* 2012; Watkins and Molesworth 2012). In particular, echoing Watkins and Molesworth's (2012) study of video gamers' emotional attachments to digital possessions in videogames, I note that extensive customisation options encoded within the videogame software enabled such transformation to occur. Thus the consumer alone is not performing such processes of transformation alone but the code itself plays an important role. Options encoded by the videogame's designers enabled Richard to engage in the acts described above and produce these customised cars. Just as paintbrushes, paint, doors, and consumers come together to transform a door through a process of painting (Watson and Shove, 2008), multiple actants, including most prominently the consumer and the code of the videogame software, come together in processes of transforming DCOs. Here we see parallels with the discussion of 'creation' presented in the previous chapter, and with discussions of craft consumption in extant literature (Campbell 2005).

Stories of extensive customisation were most evident in the context of particular types of DCO, for example blogs, avatars, in-game items and social media platforms, whilst in other contexts they were largely absent whereby the available code did not provide the opportunity or need for such processes. One example is digital music where a distinction was observed between the transformation of legally and illegally downloaded digital music. Many participants described rituals of appropriating digital music or films that had been illegally downloaded. For instance, Natalie (25) explained that when she downloads music illegally she adds the missing metadata (downloading album covers, correcting titles, etc.):

> I don't always do genre, but I make sure I've got the years right 'cause that helps organise my music. The artist, the name of the album, then usually because sometimes I'll have compilations of stuff, I'll make sure every track number's right [laughs]. Sometimes I am like, what am I doing? I've just spent an hour tidying up my iTunes.

Acts of editing metadata were common, as were processes of moving these downloaded files into the appropriate location on consumers' devices where they were accessible by desired media management software (e.g. iTunes). Thus whilst in the previous chapter Tom described processes of avoiding 'bad torrents', here we see that the imperfection of these illegally downloaded files may provide consumers with an opportunity to invest effort in appropriation processes that may facilitate a sense of perceived ownership. Yet legally downloaded music didn't demand such processes of transformation, since such metadata was already included with the downloaded file – the work that can serve to enable appropriation by consumers is already done for them. Thus whilst acts of singularising digital possessions via acts of transformation have been more extensively documented elsewhere (Odom *et al.,* 2011; Denegri-Knott *et al.,* 2012; Watkins and Molesworth 2012), here I re-iterate the importance of other actants in *enabling* consumers to invest effort in processes of transforming DCOs and in shaping this process of transformation.

We can observe the role of other actants, in particular the role of code, in providing consumers with the capacity to engage in such processes, whilst in other instances we see that these processes are absent where code do not afford the consumer this ability, or where there is little need or opportunity for transformation. This is not to say that this is not also the case for MCOs, but rather I note that in documenting transformation in the context of DCOs the role of actants beyond the end consumer becomes increasingly apparent. Indeed, not only do networks of actants afford consumers the ability to transform DCOs, these items were frequently transformed by actants beyond the end consumer.

7.1.2   Multiple Enactments and Unstable Form

DCOs frequently exhibited the absence of one fixed, solid form. For instance, participants' possessions took on a different form depending upon the device used to access them. Alice, for instance, explained that her eBook collection appeared differently depending on whether she used her Kindle, phone or tablet to access these items:

> You can see the front covers and you can sort of see when you go in what you've got in your archive, but it looks different on a tablet and on a phone to on the Kindle. On my Kindle it's just a list of titles. I've got, like, the basic Kindle so you've just got the titles and you just scroll down the titles to select the one you want, um, but on my phone you can see like it's all kind of laid out, all of the front covers. And the same on my tablet.

Alice's ebooks lacked a persistent form and changed shape as she moved between devices. Many DCO exhibited similar characteristics – blogs and social networking profiles appeared differently on tablet devices as opposed to mobiles, and music was displayed differently on iPhones in comparison to iTunes software on laptop and desktop computers. Similarly, DCOs may appear differently to different people. Beauty blogger Natalie explained that since beginning her blog a number of years ago her blogging style has progressed and she has come to look back on her earlier posts with embarrassment. Consequently, she described processes of hiding old posts from the public as opposed to deleting them entirely, retaining them as part of a personal archive.

> I had changed a lot of the quality of the photos, the sizing of the photos, the way I light, the style and also the font and how I typed and stuff. Because it all changed I didn't want people to see those old posts. It's not that I'm ashamed or anything it's just that I don't like the way that sometimes you can have a link to other related posts and there might be a link to one I don't want people to see. So I haven't deleted them, I've just kind of hidden them so they're kind of private. It just looks a bit neater. […] I wouldn't delete them, but I've removed them from the internet, in a sense, because I would be like, "My god, that's embarrassing […] You're kind of self-editing because you want to portray yourself as this blogger who's always been amazing.

Here Natalie used a function on Blogger, and later on WordPress, that enabled her to 'hide' a selection of past posts from her readers. Yet Natalie explained that she didn't want to delete

these blog posts entirely since to her this blog serves as a personal scrapbook or diary that can be a source of reflection.

> The last couple of years I've done a blog post on what I've loved from the year, so I'll go back through the year and see what I've done. Also I've got a weekly feature on Sundays called "My week in pictures" where I put all the pictures I've taken through the week, it's more like a lifestyle post, kind of like "this is what I get up to" other than the normal blogger stuff. Sometimes I go back to those. Like, for me, it's like an old diary. I can look back and see what I was doing. I've done almost a hundred of them now, it's like two years that I can go back and see things that I've done. And it's quite nice because it shows me how I've grown as well and how my style's changed. But I don't know if I'd want them to be live again.

Natalie is able to keep an intact version of the blog for her own personal viewing and an edited version for her readers; both versions of the blog are enacted simultaneously depending upon who is viewing it; when Natalie is logged into her Blogger/WordPress account she can see otherwise hidden posts. Here, again, we can observe multiplicity as this DCO appears differently to different users. A similar phenomenon can be observed in the context of social networking website Facebook whereby tailored privacy settings can enable users to display certain content only to certain users. Here we see parallels with Ekbia's (2009) proposal that digital artifacts lack a fixed identity, as various renditions are available simultaneously. Indeed, whilst the notion of transformation seems to imply the transformation of one solid 'thing' into another solid 'thing' here we can observe that multiple distinct enactments of DCOs can exist depending upon who is accessing them and via what combination of hardware and software. Thus in addition to distinctive acts of transformation we can observe that many DCOs are never fixed but always in flux.

7.1.3   Multiple Enactments and Disruptions

I observed potential for other consumers to transform DCOs whereby these items were enacted within multiple possession networks. Unlike prior theorisations of 'sharing' (Belk 2010) and 'lending' (Jenkins *et al.,* 2014) reviewed in Chapter 2, whereby consumption objects may be present in multiple possession networks and perceived as 'mine' by more than one consumer, DCOs can be simultaneously enacted in different ways in multiple spatiotemporal locations. These multiple enactments are facilitated by the internet; as opposed to multiple local copies of a DCO (for instance an ebook stored on multiple Kindle devices), we see many interconnected enactments of a DCO via internet connections. For instance, the notion of a 'singular' Facebook profile or blog is problematic. Such multiple enactments facilitated processes of transformation by other consumers. Many DCOs hosted online, such as blogs and social networking websites, were created in a large part by the contributions of others beyond the end consumer. Let us consider, for instance, Facebook profiles. On social networking platform Facebook, others play a significant role in shaping the way that we are presented – they 'tag' us in their photographs,

which become part of our own profiles, and post 'comments' upon our own content. Thus Facebook profiles are transformed not only by the consumer, but also frequently by their Facebook 'friends', which prompted some participants to frequently monitor and manage others' contributions. Here intercepting and vetting these contributions before they could be seen became an important task. Holly, 23, lives in Cardiff with her fiancé and young son. She spoke of a desire to manage others' role in transforming 'her' Facebook profile.

> I don't mind being tagged in other people's stuff, as long as I can check it looks OK. […] It comes through to me and I check I don't mind, and it goes on my profile then. If I didn't like it then I'd ask the person who put it up if they could un-tag me from it, or take it down. It doesn't happen very often, but if there was a photo that was really horrible, then I'd just ask them to un-tag me. […] I wouldn't want anything going up there that's just embarrassing, if there was a really bad photo or something, that looked awful, then I'd just want to make sure that I checked it before it went up really, 'cause it's a photo of me, it's not like it's a photo of just them.

In Holly's account it became apparent that the platform plays a role in dictating others users' ability to transform users' content. The platform's tagging and commenting functions facilitate others' transformation of users' Facebook profiles and content. However, Facebook's introduction of the Timeline Review feature provided some relief, requiring 'tagged' content to be approved by the end consumer before appearing on their own Facebook timeline (profile). However, some contributions (comments upon our own photographs and status updates for example) may be added without such approval. Here in addition to the active construction of identity online as described by Schau and Gilly (2003) in their work on self-presentation via personal websites, we see participants engaging in an additional process of managing others' transformation of their Facebook profiles. Belk (2013) has described this phenomenon as the 'co-construction of self'. However, whilst this presents a range of issues related to self-presentation and consumer identity projects, in the context of thesis our interest is in ways in which consumers' ability to transform participants DCOs may shape the enactment of possession.

Many DCOs were simultaneously regarded as 'mine' by many consumers. Participants regarded content featured on their Facebook page (e.g. photographs, comments) as 'theirs' regardless of where these items originated. In other words, participants who had uploaded photographs saw this content as theirs, but they also saw the content others had created, uploaded and 'tagged' them in or added to their profile as 'theirs' as they had become part of their own Facebook profile. For example, 17-year-old student Becky discussed the process of downloading and printing photographs from Facebook in order to create a display on her bedroom wall. She explained that she had downloaded both photos that she had uploaded herself and photos uploaded by others that she had been 'tagged' in, yet she hadn't thought about this at the time and perceived little distinction. Here there is a blurred sense of possession as content is perceived as 'mine' by multiple individuals. However this multiplicity caused issues where consumers' Facebook

'friends' deleted content that had come to be perceived by consumers as 'theirs', since it had become part of their own Facebook profile. Holly, for instance, described an instance of realising that a number of photographs of her son had disappeared from her Facebook profile:

> My boyfriend's sister has lots of photos of my son on there and then she deleted her Facebook and opened a new one. The photos of him that were on there that I was tagged in went off of there. So I had to ask here to send them to me, because there were some that I wanted to keep. […] Because they used to show on my Facebook, because I was tagged in them, I just assumed that they would always stay in there. I didn't think they would disappear if the other person deleted them.

Thus consumers' Facebook pages were fragile since if other consumers leave the platform much of 'their' content disappears. Since consumers came to see this content as part of their profile and therefore as 'theirs', as in Holly's account above, this loss often came as a surprise. Thus digital possessions present in multiple networks may be fragile and unstable, in comparison to the singular MCOs documented in extant literature (e.g. Csíkszentmihályi and Rochberg-Halton, 1981; Schultz *et al.*, 1989; Epp and Price 2010), although of course such instances of loss or damage stemming from the agency of other consumers may also occur in the context of MCOs.

The multiple enactments of DCOs had further consequences. DCOs may not only be present in multiple possession networks simultaneously but, as noted in Chapter 3, they may simultaneously remain present in companies' networks where they are enacted as assets. As noted previously, companies facilitate this multiplicity via contractual agreements that restrict consumers' use of DCOs whilst granting themselves ongoing rights. What consequences might the ongoing capacity of the company to shape DCOs hold for their enactment as possessions? I observed that platform design and function may change over time at the bequest of companies; many retain the capacity to make alterations without consumers' permission. For instance ebooks covers may be updated automatically to the latest version, whilst in 2012 Facebook made its new 'Timeline' layout mandatory for all users. Similarly, during the course of this study iTunes released a number of software updates that changed the appearance and use of participants' digital music collections. Such changes were often met with disapproval amongst participants, yet they had little means of resistance. Often in such cases consumers did not retain access to the 'old' version of the DCO – we can't see our Facebook page as it looked in 2008, for instance, whilst we currently don't have an option to prevent changes to our ebooks' covers. Here DCOs exhibited less stability over time than the MCOs that consumer researcher had previously become accustomed to, as companies hold the capacity to disrupt consumer-object relations by transforming DCOs. How might such disruptions shape the enactment of possession?

Eve, 35, is an artist and is currently completing her PhD part-time. She owns a number of Apple devices and during her final interview she discussed the purchase of a new MacBook laptop device. Eve explained the issues that arose when moving her content from one MacBook to

another and expressed her frustration at changes to her iCal (a personal calendar application that runs on Apple's operating systems) caused by the updated software on the new device.

> When I upgraded my computer, the iCal went looking like a kind of aluminium effect to a leather effect. I had a look online and a lot of people are like "Where's this come from?" and "I don't like this leather look calendar" and "how do I get this other one back?" There was something you could download to get the original calendar design back. And I think things like that are really important for whether you feel like you have ownership.

Eve explained that she was unhappy with uninvited changes to items regarded as 'hers'; as we shall see in Section 7.2 such changes may also disrupt consumers' organisational systems. Imagining a similar phenomenon in the context of MCOs is difficult; the equivalent of Eve's story might be moving your sofa into a new house only to find that upon entering the threshold the sofa changes size or colour. The capacity for ongoing change is therefore a distinct development facilitated by networks of contractual agreements, software updates and internet connections.

Companies have the capacity to change not only the appearance and function of DCOs but also the contractual agreements that are designed to govern their use – a capacity granted by the contractual agreements themselves whose terms enable companies to change these terms, often without notice to the consumer (as noted in Chapter 3). An issue arises whereby consumers have invested significant time and effort into a platform, for instance by establishing networks of connections, investing time in uploading or creating content, or developing emotional attachments to DCOs, only for the terms of such agreements to be changed. This presents a dilemma for consumers since they may find it hard to leave platforms in which they are highly invested, even when they disagree with the company's changes. For instance, Natalie explained that the time invested in not only uploading photographs to Instagram (a photo and video sharing social network) but also in following other users and generating her own following makes it difficult for her to leave the platform.

> Well, there was this big hoo-ha over Instagram when they changed their policy and people were, like, threatening to leave and all this stuff and… It's hard. It's kind of like you want to stand your ground, but if you have a certain amount of followers on Instagram that aren't leaving and then suddenly you leave, you very much get left in the dark and then you can't be part of something that everyone else is. […] So if I'm the only one who takes a stand and I go, "I'm not happy with their change in policy. I'm leaving and never using Instagram again" yet all the other bloggers still do, I'm then out of the loop, so it's… You're in two minds.

Although Natalie was concerned by changes to Instagram's Terms of Service in 2012, whereby the company granted itself extensive rights to the photographs its users uploaded (Instagram later reverted to its original terms after user backlash), and wanted to take a stand, she was highly invested in the platform and felt unable to leave. I noted in Chapter 5 that Natalie, along with many other participants, admitted that they did not read contractual agreements but claimed that they would deal with issues when and if they arose. However, we see that the more

invested consumers are in a platform, the harder it is for them to protest against company-imposed changes.

Thus we see that multiple enactments may result in both DCOs being enacted as possessions by multiple consumers, and in companies continuing to enact DCOs as assets. In both instances a consequence is the capacity for DCOs to be transformed by actants beyond the end consumer and consequently such DCOs may be unstable and C-O relations prone to disruption. Here DCOs present a significant departure from the singular, stable consumption objects portrayed in the prior literature reviewed in Chapter 2.

7.1.4   Summary: Distinctions in Processes of Transformation

Reviewing consumer research literature in Chapter 2 revealed that prior research has primarily documented processes of transformation performed by the consumer, often as 'possession rituals' that serve to transform MCOs from commodities into personally meaningful possessions, singularising them by severing (at least temporarily) their link to the market sphere. Above, I have explored processes of transformation in relation to DCOs, highlighting key departures from extant theories. Firstly, as with processes of creation documented in Section 6.2, transformation is not performed by the consumer alone but this process is produced in the relation of an array of actants. I note in particular software's role in enabling and restricting consumers' capacity to inflict change upon DCOs; the code of software sets boundaries as to how DCOs can be transformed. Furthermore, we can observe a significant departure from understandings of the stable consumption objects transformed by the agentic consumer subject in that DCOs may lack a singular, stable form. Aside from distinct instances of transformation, I observe that many DCOs are not fixed and singular but rather can be enacted in multiple, distinct ways depending on the hardware or software used or the person accessing the item.

Furthermore, in their multiplicity DCOs may be transformed by other consumers and by companies, disrupting consumer-object relations. In another significant departure from prior studies of possession we see that processes of transformation involving the consumer did not necessarily sever DCOs from the influence of the market; many continued to be hosted online on companies' servers whilst in the context of purchased and locally stored DCOs the rights that companies retain in contractual agreements enabled them to retain their influence. Thus whilst acts of transformation may enable consumers to experience DCOs as highly meaningful possessions, with the role of the company made absent they do not necessarily produce singularisation as understood by Kopytoff (1986) in that they do not sever the DCOs' ties to companies and the market sphere. They may remain present in companies' networks as assets and the above analysis brings to light instances where companies continue to transform DCOs,

changing their form and function and even changing contractual agreements. Indeed companies'
ongoing role in consumer-DCO relations is by no means limited to such processes of
transformation and will become apparent throughout this chapter. Thus we see a significant
departure from the MCOs studied in prior research; whilst such objects are largely stable and it is
the consumer who transforms their form and meaning here we can observe the existence of
unstable DCOs that due to their multiplicity may be transformed by other actants.

Transformation presents only one way in which consumers have previously been found to
imbue possessions with meaning. As noted in Chapter 2, research on material possessions
documents an array of curation processes, including caring for, maintaining and cleaning
possessions, as well as organising, storing, and displaying them. For instance, consumers may
carefully dust and arrange china ornaments (Gregson 2007), painstakingly and perhaps
obsessively organise their stamp collections (Miller 2008), or spend extensive periods of time
tinkering with and cleaning cherished sports cars (Myers 2005). In the following sections I
proceed to explore the relevance of such processes in the context of DCOs, documenting in turn
the ways in which the processes of ordering and protecting of DCOs observed in this study were
distinct from accounts of such processes in extant literature.

7.2   Ordering

In this section I consider instances of ordering, referring collectively to processes of storing,
displaying and organising consumption objects. As noted in Chapter 2, prior literature proposes
that the ways in which possessions are stored and organised enables consumers to mark, maintain
or transform their meaning. For instance, collectors may separate their collections from more
mundane artefacts, display them prominently or provide them with special care and attention
(Belk *et al.,* 1991; Belk, 1995b; Gregson 2009). Items with nebulous or negative meanings may
be displaced from active possession networks and stored out of sight (Hirschman *et al*., 2012),
whilst personally meaningful items may be placed in liminal spaces such as attics or garages to
'cool off' prior to divestment (McCracken, 1986; Gregson and Crewe 2003; Gregson 2007). Order
is associated with structure and cleanliness and therefore desired, whilst disorder is regarded as
dirty, unstructured, and thus to be avoided (Douglas 1967; Belk *et al.,* 2007; Dion *et al*., 2014).
Consumers are seen to impose systems of order upon material possessions through acts of storing,
organising and displaying. Do similar processes occur in the context of DCOs?

I found that in some instances DCOs were indeed sorted, organised and stored by
consumers in ways that reflected prior literature on the ordering of material possessions, such as
creating more selective groupings of content (e.g. playlists of favourite songs and albums of 'best'
photos), and removing digital 'clutter' from active possession networks. However, a full review

of these processes is beyond the scope of this thesis.[2] Instead, keeping in mind the research questions of the present study, I draw attention to those aspects of ordering that are not accounted for in prior work. I illustrate ways in which software enabled, restricted, and disrupted consumer imposed order, before examining the ways in which transient enactments of DCOs may inhibit processes of display and consequently processes of self-reflection and self-expression.

7.2.1 Enabling, Restricting and Disrupting Consumer Imposed Order

As with transformation, ordering was not 'done' by consumers to inert DCOs, but rather processes of ordering were enacted by various actants, and once again software emerges as a key actant, enabling and restricting consumers' capacity to impose desired order. Often organisation was performed at least in part by software, which imposed pre-existing organisational structures, with the consumer offered some choice as to how DCOs were organised. For instance, iTunes offers an opportunity to organise songs A-Z by song, album or artist name, by genre, by song length, or by the rating we have allocated to each song, whilst we may also produce playlists, grouping together smaller selections of music around a particular mood, genre, activity, or event. Whilst some consumers described the ease of automated organisation in managing their (often fairly extensive) amounts of DCOs, others expressed frustration that they were not ordered as desired, particularly where software did not enable significant flexibility in ordering digital possessions. For instance, Richard explained that although he can choose to sort his aforementioned car collection within videogame Forza by either 'car manufacturer' or 'racing class' he is unable to impose his own classifications. He was unable to separate his prized collection of high spec cars from the more functional cars that he does not consider part of this collection; this was simply not an option afforded by Forza videogame software. Thus software restrictions may prevent consumers from imposing their own categories of meaning upon their possessions in the way that they may have done in material consumption (although of course consumers' ordering processes may also be enabled and restricted by actants such as material storage spaces).

Participants explained that they had less freedom when it came to ordering DCOs, in comparison to MCOs. For instance, whilst Eve wouldn't describe herself as a 'record collector'

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[2] An examination of digital clutter and hoards stemming from an analysis of this dataset was presented at the 2013 Consumer Culture Theory conference (Watkins and Molesworth, 2013).

she possesses a number of personally meaningful records that are displayed in her living room. She carefully orders her record collection thematically on a shelving unit, grouping what she perceives to be similar music together and storing some of her least favoured records together separately. Through this act of separating she recognises and enforces distinctions in meaning, and is able to make sense of her collection. Eve explained that such processes became difficult in managing her digital music collection within iTunes, however.

> The thing I don't like about iTunes, with this whole alphabetical organising thing, is that it means you can't hide stuff so easily. So say the album you want to hide begins, or the group begins, with A, they're there every time you open up your iTunes […] I've got quite a substantial amount of music on my laptop, so I guess in a way I do have a collection, but it doesn't feel quite like it because I don't have this way of organising it in the way I'd like.

Although iTunes offers various organisation options, Eve was unable to apply them in a way that enabled her to organise her digital music collection as she desired, and consequently she felt that she had less control over her digital music collection in comparison to her record collection. This lack of control became particularly evident when she changed computers, meaning that her digital music collection moved to an updated version of iTunes where its prior order was changed. Thus Eve's imposed order was not only restricted by the available organisation options and her knowledge of how to use them, but the order that she did impose was subsequently disrupted by a software update.

> You get a new version of the software and it's mixed it all up, you regret having to re-organise it all or put it all back to how you used it before, and if you can't use it the way you used it before that's really frustrating. […] with a digital collection of music, because of the way you upgrade it and it organises things differently… I don't really feel it's mine in a way […] when you open up your computer and your collection of music isn't organised the way it was when you last opened it, that kind of makes the feeling of ownership not quite as… you don't feel you own it.

Thus in contrast to feelings of control and mastery discussed in work on material possessions (Belk, 1988), here we see that Eve is struggling to achieve any real sense of control over her collection of digital music since she is unable to impose meaningful or lasting order. Thus building upon my discussion in the previous section of companies' ongoing capacity to transform DCOs, software updates emerge as a further company imposed disruption that destabilises consumer-object relations and consequently undermines consumers' feelings of control.

7.2.2   *Transient and Enduring Displays*

Consumer researchers and social scientists more broadly have long recognised that in displaying MCOs we both communicate to others aspects of who we are (or would like to be perceived to be) to others and reaffirm our own sense of who we are, as noted in Chapter 2. Might DCOs be displayed, and do such displays provide similar opportunities for self-expression and reflection? In this study I found that many DCOs were only displayed in transient ways. An example comes

from Alice. As mentioned previously, Alice is a 30-year-old PR consultant and mummy blogger who studied English Literature at university and remains an avid reader. Alice's book collection represents her taste in literature, but also holds significant autobiographical value. For instance, books she studied at university contain annotations and remind her of a particular period in her life. Having recently received a Kindle device as a gift, Alice is a convert; although she still loves owning and displaying physical books she can't deny the convenience offered by ebooks. However, it emerged that ebooks did not hold the same meaning for Alice. During her interview Alice describes how her material books often catch her eye, prompting reminiscence and rediscovery as she flicks through old favourites. Her ebooks, on the other hand, were described as disappearing into the depths of her Kindle after reading and she explained that they were unlikely to be reflected upon.

> When I've finished a book on the Kindle, it's just archived and discarded and I doubt that I'd look at it again, whereas I've got loads of bookshelves upstairs with all my books on […] I love my books. And I do like going and browsing, like sometimes I'll pick up a book that I read say ten years ago and re-read it if I remember I really enjoyed it, so I think that's where the relationship's different. Although I know what I've got on my Kindle I don't view it so much as a possession afterwards, once it's been read […] I'd like to have the ability to read it on the Kindle just for the ease and practicality, but then I'd like to have the actual physical book to put on my bookshelf to keep, and to remind me that it's there.

Thus consistent with prior HCI work (Brown and Sellen, 2006; Odom *et al.* 2014), it becomes evident that Alice's ebooks simply don't have the 'presence' of her material books. In their physical materiality, her material books demand to be stored and displayed and in their enduring display they have the capacity to prompt processes browsing, reminiscing and reflection. Here the MCOs themselves emerge as key to provoking such processes. Alice's ebook collection, on the other hand, only presented itself when summoned. These ebooks, and DCOs more broadly, were enacted in a transient manner, with the actor-networks that enact the DCO coming together in a temporary way when in use, and later broken down. Such transient displays lacked the capacity to catch consumers' attention, and thus to provoke acts of reminiscence and reflection. DCOs hosted online such as blogs and Facebook pages have been seen to present enduring exhibitions (Hogan, 2010) that are not spatiotemporally bound and can be viewed by users around the globe simultaneously. Yet even these displays are transient; our Facebook page is enacted only when summoned, before disappearing from view. Unlike MCOs, which take up physical space in an enduring way and in doing so can demand consumer attention, DCOs' transient enactments can limit their capacity to mobilise processes of self-expression and self-reflection.

One application emerged in a number of interviews as holding the capacity to provoke such processes. Time-Hop is a smartphone application that collects together DCOs from various online platforms including Facebook, Instagram and Twitter, alongside Dropbox photographs, and shows the user those uploaded exactly one year ago to the day. Marketed as a time capsule, Time

Hop sends users notifications (Figure 4), drawing their attention to this old content that may otherwise not catch consumers' attention. Becky explained that Time Hop prompted her to view items

I've got his app called Time Hop. Have you heard of it? […] It takes photos or statuses from Facebook from the same day, but what, I think it's one, two, and three years ago, I think it is. A lot of the time it's a photo or it can be a status or it can also take it from your Twitter or your Instagram I think. But most of the time it's a photo. […] About a week ago all my friends were using it, so I thought I'd download it to see what it was. It's just funny 'cause it shows you stuff you wouldn't look back at yourself […] It showed me, like, old school photos from Year Eleven on the last day of school, and that was funny, or, like, prom photos it showed me from three years ago.

Figure 4 - Screenshot from Becky's Time Hop app

Here we can observe a piece of software that is designed to provoke the types of reminiscence that Alice's material books, in their enduring display, prompt. Thus whilst DCOs lack an enduring presence, this mobile application provides new ways for DCOs to attract consumers' attention. Whilst Kindle's ebooks currently fade into an archive on her Kindle device, where they are quickly forgotten, it is possible that future software updates may afford these ebooks the capacity to provoke processes of reminiscence, not through enduring display but via notifications that call consumers' attention to these entities and remind the user of their existence. Once again we see that software plays a central role in our relation to DCOs.

Some participants found ways to display DCOs in highly visible ways. During our first interview Louise's television displayed a slideshow of digital photographs, whilst during the second interview the artist, title and album cover of the song currently playing was displayed on screen (Figure 5). Although this display initially appeared seamless, closer inspection reveals an array of non-human actants that must act to enact these displays. These displays were achieved via a television device connected to an 'Apple TV' device, a networked digital media player that connects to the internet in order to connect to and display/stream DCOs stored on Louise's own server in the corner of the living room, upon which all of the family's data was stored.

Figure 5 – Digital photographs[3] (left) and digital music (right) displayed on Louise's TV

Louise explained that she sometimes actively showed friends and family specific photo albums, whilst at other times these displays simply ran 'in the background' whilst she was engaged in other activities.

> It's on in the background and then it goes to screensaver. And if your friends are around talking, then it's the Apple TV that's playing the music and showing the photos, so it's a talking point rather than saying, "Oh, let me get my photos out!" […] Especially when people are visiting, there's always so much to talk about, that's its almost better in the background than when you get a box of photos and talk about photos.

Louise explained that photographs displayed 'in the background' by Apple TV could provide a point of discussion (and, we might note, a point of self-expression and self-reflection) without Louise actively mobilising this process of viewing photographs; photographs would be displayed 'in the background' where they have the capacity to attract consumer attention. Here a level of automation removes Louise's agency from the enactment of these displays, enacting displays with a greater level of autonomy that may present more opportunities for serendipitous re-discovery. However, whilst this process produced more socially visible displays, these displays were not enduring. Firstly there is no display of Louise's digital photograph and music collections in their entirety since items are displayed one at a time; when one track finished, its album cover

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[3] Photographs on screen (and all subsequent photographs throughout thesis) pixelated for anonymity

disappears from the screen to be replaced by another. Furthermore, when the family use the television to watch TV programmes, these displays cease, as is also the case when the television is placed on standby or turned off. We might compare this to the photographs displayed in the clock on the wall behind the TV (top left of Figure 5), which remains present throughout each of our interviews. Thus these DCOs are still not enacted in an enduring way, and this is rooted partly in the multi-functionality of devices.

In other instances participants resorted to materialising DCOs in order to create enduring displays. Natalie, for instance, described a process of printing her Instagram photographs onto mobile phone case for her iPhone (Figure 6).

> I've got an Instagram case on the back of my phone that's all Instagram pictures that I took. I printed using a website called Casetagram. Basically you can just go through your Instagram feed, pick out the photos you like, arrange them in a pattern, and then they'll make it into a case for you. […] They're nice photos, and these photos I don't have printed anywhere, or in a physical form. So, just because I've got Instagram I don't see why I shouldn't be able to look at them somewhere else... […] When I go onto my Instagram, I don't really ever *look* at photos I've Instagrammed because I've got *a lot*. So if I wanted to find a specific one I'd probably have to go through a lot of photos to find it, whereas if I print it out like this my favourite ones can be almost highlighted and I can see them every day.

These photographs are all accessible via the Instagram app on her iPhone itself. However, Natalie sees value in having the photographs printed on a material case. She explained that she wanted to see her favourite photographs every day, and we might interpret this as a desire for these photographs to be always 'there' in an enduring display with the capacity prompt reflection, in comparison to an extensive feed that is only transiently displayed when the app is actively opened and used.

Figure 6 – Natalie's iPhone case   *Figure 7 - Becky's photo wall*

Similarly, Becky described a process of creating a 'photo wall' (Figure 7), printing photographs from Instagram and Facebook, as well as creating copies of material family photographs.

I've made, like, collages on my wall. Like, printed them out and then stuck them on my wall […] It took a while, but I didn't actually go through them on, in my pictures folder, I just went through my Facebook photos, and printed off the ones I wanted. Saving and printed them off […] Just ones with me and my friends. And then, so, like, the last day of, um, year 11 and then all the prom photos and just, like photos of when we've been going out and meals, and just photos with everyone. And Reading [festival], and different events. And then like old family photos as well that I already have that weren't on here [Facebook] […] Because it's nice to see them on your wall. Because, you can see them every day, like, I don't go on my laptop every day, and click on the file and look, look at them and go through them all, but if you had them on your wall, you, you'd see them every day. […] Like, not purposely, but if I'm getting ready you just see them, you know, in the corner of your eye, or in the mirror reflection. So, yeah, I do look at them. But not like, realising that I do, I just do it.

Becky explained that this 'photo wall' caught her eye in a way that the digital photographs on her laptop do not; in their enduring display they have the capacity to provoke processes of viewing and of reflecting. Furthermore, in both accounts printing photographs established hierarchies of order since the most treasured photos printed out. Natalie and Becky's accounts draw parallels with the findings of Odom *et al.* (2011) and Kedzior (2014) who also observe processes of materialising DCOs in order to make DCOs increasingly visible; I extend this argument by proposing that materialising DCOs was not simply a means of making DCOs increasingly visible to others, but also served to produce enduring displays that hold the capacity to prompt unplanned experiences of self-reflection and to 'remind' consumers of people, events and experiences.

7.2.3   Summary: Distinctions in Processes of Ordering

In these accounts we can observe a distinction from prior literature in which the agentic consumer imposes desired order on material possessions as a means of creating and reinforcing meaning. Although such processes of ordering observed during the course of this research I propose that, as with processes of transforming, ordering is not 'done' by the consumer to DCOs but is performed by an array of actants. In particular, once again we can observe not only the role of software in enabling and restricting consumers' capacity to impose desired order but also the capacity for company imposed software updates to disrupt order. Furthermore, we can observe a further characteristic that shapes processes of ordering; enactments of DCOs are transient. Whilst prior studies typically assume an enduring MCO which can be displayed in a lasting way, here we have seen that DCOs are repeatedly enacted and broken down and consequently are enacted in transient and temporary ways that do not facilitate such processes of display. In the absence of enduring displays, DCOs can have more limited capacity to provoke the processes of self-reflection and self-expression that are central to prior theories of material possessions (as noted in Chapter 2). Whilst I note instances where software to re-introduce this capacity via notifications, and attempts by consumers to make DCOs increasingly visible and to remove their agency from processes of display, these displays remained transient – temporary and eventually

broken down as devices were used for other activities. Consequently consumers materialised DCOs, most notably digital photographs, as a means of producing enduring displays. In sum, this analysis moves beyond the cultural level of ordering that has dominated prior studies (e.g. Belk *et al.,* 1989; 2007; Dion *et al.,* 2014) in order to recognise the way in which processes of ordering are enacted by a broader array of actants, recognising the potential for non-human actants to enable and restrict consumers' desired ordering strategies and to themselves impose order without consumers' input.

7.3   Protecting

In Chapter 2 it became apparent that not all possessions are experienced as equal in the eyes of consumers. Consumers may have special, cherished, sacred or loved possessions, whilst others may be less valued and more easily replaced (Belk *et al.*, 1989; Tobin, 1996; Price *et al.*, 2000; Ahuvia, 2005; Lastovicka and Sirianni, 2011). The ways in which consumers interact with material possessions seen to be shaped by, and to simultaneously shape, such meanings. One way in which meaning has been noted to be marked is through processes of caring for and protecting possessions. Given the importance of possessions to consumers' sense of self (Belk. 1988), keeping our possessions safe and in good condition is important. Acts of protecting possessions have been discussed as important processes in the possession of MCOs (Dant, 1999). However, not all possessions are subject to the same level of protection and cherished possessions may be treated reverently, handled carefully, used rarely, maintained regularly, cared for lovingly, and stored safely in an attempt to keep them safe from harm or loss (e.g. Belk *et al.* 1989; Kleine *et al.,* 1995; Akhtar 2005). Since such acts are typically limited to the most sacred or cherished of items, they demonstrate and re-enforce the sacred or precious status of these possessions. Thus, to recap points made in Chapter 2, prior research illustrates the way in which protecting processes simultaneously reflect and create/reinforce hierarchies of meaning amongst consumers' possessions.

DCOs, however, rarely demanded careful use, cleaning, maintenance or repair. The pages of ebooks do not accumulate dust and nor do their covers fade in the sunlight. Racing cars in videogames do not need to be washed or serviced, and mp3 files do not demand delicate handling since they do not become scratched through careless use. How, then, do consumers protect their digital possessions? In this section I observe the emergence of alternative processes of protecting digital possessions by protecting devices and backing up. In contrast to carefully caring for of our most prized and treasured material belongings as documented in prior research, protecting emerged as a more an unselective process of simply 'protecting everything' which failed to mark and reinforce order and meaning. Furthermore, we shall see that in some cases the complexity of

possession networks can make the consumers' involvement in processes of protecting DCOs problematic, whilst in other instances they are displaced from acts of protecting altogether as these processes become 'automated', performed independently by software without the consumer's input.

7.3.1 Protecting Everything: Locks, Passwords and Back Ups

Unlike the selective, careful protection of treasured possessions previously documented, participants' accounts instead involved processes of simply protecting everything, through both protecting devices and through 'backing up', processes which I shall now consider in turn. Firstly, let us consider processes of protecting DCOs by protecting the devices upon which they were stored. Here the relation between devices and the DCOs stored upon them becomes evident. Participants frequently explained during their interviews that they would be lost without their mobile phones, laptops or tablet devices. However, it emerged that the importance of these devices lay largely in the DCOs stored upon and accessed via such hardware. For instance Becky (17) explained that the theft of her mobile phone left her feeling lost without her contacts and frustrated at the loss of many months of text messages and photographs. Participants provided accounts of protecting their digital possessions by protecting their device using digital and physical locking mechanisms. It became apparent that protecting everything on a particular device was just as easy, indeed it was often easier, than protecting a small selection of their most precious digital possessions. Such processes may simply involve careful use of devices in order to avoid damage, however in other cases more considered attempts were made to protect devices. For instance Tom (18) mentioned proudly in each of his three interviews that his laptop was protected using a 'Kensington lock', a lock that prevents theft by securing the device to his desk.

> I've got this hard wired by cable so you can't actually physically take this and run with it because it actually locks onto the desk. So no one can actually take it and run. Which is always good. I'm the only one that has got to a key. That's the Kensington lock now there. Now it's unlocked, but the good thing about this is the Kensington lock, is that it sort of goes round the whole of the computer so you can't even like saw it off or anything. You could probably cut it but they [thieves] would need to know the cable's there before they come in. If they just like did a raid they wouldn't come in with like a heavy-duty cable cutter.

Whilst his expensive laptop device would be frustrating to lose, it is covered by insurance and could be fairly swiftly replaced. However, Tom explained that in protecting his laptop he also protects the data stored upon it, which is deemed to be highly valuable. Indeed, I noted that other pieces of equipment within the room such as his computer monitors and expensive speakers were not subject to the same protection mechanisms. However, this act does not establish hierarchies of meaning within the data itself; Tom does not invest his energy in protecting his most valued, irreplaceable digital possessions, as we might expect based on prior research. Rather, he employs

an overarching protection strategy that enables him to protect all data stored upon his laptop, including many mundane and unvalued items that simply remain due to inertia such as his old GCSE coursework.

Tom's act of locking his laptop to his desk using his Kensington lock is akin to the act of locking the door to our home, an act which aims to protect the home's contents in their entirety. However, in addition to locking the door to our home a number of additional protection processes may be utilised; valuables or important documents may be stored in a safe, expensive and sentimental jewellery may be hidden away, special clothing items may be kept in garment bags, first edition books may be stored away from direct sunlight, antique spoons may be subject to regular polishing whilst everyday cutlery is not, and so on. Thus it is possible for overarching protection strategies to be accompanied by specific protection strategies and here hierarchies of meaning are still reinforced as special possessions receive additional care and attention. However for Tom this was not the case – his overarching protection strategies took the place of any more specific protection strategies, and consequently demonstrates and reinforces no sense of which DCOs he values most.

In addition to locking his laptop to his desk Tom uses multiple passwords to protect the data stored upon the device.

> I've got three types of password on here so if anyone wants to steal it they wouldn't be able to get into anything because as soon as you start up the computer it's locked so they would have to be basically guessing lots of different combinations and passwords, it's difficult […] If I was to lose anything I'll have a peace of mind knowing that my data is kept confidential. It will worry me that they've got my laptop but fortunately I have GPS on it so if it were to get stolen if someone turns it on it gets activated and I can actually track it online, it's quite good. It's an expensive bit of kit but it's worth it.

Here we see new forms of digital lock that serve to deny others access to DCOs, but do not always guarantee our continued access to these items. In contrast to locking the door to our home we might see this as akin to locking a safe – although the safe can be stolen we can make it difficult for others to access the content within. In using passwords, participants felt secure that others couldn't access their personal information and private possessions. In the use of both material and digital locks it becomes evident that whilst consumers may be active in initiating this process they are entrusting the safety of their digital possessions to networks of non-human actants, which continue to attempt to deny unauthorised access in their absence. Once again, we see that many of the acts seen to be integral to possession are not performed by the consumer alone but must be enacted by heterogeneous networks of actants.

In addition to cases of protecting hardware and employing digital locks, creating multiple copies was a common means to experiencing many possessions as secure. Here participants felt

reassured that were anything to happen to their data, they would have another 'back up' copy elsewhere, whether this be on an external hard drive, USB thumb drive, old laptop, cloud storage or email account. Tom explained that after a technology failure previously resulted in data loss he was able to simply 'restore' his data to his iPhone device from an iCloud (Apple's cloud storage service) back up.

> It [the iCloud] stores all my contacts on there and every now and again I will have a problem with this, so whenever we need an upgrade for iOS, like recently with iOS6 I stopped it half way through because my laptop died. But it got rid of everything so it was not good. So from the iCloud I can restore everything, all my contacts in here it's a really, really useful thing.

Unlike the devastation of lost material possessions (see Belk 1988), where back-ups have been created, loss is easily resolved. Again, as opposed to the care lavished upon a small selection of material goods, backing up was often largely unselective; consumers would simply back up 'everything', or large groups of data, as opposed to their most cherished of items. Alice, for example, explained that when she moved phones she simply backed up everything from her phone before moving handsets.

> I backed everything up before I switched to this phone, so it's on my computer but I probably won't ever look at them or do anything with them ever again […] it's just peace of mind really probably, and just in case, I mean I wasn't really too bothered, I just backed up everything because it was easier to do that.

Such stories were common. For instance, Louise and her husband back up data from all devices onto a central server, which automatically backs up to a data centre.

> Because we're both techie, we'll wipe and reinstall our laptops every six months to a year. Just flatten it, wipe it completely. […] It's all on the server because then wherever I am it's backed up there, it's happy, and wherever I am I can still access it if I need it. […] It [the server] then backs up online via the Cloud. Chris's work's data centre's up in Westbourne, so all of their stuff is backed up to there, so we've just put a small computer up there and everything off of this backs up to there over the internet once a week, around two o'clock on Sunday morning or something. So it's all backed up there as well.

Here there is no process of selecting which items to back up – the entire contents of their laptops are backed up not only to a server in their home, but also to a back-up server elsewhere. Others similarly 'dumped' all content from their laptop onto an external hard drive on a regular basis. Frequently, everything was backed up 'just in case', often including items that were not seen as valuable by the consumer. Here there is no sense of sorting, evaluating and establishing order since everything is easily protected at once through such activities. Consequently, participants often could not tell me offhand what was stored in online back-ups and external hard drives. This tendency not to protect small selections of possessions is not an indication that DCOs are somehow inherently less meaningful, rather we see that current networks of actants enable the easy protection of everything, and consequently what is lost is the marking and reinforcement of

meaning hierarchies, since all data is treated as equal. Furthermore, we shall see in the following section that some networks of actants may not only enable processes of protecting everything, but also serve to reduce the agency of the consumer in processes of protecting to the point where they may be experienced by the consumer as automated.

7.3.2 *Displacement of Consumer Agency: Automated Back Ups*

In many cases the consumer's agency in processes of protecting was reduced as they experienced backing-up as 'automated', taking place imperceptibly behind the scenes with little or no input from themselves. In some cases participants initiated such processes but played little role in what to protect and how. For instance, Alice explained that in order to back up data from her previous mobile phone, a Blackberry device, she was required to plug the device into her computer using the USB cable provided with the phone, load the Blackberry software that she had previously installed and select the 'Back Up Now' option, following which she would wait whilst copies of the data would be made and stored on her computer. Here the Blackberry software became a key actant in this protection process as it extracts the appropriate files and stores duplicate copies in a destination allocated by Alice upon her first use of the software. Similarly, hardware is integral to this process – data cannot be backed up without both a compatible USB wire and a laptop or PC capable of running Blackberry's software and with sufficient storage for backed up data. Thus a number of non-human actants were integral to Alice's process of backing up her Blackberry data, including software, hardware, and the data itself. Alice had little input in terms of deciding which items to back up. However she performed the important act of bringing together these actants and mobilising this process; removing Alice from this process would result in any new text messages, photographs, contacts and other data not being backed up. However, this was not always the case, as consumer agency was not always required in order to mobilise possession processes.

In contrast to Alice's story above, Louise explained that backing up is something she doesn't have to worry about since it takes place without her input. In this case protecting is not mobilised by Louise but by other actants. With the introduction of the iCloud, iPhone users no longer need to manually back up their device using a USB cable, computer, and iTunes software (as was previously the case). Instead, Louise's iPhone automatically backs up to the iCloud on a daily basis when the phone is turned on, the screen is locked and a Wi-Fi connection is active.

> It's an automatic backup so it just takes it, backs it up as it is, and dumps it in the cloud. And then if we ever lose the phone, we can just restore that last backup onto a new phone […] I think it's automatically set to do it, and it's something you unset. Yeah. It's something you choose to unset, so we've just left it backing up.

Here Louise experiences backing up as an automated process with which she has no ongoing involvement. A range of actants are mobilised here including an iPhone device running iOS 5.x or later, a Wi-Fi connection, and servers in Apple's data centres upon which the backed up data is stored. For Louise, however, these complex networks of actants are absent in her everyday experience of the phone. Rather, these actants enable processes of protecting to simply be delegated and forgotten about. Unlike processes of cleaning and maintaining material possessions which may foster a sense of intimacy (McCracken 1986; Gregson 2007), in such processes of protecting digital possessions through backing up the consumer can be distanced from their possessions as their agency is displaced.

7.3.3 Inability to Protect

In some instances consumers struggled to mobilise processes of protecting digital possessions. Whilst backing up local content was common, consumers struggled to protect digital possessions that were accessed online and stored upon companies' servers. For instance, Natalie explained that she isn't sure how to protect or back up her blog in its entirety.

> To be honest, I wouldn't know how to back them up, because I don't write them in Word beforehand. All my pictures are backed up on my hard drive, but in terms of, like, the words I've written, I don't have, like, a carbon copy of it or anything, an electric copy. I know sometimes you can, like, export out all of your blog posts and do it that way, but that's not something I ever thought of doing because I like to think that the people that I have it hosted with, and when I had it on Blogger beforehand, that everything was quite secure and so nothing would happen.

Here the complex network of actants that enact Natalie's blog appear problematic. Protecting a treasured brooch, for instance, involves a relatively simple network of actants (for example, the brooch itself, the consumer, a jewellery box, locks and keys), and more importantly a network of actants that the consumer is familiar with and largely understands. However protecting a blog involves a complex network of unfamiliar (and themselves highly complex) actants that are typically made absent as Natalie's blog is black boxed, including not only content management systems such as WordPress or Blogger, but also internet connections, FTP servers, a range of PHP, HTML and CSS code, folders and files, alongside the blogger's own photographs, videos and text. In order to back up this blog herself there is a need to open this black box and consider how this DCO is enacted and therefore how it can be protected in its complete and final form. Whilst WordPress does enable consumers to download a local copy of their WordPress database and files, creating a back-up, this is not something Natalie understands how to achieve. For Natalie this process is daunting, and she therefore instead opts to entrust the safety of her precious blog to WordPress. Alice explained that although she has local copies of her blog posts in Word

documents, she would like to preserve the blog in its complete, interactive form to pass on to her children.

> They feel nicer, the published versions, just because they're presented as public post with photos and stuff. The word documents are just text, so it's just a backup really, just if the blog was to… if the hosting company or whatever was to go down over night, and I was to lose everything, I'd have the individual posts saved as word files […] say in fifteen to twenty years' time, I hope it will still be live and that my children will kind of be able to dip in and dip out of reading posts that I wrote about them and that sort of thing. I hope it'll be like flicking through a photo album for them and there'll be content that they can read, and I think it'll be a much better experience for them to have a blog for them to look through rather than just giving them a USB drive and saying there's all the blog posts on this in Word, which they probably would never open or look at.

However similarly to Natalie, Alice has no real strategy for backing up this blog in its complete and final form, and entrusts its protection to WordPress.

> There's no guarantee, but I do kind of think, "Yes, it will still be there." I think there'd be a massive outcry if websites suddenly started disappearing. … I don't really worry about that. I mean, I'm sure the internet will be something very different in ten years' time, but I don't think that you could just lose content.

Participants provided similar accounts in relation to social media profiles. They explained that they weren't sure how to back up or preserve Facebook profiles in any meaningful way. For instance, Holly explained that in separating items from Facebook they lose their meaning.

> Some status updates and stuff that are events in your life would be nice to keep, but it's just how to keep them really 'cause they're just on Facebook. If you just printed them, it wouldn't really mean anything, 'cause it'd just be like a piece of paper with a couple of statuses on it […] There's a status that I was tagged in after I had [my son], which [my fiancé put up, with the first photo of him, saying like when he was born and how much he weighed and stuff, I think that would be nice to keep as memories. But again, I don't know how it would look if you just printed it out and kept it, I don't think it would have the same meaning it does on Facebook.

It becomes evident that there is personally meaningful content on Holly's Facebook page, in particular metadata (comments) on photographs. However, again we see confusion as to how to back up this DCO (the Facebook profile) in its entirety and in a way that retains coherent meaning. Participants explained that printouts and screenshots of DCOs such as social networking profiles, blogs, and avatars within online games, wouldn't hold the same meaning. Where digital possessions are locally stored, often participants relied on protecting physical devices and on creating multiple copies. However, where DCOs were stored online they struggled to engage in such processes. Often participants simply resorted to entrusting the safety of such digital possessions to host companies. However, in line with Watkins and Molesworth's (2012) findings in the context of online games, this could be a cause of some angst. During their interviews participants reassured themselves of their DCOs' permanence with reference to the success of companies such as WordPress or Facebook – they explained that such companies are likely to

persist and therefore so will their content – yet they admitted that they didn't consider these issues on a regular basis.

7.3.4   Summary: Distinctions in Processes of Protecting

I have documented new processes of protecting digital possessions which differ significantly from those described in the prior literature reviewed in Chapter 2. We have seen that consumers are often able to easily back up their local data in its entirety by creating back-ups on alternative devices or on online storage spaces, and by using physical or digital locks, without considering which items in particular they value and wish to protect, whilst in many assemblages the consumer is increasingly displaced as software performs automated back-ups. Where protection processes are largely mobilised by consumer agency, as appears to be the case in prior work, they may produce highly meaningful possessions, since such acts produce and strengthen feelings of knowing, controlling and mastering possessions, as well as creating order in the form of hierarchies of meaning which distinguish precious and irreplaceable items from more mundane possessions. However, it seems here that as protecting shifts to a collective level, it no longer becomes a marker of such meanings. This is not to say that DCOs cannot be meaningful but rather that without acts of more selectively protecting (and consequently weighing up meaning and value), such meaning is not always so clearly established. This is particularly the case where consumers' agency is displaced from protections processes as software performs such acts independently. Furthermore, we have seen that in relation to digital possessions that exist online, consumers expressed confusion as to exactly how they might to begin to protect these items; in order to do so they must confront the range of actants (e.g. code) normally made absent in use and consumers opening these black boxes, instead simply entrusting the safety of their possessions to 'Facebook' or to 'WordPress'. Here I provide an understanding of the complexities of protecting possessions that are bound up in complex networks of software, servers, licence agreements and so on.

In summary, the processes of protection documented here are distinct from those noted in prior literature; in the context of DCOs we must account for the role of non-human actants such as devices, locks, and software. However in looking at possession processes from this perspective we may also become sensitised to the role of non-human actants in protecting material possessions; locks, keys, alarms, storage spaces, protective cases, and cleaning products all play an important role. Thus these distinctions emerge not only from the context of DCOs but also from an increased sensitivity to tracing the role of actants beyond the end consumer.

7.4   Moving

Within prior literature the consumer plays a significant role in moving possessions. As noted in Chapter 2, consumers may transport possessions between places, including between and within homes, whilst possessions may move between consumers via processes of lending, sharing, and passing on. In this section I shall focus upon those instances whereby DCOs may move between locations and between consumers. However, I shall illustrate that movement takes on a distinct form in this context. We shall see that as opposed to the transfer or relocation of singular consumption objects, DCOs are duplicated, with multiple distinct enactments emerging. Indeed, DCOs connected to the internet can be enacted, accessed, used, and transformed in multiple spatiotemporal locations simultaneously. Here we see that the notion of a singular DCO following a linear biography becomes problematic. However, we shall see that companies may act to constrain multiple enactments by tying DCOs to particular people (accounts) or places (devices).

7.4.1   Between Consumers: Duplication, Interwoven Enactments and Processes of Containment

As highlighted in Chapter 2, movements between consumers are seen to punctuate the biographies of many MCOs. Research documents second hand markets fuelled by MCOs repeatedly re-entering the commodity sphere (Belk *et al.*, 1988; Gregson and Crewe, 2003; Lastovicka and Fernandez, 2005; Denegri-Knott and Molesworth, 2009), the passing on of family heirlooms (Price *et al.*, 2000) and processes of sharing and lending (Belk, 2010; Jenkins *et al.*, 2014). Might such transitions be replicated in the context of DCOs? Much prior work assumes a singular MCO that changes hands as it follows a linear biography. However, as noted above, the notion of transferring a singular consumption object becomes problematic in the context of DCOs. As noted by Faulkner and Rund (2011) in their work on digital artefacts, these entities are infinitely reproducible and non-rivalrous since use of a digital artifact by one person does not affect its simultaneous use by others. 'Passing on' an ebook, digital music album or digital photograph to another consumer does not result in the loss of the consumer's copy. There is no single DCO that is 'transferred', but rather another enactment of the DCO emerges – transfer is replaced by duplication.

In Chapter 6, I noted that Tom described processes of illegally downloading music, films and software via torrent websites. In addition to downloading for his personal use Tom also described instances of passing these DCOs on to his friends.

> Especially when I'm back home my friends will be like "Can you get this for me?" and yeah I'll download them […] Normally my first reply is "Why can't you download it?" and then they say they don't want to get any viruses, so like they're willing to let me get viruses instead. So

they normally don't have anything to come back to that. If I'm quite chummy with people I don't mind doing it, because I know where I'm getting my sources from and if they're not good sources it'll pop up in my antivirus. […] A lot of them I do keep for myself, a lot of the movies anyway. There's all those and also in my documents I've got loads as well. But there's quite a collection but I'm running out of space so I need to find another hard drive I reckon.

Thus whilst Tom downloads files for his friends, he often retains a copy himself even once this item has been given to the intended recipient; rather than transfer we see duplication. Other instances include sending digital photographs to friends via instant messages, and emailing documents to others. Here processes of duplication produce multiple, distinct and unconnected enactments of a DCO; changes to Tom's copy of an mp3 file stored on his laptop will not affect the seperate enactment of this DCO stored on a friend's computer. However, duplication does not account fully for the 'movement' of DCOs. Rather, I observed instances where internet connections connected multiple enactments. This resulted in interwoven enactments whereby multiple consumers accessed enactments of the same DCO simultaneously, and where they hold the capacity to transform the DCO this process disrupts others' consumer-object relations also. For instance, as noted above, mummy blogger Alice intends for her children to one day look back on her blog as a digital scrapbook of their childhoods. Yet here the blog will not be 'passed on' in the same way that heirlooms and hand-me-downs have previously been documented to be passed on (Price *et al.*, 2000). Alice's children will both be able to access the blog, whilst Alice will not loose access. Rather, multiple enactments of this blog may exist simultaneously. Indeed, where DCOs are available publically online, as is the case with Alice's blog, infinite enactments may exist since anyone with an internet connection and the correct web address can access the DCO.

In Section 7.1 we saw instances of multiple, interwoven enactments in the context of Facebook profiles, whereby multiple consumers held the capacity to engage in processes of transforming these profiles and consent, resulting in a blurred sense of what is 'mine'. A number of such instances emerged. Louise and her husband Chris, for instance, share an iTunes account, enabling fluid instances of 'sharing' whereby apps, notes, calendars and photos becoming shared possessions, synced between devices. Consequently, changes made by Louise shaped the enactments of these DCOs on Chris's iPhone, and vice versa.

We just use Chris's account, same as on the iPhones. ITunes is all on Chris's account. And then any app he downloads on his [iPhone] automatically appears on my iPhone and vice versa, and you don't need to buy apps twice and things like that. […] Our photo stream, because we're using the same account, it's a joint photo stream so any photos I take appear on his phone, and vice versa, which is nice. So instead of me sending him a photo I can just say look at the screen, it's there […] [The Notes] synchronise, so that's nice. Calendars, we've got synchronising. Every time I book us up for something for a weekend, you know, there's such and such on this weekend we want to go to this, I'll put it in the calendar so then if somebody said "Right do you wanna go out on Sunday?" he can look at it and say "Ah, no, Louise's already booked us this but I can see we've got Saturday free". So, yeah, we use that all the time. And the Notes is great for shopping.

> We both add to it as we think of something, and then if he goes Tesco at lunchtime when he's at work, he can just look at it and say, "Right she needs these. I'll get these."

Here these interwoven enactments are viewed in a positive light, becoming an important shared possession that is mutually shaped by Louise and Chris.

Jane provides another account. Jane, 43, works as a business analyst in the IT sector and lives in the south of England with her husband and young son. Jane describes herself as being tech savvy, and throughout the interview described using and experimenting with a range of digital platforms. Jane described a process of collaborating with her sister to produce a Christmas calendar for their parents, featuring photographs of their children. Rather than meeting up in person to view and select photographs to feature in the calendar, the sisters were able to simultaneously consult a selection of digital photographs are stored in online locations.

> I gave my sister the password to my Photobucket account, then she would then just upload maybe about eight or nine photos of her girls, and then I would upload random ones of my son. And then what I said to her sister that the front cover will be a mixture of them, January and December will be a mixture of them, and then five of each, so five of her girls and five of my boy. And then I just sent her the link, once I designed it all on the Vista Print site I sent her a link to where it was for a preview. […] sites to upload your photos are a godsend really. Oh! And the other thing as well is I need a few more different ones and I said you know, what about the ones you put on Facebook because I can easily grab those, screen-print and cut them down, um and yeah I think it's much easier.

Here in providing her sister with the password to her Photobucket account, Jane engages in a process of creating a shared collection of photographs that she and her sister can simultaneously view, add to, and discuss. Thus again we see that interwoven enactments of DCOs may present new instances of 'sharing' DCOs. Such new, emerging processes present an interesting phenomenon that is not adequately explored in prior literature, and although a more extensive exploration of such processes is beyond the scope of this thesis, this presents an intriguing area for future work. However, we saw in Section 7.1 others' transformation of 'our' DCOs was not always desirable, as in Holly's account whereby friends add unflattering photographs and delete content.

Thus we see the capacity for multiple enactments of DCOs, and processes of duplicating possessions. However, companies often attempt to constrain multiple enactments, returning DCOs to singular entities tied to a particular consumer (or account). As noted in Chapter 3, typically DCOs are tied to a particular account, governed by a contractual agreement that typically gives consumers the right only to personal use of the item, forbidding acts of transfer. Consequently, whilst some DCOs were observed to move highly fluidly between consumers (e.g. digital photographs), movement amongst consumers was conspicuously absent from participants' accounts of certain categories of DCOs. Ebooks present an example; despite a number of participants regularly reading ebooks, participants did not mention any of the processes of lending

or passing that are common in the context of material books. Often there was no direct recognition that such acts are prohibited, simply an absence of such processes. Alice explained that she was unsure as to whether she could indeed pass on her ebooks to her children.

> What I really, really hope, is that when my children reach a certain age, they'll, want to start reading some of [my books], and they'll say, you know, 'Mum can you recommend a good one' or 'what do you think I should read next', that sort of thing, so … obviously it didn't start off like that but now I've got children that's what it's become, and I sort of hope that we'll build a relationship around books in a way […] I don't know how many copies [of ebooks] you're licensed to have. So if my daughter had her own Kindle whether I could sort of transfer one onto hers… I don't know. I'll have to find that out, I guess.

During the interview she anticipated her children reading her own books as they grew up, but noted that this might be problematic in the context of her Kindle ebooks. In Chapter 6, I noted that consumers rarely read contractual agreements, and here we see that Alice is unfamiliar with the terms that restrict her use of the ebooks; restrictions are often only made present as obstacles to desired processes arise.

Other participants explained that they would engage in such processes regardless of whether such processes were deemed 'legal'. For instance Jane described a complicated processes of sharing her digital music with her young son, copying these items (purchased from iTunes) onto his new Samsung device.

> They do make it very difficult. I kind of think, I've paid for it, I haven't gone about it the wrong way or anything, but that's typical Apple. […] I look at it is that I've paid for it and it's staying within... it's not like I'm giving it to a friend who's then going to give it to... you know, it's my son. So I don't see that as illegal, it might be illegal I don't know. But, no I don't think that. Because it's just going on his device for personal use as well, not for anything else. […] If you go back to the days of vinyl, you purchased it, you've got a physical item there, here we are it's now yours. I'm handing that down to you. So, why the same can't be applied to digital media? Especially as well when the prices are not cheaper.

Here we see that regardless of iTunes' terms of service, Jane's belief that she should be able to share her digital music collection with her son motivates such processes, and she rationalises this action by drawing comparisons with non-digital music. In sum, we can observe that movement is distinct in the context of DCOs; as opposed to processes of transfer, leading to processes of sharing, lending and passing on, we see alternative processes of duplication and of interwoven enactments. However such fluid movement may not always desirable by companies who may attempt to constrain such processes and to either enact DCOs as singular or limit duplication/multiple enactments.

7.4.2   Between Places: Placeless Possessions and Trapped Possessions

In addition to moving between people, MCOs may be subject to spatial transitions and consumers may transport possessions between places, for instance moving possessions between homes (Mehta and Belk 1991; Epp and Price 2010), between rooms, and in and out of storage (Epp and Price, 2010). How might digital possessions move between locations? How do they move between devices or software? I shall proceed to discuss two highly contrasting themes emerging from my research; placeless possessions and trapped possessions.

In some instances, participants' accounts echoed research by Odom *et al.* (2014) in that 'placeless' possessions appeared to follow the consumer and were accessed in multiple locations and embodied in multiple forms via multiple devices. For instance, as noted in Section 7.1 above, ebooks were accessed on e-readers and mobile devices and were displayed differently in each case. Here there is less sense that ebooks exist in any one location, rather multiple devices act as portals that embody ebook collections. Again, as opposed to duplication we can observe interwoven enactments; the same ebook is enacted in different ways, on different devices, in different locations. Similarly Louise describes her frustration with duplication ('transferring back and forth') and instead stores all data on a central server (Figure 8) that she can access over the internet via multiple devices, from any location.

It's our main data backup, so everything I do... if I do an invoice for somebody because I'm working from home, if take some photos of Josh, if we download a film… it all goes onto there and then from there we can decide how we want to play it […] So we can play it on the telly through the PlayStation, we can play it in the bedroom through another media player that we've got in there, so once it's on the server we can do anything to it […] Where if we're down at my mom's I can connect to it and drag it down to my mom's. Just over the internet. It's just got an address pointing to it and we can just connect to that address. Log in, using username and password. And we're on it just as if we were here. […] Say I've gone out to Mum's and Henry falls asleep and I get sort of a couple hours to myself and think, 'Oh, I can do that little bit of work'. Then I'll connect to here, copy the documents I need and then disconnect then work when I'm down at Mum's.
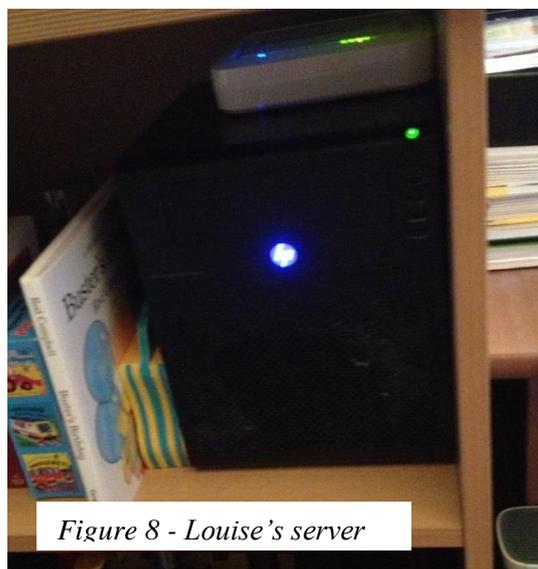
Figure 8 - Louise's server

Here this 'placelessness' is facilitated by an array of actants including Louise's server, an internet connection, her chosen device, as well as usernames and passwords, but is experienced by Louise as seamless. In other instances participants described processes of backing up documents to Dropbox, or self-emailing them, enabling them to be accessed from anywhere via any device should this be necessary. Andrew, 26, provided a similar account. Andrew is a mature student living in Bournemouth. He is currently studying film, but also runs his own record label and DJs in his spare time. Unlike Louise, Andrew did not have his own locally stored server but instead used Apple's iCloud service.

> I pay Apple £25 a year and they store all of these songs on one of their computers somewhere in California and then with my iPhone if I ever want to listen to one of the songs they're just there and I click on it and it will just stream it straight away. So instead of having to have a massive memory on my phone, because of like digital cloud services I now have 16,000 songs on my person at all times […] Yeah it's a fair bit of music and then films as well. The good thing I like about streaming film as well is that I don't need anything. If I want to watch my film I go 'click' and I've got it. I don't keep it anywhere. I don't need to have a DVD. It's just there straight away.

Andrew explained that this transformed the process of DJing, giving him more flexibility since forward planning – deciding which tracks and albums to bring with him – was no longer necessary.

> I have that 16,000 songs now – normally you couldn't take that to a club. I used to be limited. When I used to tour I used to have my record bags […] I would have to take whatever records fit, like some classic records and my new ones and then organise them and have them ready and that was all I could play. That was it. Whereas now if something's not really going right, or I want to play this tune or you know, if people aren't feeling it, then like I literally just go through and scan down […] So you have all these things to hand whereas before you didn't.

In these accounts we see that compared to MCOs (e.g. Andrew's records) that are spatiotemporally fixed, we see that complex networks of actants enable DCOs (e.g. digital music) to be enacted in multiple spatiotemporal locations, as desired. This placelessness is enacted, requiring in particular the relation of local devices (e.g. Jay's laptop used for DJing), internet connections and servers (whether owned by the consumer or by a company) that enable consumers to access these items. As we shall see in Chapter 8, where there is a limited internet connection, or if this server fails, this placelessness may break down and DCOs may not be able to be accessed (either temporarily or permanently).

In stark contrast to such placelessness, DCOs could also be bound to particular software of hardware and many consumers therefore had difficulties moving some DCOs. For instance, videogame content was left behind on old consoles and within previous versions of the game, whilst some participants struggle to move digital music collections between devices. For instance, Richard explained that when he moved from Forza 3 to Forza 4 (the more recent iteration of the videogame) he had to leave behind his treasured collection of cars. He had collected over one hundred cars in the previous iteration of the game but now only has fourteen. He had obtained a

top car from each manufacturer and upgraded them, giving him a garage full of cars that were hard to beat. He received some stock cars when he moved to Forza 4 (provided as a gesture of loyalty) but wasn't able to take his collection with him into the new version of the game. Richard spoke of 'losing' these cars (even though they were technically still accessible in the old game).

> My collection is quite small at the minute. I used to have Forza 3 where I had like a hundred cars and then when I bought Forza 4, obviously I had to start again […] What they do is they give you sort of a, um, loyalty thing. It reads your hard drive and if it can see you've got a previous save from a previous game it will give you a certain amount of cars for free depending on what your level is in the game and whatever else. So it gave me like five or six free cars. But that's not what I had on my old one. Like I had some cars that I'd spent so much money on. Um, like I had a Nissan that I'd spent so much money on but in the last game it was a downloadable car but in this version I think it's just standard in the game so you can buy it. Let's look… Nissan… yeah I downloaded that one on the other game, upgraded it so it was literally – I raced my friend so many times in it and I never lost in that car it was so quick. But when it came to getting the new game then obviously it couldn't give me that car as a starter car because it was downloadable on the last one. So I've got some basic cars instead, so now I've got to save up to be able to buy that one again to be able to get it to where it was. […] All the ones I had were either upgraded performance-wise or visually. So I'd rather bring them all across so I don't have to waste time doing it all again."

Richard explains that although he has tried to rebuild his collection in the newer version of the game, the cars never feel quite the same:

Researcher: So out of these cars, which would you say is the most important to you?

Richard: Um, probably that one. The Ford. Just 'cause, like I said, I had it on the last game and I actually put the effort into saving up to buying it on this game and then upgrading it. You can see I haven't painted any of the outside or anything, it's stock colour. But um, I've actually done the full performance upgrades on it to get it to where it was before, and then I'll go through and do all the painting on it another time but I can't remember what it looked like on the last game.

Researcher: So would you want it to look the same?

Richard: Yeah, because then I've got my car back then. And again, if I bought that Nissan I'd get it back to where it was and everything.

Researcher: Would it be the same if you could get it to look the same?

Richard: Oh no, no. Because I've done other races in the other car which I can't do on this one 'cause they haven't got it on here. And like I've beaten my friend. Say this Nissan for example, yeah? I'll get the Nissan- however much it's worth – 100,000 I think it is. Where's it to? There. 150,000. Say I spend 200,000 in total painting it and whatever else, I'll have the same car but that wouldn't be the one that I've beaten people with […] In the other game I've done 7,000 laps in and I don't think I've ever lost in it because it was just so quick. Whereas if I bought it in this it would just be blank. Nothing has been done in it. So it wouldn't feel the same.

Here Richard's treasured car collection is 'trapped' within a specific piece of software, from which he is unable to separate it. Other participants described similar instances. Charlie is an avid

video gamer and explained that World of Warcraft have recently introduced the ability to move content between servers, however he is frustrated that he has to pay to do so.

> World of Warcraft is linked up to different servers so they're not too many people playing the same World at once, if you know what I mean? So when you start the game, you make a character and then you choose a server you want to put it on. Once you've done that, you're kind of stuck to that server, so if there's somebody else on a different server, you won't be able to interact with them. Blizzard actually just introduced… There's this system where you can pay to swap servers. […] It's annoying, 'cause you… Everyone hates doing it, but the service is just there for them to make money. I mean, it cost fifteen quid, which is a lot of money just to move something virtual from... here to there... Just so you can play with this other guild that you may have never met before. And a lot of the time, the problem is that it doesn't work out with this new guild. So this person paid fifteen quid to move to this new server... and then, everything goes to... Yeah, sorry. I'm trying not to swear.

Here movement between places is possible, but is charged at a premium. Charlie expresses his frustration at having to pay for this service of moving digital possessions. Trapped possessions were not only present in the context of videogames, and were not only trapped within software. Becky, for example, explained that after receiving a new laptop for Christmas she was struggling to transfer her old content onto her new device due to broken ports. She explained that she had uploaded some content to Facebook (photographs) and sent others via email (e.g. important documents such as CVs) with plans to re-download them onto the new computer, although the majority of content (including old music) is left behind on the old laptop. She explained that this is because she doesn't know how to transfer this data. This means her music is effectively 'trapped' on her old iPod. She can't plug it into her old computer (the USB ports are broken), but worries that if she plugs it into her new computer it will sync automatically to the empty iTunes software and she will lose her music. Since the music is illegally downloaded she would have to re-download it again.

> If I plug my iPod into my new laptop all my songs would be gone… because I think I'd have to get a new iPod, because I think if I plugged mine in now all my old music would go […] I don't want to risk putting it on my old iPod, I'd rather get a new one for my new music and keep my old iPod for all the old music. 'Cause I haven't been able to put music on there for a while, it's all old music, so I'd be more likely to get a new iPod and start, just start putting new music on there from my laptop. […] It would be annoying because they wouldn't be all, you can't access them all at once, you'd have to keep changing iPods, but then I'd quite like it as well because sometimes I do just want to listen to old music so I can just stick that iPod in and just listen to that. And then if I wanted to listen to new music then I could listen to the new music, but then if I wanted to listen to them both, like, one after the other, I wouldn't be able to.

In Becky's account we see the importance of a range of actants to processes of moving. Becky's usual process of moving DCOs from one device to another involves MCOs including memory sticks, laptop devices and their USB ports. However, when these ports become broken this process breaks down and cannot be enacted. Consequently, Becky seeks alternative processes by bringing together other actants (e.g. Facebook pages, email accounts, internet connections). Furthermore, her fear that she will lose the digital music on her old iPod upon plugging it into the computer reveals Becky's perception of the iTunes software's agency; she fears that the software

may perform an act of deletion beyond her control. Here we see that even 'digital natives' may lack the technological understanding necessary in order to order and manage their collections.

Richard provided a similar example of restrictions on movement, this time in the context of his digital music collection. The majority of Richard's digital music has been downloaded illegally but is accessed via iTunes software, and this digital music collection is synced with his iPhone and iPad. Prior to our third interview Richard had swapped his iPhone for a new Samsung Galaxy S4. Since the Samsung device runs an Android Operating System this music is incompatible and therefore Richard has a separate collection of music on his phone and on his computer/iPad.

> With my new handset because a lot of the songs wouldn't go onto the Samsung I had to start again. I had to buy them on there. I've still kept my old ones on my laptop 'cause I've still kept iTunes for my iPad but to get songs on my Samsung to use in the gym or in the car I'd have to get them separately through the Play Store […] I've got the files on my computer separately so I thought if I plug my Samsung in and click and drag them across it'll work, but it just fails, it doesn't work. I think it's just that the file type couldn't be read on there. I think the ones for iTunes were WMA files or something like that. But they had to be changed back to mp3 for the Samsung and I haven't got the thing [software] to do that so I just haven't bothered doing it.

Thus Richard's digital music can be moved from the iTunes software on his laptop to his new Android device. However, this process of movement would involve the acquisition of new software in order to perform a process of transforming DCOs from one file format to another. This process would need to be performed for each new song downloaded. Here we see that this process of moving requires a level of knowledge and effort that may not be required for the movement of many DCOs. In contrast, Richard compared this to the ease of transferring data from one iPhone to another, as he had typically done in the past.

> You basically just get a new handset, because everything on there's exactly the same because it syncs to your iTunes anyway. So it straight away has all your apps on it, straight away has all your songs on it. And your films or whatever else you had. And your text messages even. Just a new handset with the same data on it.

Thus Apple's software enables an easy process of moving DCOs between its own devices. For some participants the ease of moving DCOs between devices was a key motivation for staying with the same brand of mobile phone; Alice, for instance cited this as a key reason for always purchasing phones that have a Google operating system. Thus we see that software can enable seamless processes of moving, or can complicate the moving process by requiring additional processes of acquiring new software and new knowledge, and we might speculate that this serves companies' interests.

In summary, we have seen stories of consumers who are struggling to move their collections from device to device or videogame to videogame, resulting in trapped DCOs left

behind or spread across locations. Thus DCOs can be 'placeless' and accessible via multiple devices in multiple locations, however others are bound to particular software or hardware.

7.4.3 *Summary: Distinctions in Processes of Moving*

In this section I have explored processes of moving DCOs. Prior literature has documented the movement of singular DCOs as they are transferred (e.g. lent, passed on, sold) and shared between consumers (e.g. Price *et al.,* 2000; Belk 2010; Jenkins *et al.,* 2014), and transported between spatiotemporal locations (e.g. Mehta and Belk 1991; Epp and Price 2010). However, in the context of many DCOs we can observe the absence of a singular, spatiotemporally fixed enactment and consequently processes of movement are distinct. In particular, the notion of singular consumption objects moved through linear biographies by consumers as they are transferred between people and places cannot account for the complex processes of movement documented here. As opposed to transfer we can observe processes of duplication, whereby additional enactments of a DCO emerge in distinct networks, whilst internet infrastructures have led to instances of interwoven enactments whereby DCOs can be simultaneously accessed, used and even transformed, by multiple consumers. In both instances the notion of transferring a singular DCO, access to which is then lost by the 'giver', is inapplicable and we see that extant theories do not account for the new processes of moving documented here. Similarly, movement between spatiotemporal locations can be distinct as internet connections enable DCOs to be accessed via multiple devices and from multiple locations. Here there is less sense of DCOs being transferred from place to place since these items do not have one fixed, spatiotemporal location. However, we can observe a stark contrast whereby DCOs become trapped on particular devices or particular software, or bound to particular consumers. Important to note here is the way in which processes of movement are facilitated by an array of actants, including most notably the internet infrastructures that enable interwoven enactments and placeless DCOs, and the ways in which actants such as software can constrain movement. Thus as with processes of transforming, ordering and protecting, consumers' capacity to engage in processes of moving DCOs is enabled and restricted by non-human actants.

7.5 Chapter Summary

This chapter documents various ways in which relations between consumers and DCOs were observed to present significant departures from the consumer-object relations documented in prior studies of possession. Processes of transforming, ordering, protecting and moving have been explored in the context of DCOs, with emphasis placed on how these processes are 'done'. The above analysis speaks to the study's research questions by highlighting the role of networks of

actants in performing such processes (in particular the role of software in enabling, constraining and even displacing consumers' agency), documenting ways in which DCOs exhibited distinct characteristics (including multiple and transient enactments) that shaped consumer-object relations in unanticipated ways, and demonstrated ways in which companies' ongoing enactment of DCOs as assets may interfere with and disrupt consumer-object relations. In the final findings chapter I shall proceed to document ways in which these relations were observed to break down.

Chapter 8: The Dissolution of Consumer-DCO Relations

In this final findings chapter I consider the ways in which consumer-object relations may break down, documenting both instances where the consumer 'divests' digital consumption objects (DCOs) by actively severing consumer-object relations, and instances of 'loss' whereby these relations are disrupted by other actants. I will highlight the ways in which networks of actants enable consumers to both avoid selective divestment and to engage in mass divestment processes whereby participants simply divested 'everything', quickly and easily erasing folders, devices and accounts, in a way that would be difficult to achieve in the context of material consumption objects (MCOs). However, we shall see that such processes are not always possible; I note instances where DCOs linger, persisting despite consumers' desire to divest. As with material possessions, the conclusions of consumers' possession of DCOs was not always intentional; in addition to acts of divestment I will discuss the various ways in which DCOs are lost, including instances where hardware was broken or lost, services were discontinued and internet connections were absent. Furthermore, I shall illustrate that such cases of loss resulted not only in devastation, as illustrated in previous research on cherished digital possessions, but in some cases was met by indifference and even relief as participants felt freed from their digital clutter and observed an opportunity to start afresh.

8.1   Divesting

By divestment I refer to processes whereby the consumer plays an active role in dissolving consumer-object relations, although of course a range of actants may prompt such processes (see Epp and Price 2010). As we saw in Chapter 2, the divestment of material possessions has come to receive substantial attention within consumer research (e.g. Young and Wallendorf, 1989; Lastovicka and Fernandez, 2005), and the social sciences more broadly (e.g. Gregson *et al.,* 2007), with research exploring consumers' motivations for, and methods of, divestment. In reviewing this body of work in Chapter 2, it became evident that although such acts of divestment may conclude the individual's possession of an object, the item's biography often continues to unfold as MCOs are resold, passed on and repurposed. Might DCOs' biographies unfold in similar ways? What might prompt consumers to divest their digital possessions? How might this divestment take place? In this section, I explore processes of divestment in the context of DCOs.

Firstly, what actions do consumers take in order to separate themselves from their digital possessions, where they choose to divest such objects? What happens to DCOs once they have been divested? Are the complex biographies of material possessions acknowledged in Chapter 2 mirrored by digital possessions? Prior literature documents a plethora of divestment processes;

divestment may involve the realisation of a consumption object's latent exchange value as it re-enters the commodity sphere (Belk *et al.,* 1988; Gregson and Crewe, 2003; Lastovicka and Fernandez, 2005; Denegri-Knott and Molesworth, 2008) or processes of passing on treasured possessions with significant personal meanings to friends and family, (Price *et al.,* 2000; Gregson 2007), whilst even where MCOs are disposed of their biography does not necessarily – even as rubbish there is potential for rediscovery (Thompson, 1979; Parsons, 2008). However, such multifarious paths to divestment were not observed in this study of DCOs. In Chapter 3, I noted that many DCOs are prevented from being transferred to other consumers by the terms set out in contractual agreements, often enforced by code, and in Chapter 7, I noted the ways in which movement between consumers can be restricted.

However, even where such movement can take place the result was typically duplication – passing on a DCO was not typically a means of divestment since the the consumer retains access to the 'original' DCO; in giving a friend a digital music file I do not lose access myself – I have not divested the file. In the absence of passing on or re-selling as divestment strategies, paths to divestment were highly limited. Indeed divestment largely involved the dissolution of the DCOs themselves by deleting them. Thus DCOs did not go on to fulfil long, linear biographies as they moved between people and places but disappeared (although other enactments of the DCO may persist elsewhere – if I delete my copy of the digital music file, my friend's copy may remain elsewhere). An exception can be observed in the context of items in videogames where artificial scarcity is introduced and the notion of transferring singular items becomes applicable; Richard for instance, described a process of giving duplicate cars within videogame Forza to his friend. However aside from items within videogames the divestment processes I observed in this study were limited to processes of deletion.

How does such deletion take place? Firstly, we shall see that participants avoided selective processes of divestment, requiring acts of carefully sorting and evaluating possessions. However, in place of selective divestment, consumers often opted for mass divestment strategies, deleting large quantities of DCOs in another attempt to avoid the effort required for selective divestment. Furthermore, I shall document a selection of cases where consumers were unable to divest, with unwanted DCOs lingering, sometimes in highly visible forms on online platforms.

8.1.1 *Avoiding Selective Divestment*

Prior literature documents selective processes of divestment, whereby the consumer divests selections of possessions that are no longer consistent with their current identity projects or where circumstances prompt divestment of these items (e.g. Young, 1991; Lastovicka and Fernandez, 2005; Gregson *et al.,* 2007). Consumers are seen to evaluate possessions, choosing which to keep

and which to divest, and therefore such selective acts of divestment can play an important role in shaping the order and meaning of remaining possessions. For instance, Gregson *et al.* (2007) describe one participant's routine of methodically sorting through her wardrobe twice a year and evaluating each item, with highly worn or washed-out items thrown away and a selection of other items given to charity shops; it becomes apparent that this isn't simply a process of divestment but part of a broader process of clothing management. Similarly, processes of selective divestment described by participants in this study illustrated their role in shaping retained digital possessions. Natalie, for instance, described regular processes of de-cluttering her digital music that over time became full of songs she was no longer fond of. A couple of times a year Natalie tackled the task of deleting these unwanted songs.

> With digital music if I haven't listened to it for six months then I'll usually end up deleting it. 'Cause I know I can always download it if I want it again. […] There are certain things I can't bring myself to delete, because I'm like "Oh, but what if one day I want to listen to it!" Bands I love, songs I love I won't delete ever, even if I haven't listened to it for ages […] Every six months you have that morning with all that time when you sit down and sort through it all in a sense. I guess it's like when people used to maybe go through an attic or something, now you go through your iTunes instead.

Such episodic processes of selective divestment are akin to ritual acts of spring-cleaning. Natalie explains that she doesn't *need* to delete these songs since she is not short of storage space on either her laptop or her phone, however these acts of de-cluttering are important to her since they enable her to maintain a meaningful and selective collection of digital music (although as we shall see in Section 8.1.3, she struggles to truly delete some songs that lingered in the iCloud available for re-downloading). Thus acts of selectively divesting DCOs can also serve to enable consumers to mark kept items as meaningful and valuable. However, such accounts were rare.

Processes of selective divestment were largely avoided by participants who tended, where possible, to simply keep everything. One thing that struck me during this research was the sheer quantities of DCOs that each participant identified. Many participants kept old consoles and memory cards in order to retain access to saved game data (despite no longer playing the games in question), and a number were able to dig out assortments of old mobile phones and laptops, stored away and forgotten but still loaded with data. Many showed me thousands of emails, text messages, and instant messages, whilst it was common for participants to have tens of thousands of photographs stored on their computers or laptops. Others discussed dormant social media and email accounts that had been abandoned, yet not deleted. Indeed, the more participants talked, the more DCOs they were able to identify, often discovering long forgotten folders, documents, hard drives, memory sticks, mobile phones, and social networking profiles during the interviews. This appeared to be rooted in the absence of selective divestment. Often everything was kept, whether actively or passively.

In some instances I observed the active keeping of everything 'just in case'. Many DCOs held nebulous value, whereby consumers had not established whether these items should be classified as meaningful possessions or whether they should be deemed rubbish to be deleted. This ambiguity was often rooted in a struggle to anticipate future meaning. As a result participants adopted a 'just in case' mentality, often retaining vast quantities of files, photographs, emails, profiles, and accounts, even where they recognised that they held little value. Unlike small accumulations of MCOs such as letters or photographs that might be retained in a loft or cupboard, participants identified thousands of digital files of all sorts spread across multiple devices and platforms. Indeed, often they confessed that they tended to just keep everything, in a way that is rarely possible with material things. For instance, Natalie discussed her reluctance to close her unused online accounts, which persist online in an abandoned state.

> It's like my Hotmail – I don't use it; no one has that address anymore, but I still have it. I guess I kind of worry if I delete things, that I might need it…. I probably still have a Neopets account somewhere floating around. I'm not really one for going back and deleting things, unless I know I'm really not going to need it…I just stopped using like MySpace, Hotmail, MSN, Neopets. I kind of just... leave it. I don't ever unsubscribe or delete my account, or anything like that.

Thus even accounts that had been inactive for years, including those that had been forgotten about until this interview were kept, since Natalie worries that she 'might need it'. Natalie also avoided disposing of nebulous locally stored content, including old instant messaging conversations with ex-boyfriends from her teenage years, instead simply moving them to external hard drives.

> Some of the things like that, like to do with old relationships, I don't necessarily want to do delete them but I probably should; I can't let go [laughter] I put them on external hard drives, because it's not something I want to look at every day, but if I was, like, backing up or something would happen to make me go through the files, it's something I don't mind coming across and then I'll have a look, but I've kind of... It's almost like a reassurance in a sense. I know that might sound weird, but you know they're there somewhere if you need them. I'm not going to read them every single day, thank god, but if I was to plug in my external hard drives and have a look at them, they'd be there.

Natalie opts to simply keep everything 'just in case', and retaining everything provides a sense of reassurance, enabling her to avoid confronting these items and making difficult decisions that she might come to regret. Rather than carefully assess whether such items should be kept or divested, she finds middle ground in moving them to an external hard drive in case she should ever need them. Here the external hard drive serves a similar purpose as an attic or garage in material consumption (McCracken, 1986), acting as a dumping ground for liminal, ambiguous or troublesome possessions.

The fear of divesting something one might someday regret was intensified by the extent of participants' DCOs, which made careful and selective divestment time consuming. As we saw in Chapter 6, consumers increasingly create and accumulate extensive quantities of DCOs.

Participants could take hundreds of photographs over one weekend, whilst some received hundreds of text messages, instant messages, and emails each day. Consequently, many were unwilling to invest the extensive lengths of time necessary in order to sort through these items and engage in selective processes of divestment. However, they feared that in not doing so carefully, they risked deleting something valuable or important and therefore abandoned attempts at divestment altogether. For instance, Chloe explained that although she had initially attempted to engage in a methodical process of deleting email by email from her Hotmail account, the extent of accumulated emails was such that she had simply become overwhelmed and all but given up.

> At the moment, my Hotmail is getting really clogged up, with loads of Groupon and Living Social deals. I get about five a day from Groupon and about three a day from Living Social […] I've got over 2,000 unread messages… and I don't even know how many read ones as well. It'd have to be about 10,000 to 15, 000. It's madness! I try to go through and you're like, "When I am ever going to need this email from, I don't know, ten years ago or five years? When am I ever going to really need that?" Then I think, "I might need it at some point…" But in reality, I don't need it. […] Because of the enormity of the task … I try and do it if I have a minute, even at work if I have five minutes I'll quickly delete a load of emails, but I think 'cause there's so many there, it's safe to say it's unmanageable in some respects and I need to just... I probably could spend a day, just clearing out the whole inbox. But I don't want to just delete everything and then lose things that are important.

Here Chloe is overwhelmed by the sheer quantity of her emails and the enormity of the task of sorting through them. Dion *et al.* (2014) describe how participants can come to feel 'enslaved' by their material possessions as they engaged in continual processes of ordering and tidying them as they repeatedly became out of place, and we see here that selectively divesting DCOs can be seen as an overwhelming and highly daunting task that should be avoided where at all possible. Indeed, here Chloe is beginning to give up on making any substantial attempt at de-cluttering and instead just keeps everything. She has a fear of deleting even mundane, out-dated emails 'just in case' she might need them, despite recognising that this is highly unlikely. It is important to note that the items discussed by Chloe and Natalie would likely, if evaluated, be fairly easily categorised as rubbish (for example, an email receipt for an online purchase three years ago), however here they (along with everything else) are retained.

Whilst in some cases participants actively kept digital possessions 'just in case', at other times their retention was more passive. I also witnessed many digital possessions that simply persisted, despite being either recognised as rubbish or not considered at all. Charlie is 23, works in finance and lives in Bournemouth. He explained that his text messages simply accumulated and remained due to inertia, rather than being actively kept out of some perceived future value.

> I remember ex–girlfriends and stuff like that, if they'd send me a sweet text or something like that [I'd think] 'I'll save that one and keep it', like so I could look at it like "Aww!" That's all rubbish; I would never do that nowadays. I was young, a stupid teenager in love and all that crap. But that was years ago. Nowadays, no... no […] I still keep them all. There's not much point in deleting them. I don't think phones will really get filled up nowadays with the amount of storage

they put on them. […] I mean, this phone I think I've had for two months now, but my last phone I had for, like, a year and a half and I didn't even bother checking what my storage limit was on that thing. I think I just kept filling things up and up and up.

Thus whereas Charlie used to engage in active keeping of sentimental text messages, these items hold very little meaning yet remain stored on his phone, where they accumulate and are passively retained. It becomes clear that Charlie's text messages aren't kept out of an inability to clearly assess their potential future value – there is no act of evaluating and 'keeping' these items. Rather, these text messages simply persist as a result of Charlie's inertia, which in turn emerges from a lack of pressure to divest. Deleting these text messages seems unnecessary to Charlie since the perceived benefits of divestment are not seen to outweigh the time and effort this process would require. Similarly, Richard described an old social media profile that he deemed as rubbish yet has not divested.

> I've got a MySpace from when I was like sixteen. I don't use it anymore. 'Cause I got Facebook so I don't need it. I haven't been back on it for years, it's embarrassing to look at it. I think I've got the line on there "Jeremy Kyle rules". I don't delete it because I don't know how. When I first got Facebook I had both for a while, but when I went to delete it I couldn't figure it out….so I just left it. I was younger then, if I went on it now I could probably do it straight away, but I just don't bother. I don't use it, no-one I know uses it so they don't see it. There's just no point, what's the point in deleting it?

Richard's account is distinct from Natalie's where online accounts and profiles are kept because she might one day need them. Rather, similar to Charlie's account above, there is simply little perceived value in divestment, particularly when this process complicated; although Richard looks briefly into deleting his "embarrassing" MySpace profile he is quick to give up on this goal. It becomes clear that here the retention of DCOs is more passive, and can result simply from a lack of divestment as opposed to active keeping. As Holly put it: "If I'd kept a physical letter, there'd be a reason for me keeping it. I probably would have made a conscious decision to keep it somewhere. But then Facebook messages and text messages, they're just automatically kept." It seems that keeping everything involves less effort than the sorting, classifying, and organising of large quantities of DCOs

The avoidance of divesting ambiguous and troublesome items is not unique to DCOs; MCOs, too, can generate feelings of uncertainty – think for instance items of clothing that we love but are uncomfortable to wear, no longer fit, or which we feel we can't quite 'pull off' (Gregson *et al.,* 2007), and gifts we actively dislike but feel a sense of guilt at divesting (Sherry *et al.,* 1992, 1993). It is not unusual for participants to delay divestment in such cases. Similarly, it is not uncommon for clutter to accumulate in everyday life, albeit perhaps to a lesser extent, often holding little value, but yet to be dealt with. However, the pressures of MCOs may eventually force individuals to decide what to keep and what to divest. When storing material goods we find

that eventually the attic, the cupboard, or the basement becomes full. As goods begin to invade living spaces and inhibit the performance of everyday tasks, we may be forced to decide which items to keep and which to divest. Spatial limitations were significantly less of an issue in the context of DCOs, however. Digital space was so freely available and so inexpensive in comparison to material storage space that many participants were not prompted to make such decisions. Indeed, where consumers did begin to reach spatial limits they simply continued to purchase more space, rather than engage in difficult and time consuming divestment processes. For instance, Louise revealed that she had 25,000 digital photographs stored on the family's server or 'NAS box' (Network-attached storage box), the majority of which have been taken in the past three years since the birth of her first child. As described in Chapter 6, we again see the capacity to create vast quantities of digital photographs. Louise admits that many of these photographs are highly similar and perhaps unnecessary, yet rarely are photographs definitively deemed 'rubbish' and divested. Instead they are kept, enabled by a range of hardware including numerous hard drives.

> Because we're techies we find space. In the NAS box there we've got two mirrored terabyte hard drives for the general data. But of course because it's a computer as well we've got two sixty gig hard drives […] If we start to run out of space there then I would have to go through the photos and delete out duplicates, but we've got the PC there, I've got an almost empty hard drive on my laptop, you know, we've got enough space around. If we need extra space we'll just archive stuff and send it to the datacentre. And again, if we run out of space up there we'll put a bigger hard drive in... Storage isn't an issue.

Here divestment is avoided via the acquisition of more storage space. Louise is particularly knowledgeable about technology due to her background in the IT sector. However, less tech-savvy participants described the purchase of external hard drives, memory sticks, and online storage space when they began to approach their storage limit. Participants recognised this to be a fairly recent development, noting that just a few years ago storage was a great deal more limited. Early mobile phones, for example, would only enable the storage of small numbers of text messages, and whilst PlayStation 1 Memory Cards once stored 1MB of data, the Xbox One and PlayStation 4 both come equipped with 500GB internal hard drives. For instance, Chloe explained that the amount of storage space on her current iPhone means that she simply doesn't think about deleting text messages:

> To be honest, with the old phones back in the day you could only store a certain number of text messages. And these phones now seem to pile them all up and keep going and going. […] I don't really think too much about keeping or deleting texts […] I don't really see the point [in deleting them]. I've become quite lazy with my phone, I just let things pile up. I just forget about them.

Here we see parallels with Charlie's account of his text messages, above. For Chloe these texts aren't actively kept out of perception of some future value or use. Rather they simply 'pile up' and are forgotten about. Unlike the accumulation of material clutter that upon exceeding the

limits of allocated drawers, boxes, attics, or basements would need to be dealt with, and indeed unlike text messages on earlier phones that, due to their limited storage capacity, needed to be culled at intervals to enable the receipt of further messages, the available space on Chloe's iPhone means that this accumulation can continue indefinitely – most likely she will change to a new handset before she runs out of space. Indeed, newer handsets are likely to include greater quantities of storage space than their predecessors. Here we see the importance of spatial constraints in provoking processes of divestment. The attic, cupboard or hard drive dictates how much 'stuff' can be kept and in their fullness tell us when we must engage in divestment processes. However the vast quantities of digital space upon devices, and/or the ability to easily acquire more space (by acquiring external hard drives, memory sticks, or SD cards, that are compact and easily stored themselves, or online storage space that takes up no physical room), mean that spatial limitations may not place pressure upon consumers to engage in the divestment processes.

Alongside spatial limitations, transitions have been found to prompt acts of divestment in material consumption. Gregson *et al.* (2007) find that the process of moving home has been seen as an opportunity to shed things from consumers' past lives. Whilst they focus on such processes in relation to identity and the notion of a fresh start in a new home, there is of course a much more practical element to such transitions; in order to move our possessions from one place to another we must transport them and in doing so we are often forced to confront our possessions, including those that have been lying dormant, forgotten about at the back of cupboards and bottom of drawers. Furthermore, the physical process of moving MCOs from one place to another can be complex, effort intensive, time consuming, and costly, which may prompt us to 'streamline' our possessions and be more ruthless in our decisions of what to keep. We might therefore expect participants to engage in such acts of ridding when moving between devices such as mobile phones and laptops. However I observed ways in which consumers avoided engaging in selective acts of divestment during such transitions. Firstly, many participants moved all data in its current state to the new device (indeed this was often an automated process). For instance it became the norm in mobile phone use for participants re-purchasing the same brand of phone to simply transfer everything to their new device. Indeed, Alice described purchasing her new Galaxy Nexus in part because acquiring another Android device was seen to ease the process of transfer.

> That's kind of why I went for it, because I knew it was going to be easy, I've got absolutely no patience for setting up new phones and transferring contacts and all that sort of thing, and I knew if I kept with a Google phone it would be easy to do, that was a big attractive feature for me […] [It transferred over] everything really, all contacts, photos, videos, music all that sort of thing, all automatically as soon as I turned it on it picked up everything, that was already on my old phone, apart from text messages which I wasn't really bothered about. And then the only thing I had to do was set up the two email addresses that I have coming through to this phone, but that was really easy so that was it […] I backed everything up before I switched this phone on, so it's on my computer but I probably won't ever look at them or do anything with them ever again.

Thus Alice intentionally chooses a device that enables an easy process of transfer that makes sorting unnecessary; rather than sorting through and evaluating these DCOs before either transporting them to their new location or divesting them, as the act of moving home prompts us to do in relation to material possessions, she is easily able to move her amassed digital 'clutter' in its entirety. Furthermore, despite transferring this data to her new phone Alice retains the old phone with data intact, alongside a backup of this data on her computer. Thus rather than a processes of de-cluttering and refining one's possessions we see that here Alice's transition between devices leads to the expansion of her digital clutter as it is duplicated and spread across multiple devices. In some cases there was a desire to engage in a ritual sorting of data prior to transition as consumers attempted to have a 'fresh start' on their new, 'clean' device. Here participants would transfer the most current data but simultaneously retain all other DCOs elsewhere be it hidden away in a folder called 'Old Computer' on their new laptop, or on the old device itself (and in some cases both). For instance, two years prior to our first interview Leonard, 80, purchased a new Apple computer to replace his old device. However rather than divest his old computer, the device remains on his desk (Figure 9) and contains Leonard's old data. Thus once again, divestment is avoided. The process of transitioning to a new computer or phone whilst retaining the old device would be comparable to moving to a new home with a selection of favourite and often used items, but leaving everything else in our old house to which we may return if we ever need any of these items.

Figure 9 - Leonard's new (left) and old (right) computers

Finally it is worth noting that where acts of selective deleting did occur, items were not necessarily truly divested. An example comes from Melissa. For example, Melissa described how after a previous relationship ended she questioned whether photographs of her ex-boyfriend retained their status as meaningful possessions or whether she should discard these reminders of a painful breakup. As it happened she did neither. Instead, she removed DCO from visible digital spaces such as social media, but still retained them for the future in a less public space.

> I deleted him from Facebook, I deleted his number from my phone, I deleted all pictures of him, detagged all pictures of him on Facebook, because I didn't want a daily reminder of our relationship [...] It was really hard to do because I had to look through them in order to delete them. I did it in kind of stages... I just slowly deleted him from everything [...] All my pictures that I took I probably have copies on my laptop, because I uploaded them there first and then I would upload them onto Facebook... I would never delete the originals.

Here we see a new phenomenon of divesting whilst keeping. Melissa is able to keep the photographs hidden away in a folder where she will not have to confront them. However, she is comforted by the knowledge that if she ever wishes to revisit them in the future, she can. Thus we might question whether we can really count this as selective divestment since Melissa isn't engaging in careful acts of evaluating DCOs and making definitive decisions to keep or divest, but is simply doing both and avoiding the risk associated with divestment.

Thus we see that key actants and processes that may mobilise selective divestment in the context of MCOs, such as spatial limitations and spatiotemporal transitions, often did not hold the capacity in the context of DCOs. Divestment is not simply 'done' by the consumer to consumption objects, but may be provoked by other actants and processes, and where these processes are not provoked DCOs simply remain. This is not to say that divestment never took place, but rather that selective processes of sorting, evaluating, and therefore selectively divesting DCOs were largely absent from participants' accounts. Indeed, where divestment took place it largely consisted of unselective processes of mass divestment.

8.1.2 Mass Divestment

Rather than selective divestment, participants tended to engage in mass, largely unselective divestment processes. For instance, some assumed that if they hadn't used a device or account for a number of months or years that they were unlikely to need any of the data stored within, whilst others saw this as an opportunity to divest digital clutter quickly rather than carefully selecting items to keep or to divest. Richard, for instance, described an experience involving his previous laptop. Richard had what he deemed to be a fairly large collection of digital music on his old laptop, 600 to 700 songs in total. This music was largely downloaded illegally, meaning that Richard would sometimes download songs he was unsure about or hadn't heard before, since he explained that if he didn't like it he could always delete them. However, it became evident that

such processes of selective divestment did not occur, leaving Richard with many songs he disliked or no longer enjoyed. In the absence of the type of selective decluttering described by Natalie in the previous section, Richard's digital music collection became polluted and did not adequately represent his music tastes. The purchase of a new laptop provided Richard with the opportunity to start afresh, leaving his old music behind and beginning a more selective music collection on his new device.

> When I changed my laptop I had loads of music on my last laptop but I just deleted it all because it was all just [illegally] downloaded anyway. I just started afresh […] I used it as an opportunity to refresh it. 'Cause I had like six or seven hundred songs or whatever but a lot of it was stuff I hadn't listened to in months. So I thought, screw it, I'll just start again and use this as a chance to do that […] I've gone from six or seven hundred songs or whatever it was down to two or three hundred on my iTunes, and then I've got about ten albums on my phone, whatever that is. A hundred songs or whatever. So I've completely cut it down and it just shows the amount of rubbish I had on there which I'm glad has gone because I never used it anyway. […] I sort of did a cull, I'd been downloading songs over a matter of years so my taste had changed over the years anyway. So I had stuff on there that I would never listen to again.

Thus for Richard this change of device does not prompt a careful reconsideration of the old device's content in order to transfer only a selection of items, as has been found to be the case in the context of MCOs when moving house (Gregson *et al.,* 2007). Instead this transition is interpreted as an opportunity to divest in its entirety a digital music collection that over time has come to hold less meaning, and to begin a new, better music collection on a new device. Although Richard had not paid for his digital music collection, and thus there is no financial loss, significant time or effort was invested in building up this collection and needed to be invested in re-building his new collection. However, for Richard it was deemed easier and preferable to simply delete everything and begin from scratch, and here we see the attractive ease of mass divestment strategies, as Richard is able to restore his old laptop to its original factory settings in a matter of seconds, wiping all data from the device.

Such examples were common as participants engaged in mass divestment strategies that were simpler and required less effort from the consumer than acts of careful and selective divestment. This leads us to the question of why it is that such unselective acts of mass divestment were so common in participants' accounts of their digital possessions, but less prominent in prior literature on the divestment of material possessions. Of course, acts of mass divestment can and do take place in material consumption. We may choose to throw away folders of old notes without sorting through each piece of paper, for instance, or donate a box of old toys re-discovered in the attic without checking its contents. However, what is particularly evident in digital consumption is the ease of doing so on a large scale. Trying to imagine a similarly straightforward material equivalent to Richard's process of wiping his laptop device of all DCOs is difficult. How would we divest everything in our home, or even one room, so quickly and seamlessly, without encountering individual items as we transport them from our home? In divesting large quantities of material

possessions, unless this task is outsourced to someone else, we are required to handle and move individual items and consequently we have a clearer sense of what it is that we are divesting. Encountering and consequently re-evaluating items may be difficult to avoid. In comparison, Richard was able to divest all data from an old laptop without re-confronting each item as he disposed of it. Here divestment, although mobilised by Richard, is performed by software, which erases his DCOs from the device for him. Thus this process of mass divestment is facilitated by his device's software; without the ability to restore his device to factory settings Richard may have been forced to divest folders of data individually.

Indeed, not only does software often enable easy mass divestment, but it may also render more selective divestment difficult and even impossible. Louise, for example, explained that the inability to delete individual parts of text message conversations on an earlier version of the iPhone operating system left her able to either keep or delete the entire conversation, whilst the 'delete all' button on the current operating system enables the easy mass divestment of conversations without the careful consideration of individual text messages.

> You know when you get a dodgy text and you didn't want the other half to see [laughs] Well, originally on this [her iPhone], you could only delete an entire conversation. Now you can delete sections of it, so I can delete just those two parts if I wanted to. So that's made it a lot easier [...] When they brought out iOS3 it was probably a possibility then. It's nice to know that I can if I wanted to. You know? [...] There's a 'Delete All' button and it will tick that box for everything and then you can scan through and untick the ones that you want to keep.

Here we see that an earlier version of Apple's iOS software enabled and even encouraged mass divestment in a way that simply wouldn't be possible with material possessions. Here it is easy to divest vast quantities of text messages without considering each item. Once again the role of software in shaping consumer-object relations becomes evident

In summary, we have seen that participants largely avoided selective divestment in favour of mass divestment that was easily achieved, enabled by software. Prior work has demonstrated the difficult and even distressing processes of dispossession (Young and Wallendorf, 1989; Lastovicka and Fernandez 2005). Here we see consumers able to avoid this through either avoiding divestment together or by engaging in processes of mass divestment whereby they can avoid confronting digital possessions.

8.1.3 Inability to Divest

Participants were also not always able to divest unproblematically. Above it became apparent that often the actor-networks that enacted DCOs enabled consumers to avoid divestment, and enabled processes of mass divestment. However, in other instances consumers' capacity to divest DCOs was restricted. I observed instances where DCOs lingered, persisting despite consumers' attempts

to divest. For example, Holly described old social media profiles she wishes to delete but is unable to since she can no longer access her accounts:

> I used to have MySpace and Bebo when I was about fifteen. I stopped using them when I got Facebook because all of my friends had moved onto there. But I still kept them for a bit. I thought, well I don't want to delete it and then have to make a new one and re-add all my friends if I changed my mind […] eventually Facebook took over but I didn't delete them when I stopped using them and I still haven't deleted them. I have tried to go back onto them both recently to delete them. They have personal information and photos on them that I don't really want to leave on a site that I don't actually use. I haven't been able to access them though because I can't remember my log in details and I can't even reset them because the email account I used to set it up was blocked. It's annoying because I don't want other people to be able to see personal stuff about me and see my photos. And it's worse because I can't even remember exactly what's on there because I haven't been on it for so long now. I would definitely delete it if I could though.

Despite their status as "embarrassing" rubbish, these DCOs cannot be deleted. In forgetting her log in details she is unable to access her digital possessions; as I shall discuss in Section 8.2 we might see this as akin to loss. However, whilst these highly singularised profiles are beyond Holly's control they persist online, socially visible online. In other cases lingering digital possessions were less socially visible, but still experienced as troubling. Above, I described Natalie's ritual processes of selectively decluttering her digital music collection and in discussing these processes she describes the experience of attempting to delete a song from iTunes.

> It came up with a little cloud next to it, and I was like, "What the hell is that!" And I went to delete it again and they're like, "Do you want to hide this even though it's still in your iCloud?" and I was like, "Oh my god, you can't really get rid of these things, can you?"

Natalie's iTunes content is hidden; it is never 'really' deleted but persists in the iCloud. Apple's iTunes software and iCloud storage solution encourage hiding as an alternative to divestment, and Natalie struggles to understand whether she can ever truly divest these items. Sass and Whittaker (2013) discuss the value of intentional forgetting via the disposal of DCOs, however we here we see an inability to dispose of items. Here software presents an obstacle to true divestment; instead we are encouraged to simply keep everything.

There were also concerns surrounding the persistence of DCOs on devices, which in some cases prompted the lingering of material hardware. Appropriate divestment methods for devices that contained DCOs were not understood. For instance, Natalie explained that she had kept all of her old hard drives because she was too scared to throw them away and she doesn't want someone to be able to steal her data.

> I'm scared to throw away hard drives in case someone gets it and uses it and sees any of my horrible MSN conversations. [Laughter] […] I don't look at them [her old hard drives]. I don't think I've plugged my old one in since I bought my new ones. It's more for safety, because I don't know *how* to dispose of a hard drive, to like delete all the information on it and make sure it's all *gone*, 'cause I don't want someone to steal my identity or anything. So I keep them more because I wouldn't know how to throw them away than because I want to check the data on it.

Natalie's hard drives were unused and simply contained duplicates of DCOs stored upon her newer hard drives. She perceived no value in keeping this data, nor the old hard-drives themselves, however she explained that her inability to ensure she had truly divested this content prevented her from disposing of these items. Here we see that lingering digital possessions, and struggles to truly divest these items, may also produce lingering hardware that for consumers can become more problematic as it takes up space and can produce an appearance of disorder.

In this section I have illustrated the ways in which networks of actants produced an absence of selective ridding processes, whilst simultaneously enabling and even encouraging mass divestment, whilst finally I reviewed instances where consumers were unable to divest as desired. However the break down of consumer-object relations was not always intentional; how may DCOs be lost?

8.2   Loss

By loss I refer to those instances whereby the dissolution of consumer-object relations is mobilised by actants other than the consumer themselves; here the consumer does not actively choose to divest, yet their relation to the consumption object breaks down nonetheless. Extant literature illustrates that MCOs may be lost due to events such as natural disasters (McLeod, 1984 cited Belk, 1988), theft, or simply by inattention (Akhtar, 2005); within this body of work loss is seen to result either from MCOs existing in an unknown spatiotemporal location or damage to DCOs which erodes their function or meaning. Scholars have described the loss of DCOs as stressful, painful, and even traumatic (Belk, 1988; Akhtar, 2005; Ferraro *et al.,* 2007). How might DCOs be lost, and how might such loss be experienced by consumers? Unintentional dissolution of consumer-object relations was observed to occur in a variety of situations; the loss of hardware (e.g. a lost mobile phone), the malfunction of this hardware (e.g. corrupted hard drive), and loss of access due to service discontinuation, lack of internet connection, forgotten passwords, absence of necessary hardware or software, and cases of trapped possessions left behind on old hardware/software. Network breakdowns varied in their permanence; in some instances it was possible to re-establish consumer-object relations where missing actants were re-introduced to the network. Here I shall document ways in which DCOs can be lost as networks break down with varying level of permanence, and explore consumers' reactions to such loss.

Firstly, relations broke down when hardware was lost or broken. For instance, a number of participants recounted stories of hard drives which became 'broken' and therefore DCOs could not be accessed. Andrew described an experience of a broken hard drive that prevented access to his university coursework after it 'crashed'

> I had two hard drives crash at once and I lost six weeks of uni work and then had to grovel to get an extension couldn't get one and had to fail that unit and then had to go through a whole mitigating circumstances thing to just be allowed to resubmit the work and then was only given a week to do six weeks' worth of work. So I had to do something completely new. That was horrible and it was because I didn't back my data up. […] It was the closest I've come to tears in a long time, like genuinely. I was like: mouth open, "Oh my god!"

Here the hard drive fails to perform its intended role in enabling Andrew access to his files and consumer-DCO relations break down and we become sensitised to the role of the hard drive in enacting Andres's DCOs. Sue provided a similar account. Sue is 45 and at the time of our interview was unemployed, as she had recently returned from a year of travelling. She explained that she had decided to bring an e-reader with her on her travels and to download a guidebook in ebook form for convenience given the lightweight of the device in comparison to the physical copy of the book. However as soon as Sue arrived at her first destination the e-reader malfunctioned and she was unable to access the ebook, prompting her to purchase a material version which, despite becoming damp and worn, she retained access to throughout the trip. Without the e-reader device functioning in a specific way Sue's ebook cannot be enacted and read. Here DCOs emerge as vulnerable in their dependence upon hardware, which has the potential to break, preventing access and use of these items.

In addition to hardware malfunction, hardware could be lost entirely. For instance, Becky's Blackberry device was stolen on a trip to London.

> That's what I was more gutted about when I got it stolen, because I had other photos of [my nephew George] on there. I hadn't backed them up. I hadn't put them on my laptop because I couldn't. Because of the broken USB ports. But I did have a lot of photos. I had about, like, five hundred photos, [laughter] not just of George, of events that had happened, and parties, and… So, I lost all of that. […] Obviously I'd lost all my contacts as well. But, it was more the photos, it was like, "Oh, no! All my photos of George are gone and I have no way of getting them back." I had uploaded some of them to Twitter, so I do still have some of them from Twitter, but not all of them. […] I didn't mind about the phone because obviously I could get a new one on the insurance, but it was like the memory card. I'd be fine if they'd taken the phone, if I'd just l had the memory card I'd have been fine, because I'd have all my photos and contacts and everything I needed. But because it was, everything's gone, that's why I was most upset.

Here the loss of the material device is bound up with the loss of the data stored within the phone, and as discussed in the discussion or protecting processes in the previous chapter, it became apparent that it was the DCOs stored on Becky's device that was deemed most valuable, rather than the hardware itself which was more easily replaced. Unlike earlier accounts of automated back-ups, and participants who 'backed up everything', Becky's laptop's broken USB ports prevented her from engaging in protection processes (discussed in Chapter 7), and consequently her DCOs were lost along with her stolen mobile phone. In being unable to separate the majority of DCOs from the phone they become more vulnerable to loss since only a singular enactment existed. However, where DCOs had been duplicated they were not really 'lost'; where copies had been uploaded to Twitter, for example, multiple enactments had emerged and

consequently the loss of one enactment did not result in the loss of the DCO altogether. Thus duplication, the emergence of multiple enactments of a DCO, meant that DCOs were less vulnerable to loss, in particular loss stemming from loss of or damage to hardware. Indeed, Louise explained that she would never have to worry about losing DCOs.

> We go to Grandma's and look through old photos of when we were little, you know, and it's a box by year with tabs in it for years. And it's *proper* photos. But then I remember how many photos were destroyed when our shed got water logged. Obviously we're not going to have that. You know, the worst we can do is have the hard drive go down, and it take two days to restore the backup from the data centre back on to a new hard drive here. We're not going to lose photos anymore, you know. I like that.

Whilst Louise felt some regret that she rarely printed photos, expressing some nostalgia during the interviews for traditional photo albums, she took comfort in the perceived safety of her digital photographs in comparison to their material equivalents. During her interview Louise explained a process of creating multiple back-ups of all content, and here fear of losing her (locally stored) DCOs were absent from her experience of these items. Here we see that even 'loss' isn't really loss due to multiple enactments of a DCO; Louise simply restores her DCOs from one of multiple back-ups.

In other instances, DCOs were stored not on devices themselves but on data storage devices and in some instances they could not be accessed due to the absence of necessary, compatible hardware. Often this resulted from 'out-dated' data storage devices that had been 'phrased out' as markets had moved on to newer formats. For instance, Jane explained that various disk storage media had been phased out, meaning that she had no way of accessing the DCOs (digital photographs) stored on them.

> First of all it was the 5¼ inch or 5¾ inch floppy disk, proper floppy disks that really were floppy. They were 5¼ inch I remember that's what I first used in the office. And then it went down to the 3¼ or 3½ inch disk drives, and then of course they got phased out and it was like "What are we going to use!" You know. And in fact I've got a few of those disks in the cupboard where we never transferred those things [digital photographs] off of anywhere so there's no way of getting access. Thruxton Touring Cars 1994 I think it was. […] Obviously, at the time we had the necessary hardware to view it. I'm sure if I wanted to there'd be someone who would actually transfer them off for me, for a fee. […] Next time I have a clear out I'll maybe I'll dig them out and see if anyone's still got a disk drive that I can put them into and just put them onto a little USB stick or something. See how slim I used to be back in those days! [Laughs]

Similarly, Andrew explained that he had a number of mini disks stored in a drawer that had been unused for several years, yet he was reluctant to dispose of them since he didn't know what was stored upon them as he did not have the appropriate hardware needed to access these DCOs and evaluate them. However, both Jane and Andrew kept hold of these items, since there was deemed a possibility that they one day would re-establish consumer-DCO relations by finding a way to transfer this data to a more current and therefore more accessible medium. This was

perceived as a temporary network break down; there is seen to be potential for re-establishing this network should the correct hardware be acquired.

Additional experiences of 'loss' emerged when consumers did not lose access, but were unable to move DCOs to new devices or new software. In Chapter 7 we saw instances of 'trapped possessions' – items that cannot be separated from specific hardware or software as in the case of Richard's digital car collection and Becky's digital music – and such instances were perceived by participants as a form of loss. Here consumers lost access if they moved to the videogame/laptop they wished to use and, although access is possible via old hardware/software, DCOs cannot be enacted in desired ways. Thus we see that where DCOs become highly bound up in specific networks and cannot be separated they become increasingly vulnerable – as noted above such singular enactments leave DCOs more prone to loss. Here we see the role of hardware and software in enacting DCOs and in limiting ways in which DCOs can be enacted, and preventing access in new networks despite consumers' efforts.

Thus loss of DCOs can be related to the loss of, or damage to, the hardware on which these are stored and the absence of hardware required to access these items, although it may be possible for consumer-DCO relations to be re-established where this hardware is 'fixed' or re-introduced to the network. Whilst often the role of hardware was made absent in participants' accounts, we see that when this actant is missing or 'breaks', its role in enacting DCOs becomes particularly apparent to consumers. Here we see digital-material hybrids whereby the loss or break down of hardware results simultaneously in the loss of DCOs.

We might speculate that as we move towards an era of cloud computing whereby DCOs are stored on servers (usually company servers which are regularly backed up) and merely *accessed* via local devices via internet connections (rather than stored upon them), damage to our devices may be less likely to result in the loss of DCOs. However in such instances loss may still occur, both temporary loss of access and permanent break downs of consumer-object relations. As noted in Chapter 3, Scarabato *et al.* (2014) demonstrate that online services can be discontinued, resulting in the loss of consumers' DCOs. This study presented further illustrations of this phenomenon. For instance, in Chapter 6 we heard from beauty blogger Natalie who was an avid user of RSS feed aggregator Google Reader, which she used to gather her favourite blogs into one place, where new blog posts accumulated and read. However in 2013 Google announced that it would discontinue the Google Reader service, releasing the following statement on their official blog:

> We launched Google Reader in 2005 in an effort to make it easy for people to discover and keep tabs on their favorite websites. While the product has a loyal following, over the years usage has declined. So, on July 1, 2013, we will retire Google Reader. Users and developers interested in

RSS alternatives can export their data, including their subscriptions, with Google Takeout over the course of the next four months.

<div align="right">(Hölzle, 2013)</div>

In our second interview Natalie described her response to this announcement.

> I had a little heart attack […] I'm now 100% a Bloglovin' girl […] I think I did a blog post about, "Google Reader's Going! Come join me on Bloglovin'!" and, like, encouraging people to follow me on Bloglovin' and I made an account and now that's the only way I read blogs now, just through Bloglovin'. […] Like Google Reader—you can still use it, but I was trying to be stern with myself and be like, "No! Get used to the change now, 'cause at one point, Google Reader will never be around, so you might as well get used to Bloglovin' now" as opposed to carrying on using Google Reader and then in July, I'll be like, "Ah, fuck's sake!" So yeah, I follow all my blogs through Bloglovin'.

Google's discontinuation of the Google Reader's service led to the dissolution of consumer-DCO relations as Natalie's gathered collection of feeds and content on the platform (Figure 10) would soon no longer persist, forcing her to find an alternative platform. As with Richard's account of his 'lost' cars in videogame Forza, Natalie has no means of resistance but must instead attempt to re-accumulate her collection of blog feeds on a new platform, Bloglovin' (Figure 11). Here the role of the company in enacting this DCO becomes apparent; when Google no longer hosts this data on their servers the DCO breaks down. Natalie expressed shock at Google Reader's discontinuation, and we might attribute this to a tendency, as discussed in Chapter 5, for participants to make absent other actants, in particular the role of companies, in their accounts of DCOs. In making the company's role absent, the sudden decision of the company to close down the platform comes as a surprise.
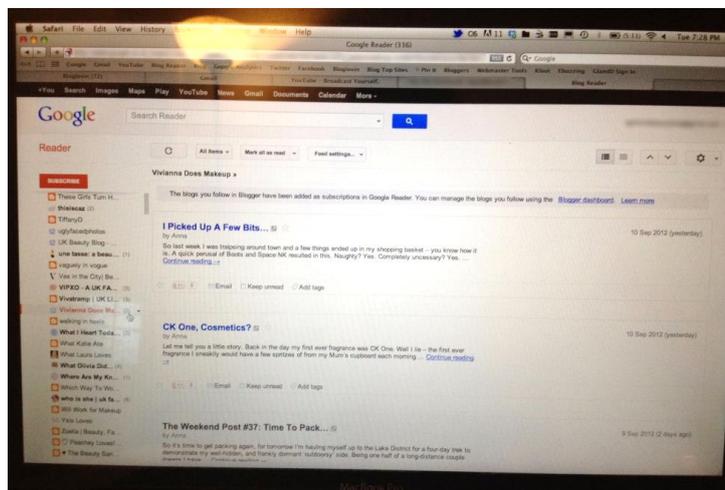

*Figure 10 – Natalie's gathered RSS feeds on Google Reader*
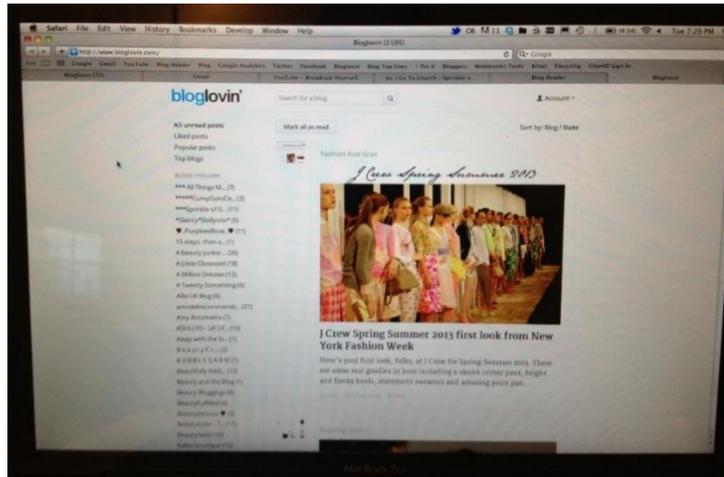
Figure 11 - Natalie's new collection of blog feeds on Bloglovin'

Loss of access to DCOs hosted online occurred was prompted by other forms of network breakdowns. In addition to service discontinuation, loss may occur where passwords are lost. In the previous section I noted instances where DCOs persisted online yet consumers lost access, including the ability to divest where these items were deemed as rubbish. Holly's social media profiles remained online, yet without her log in details she was unable to log into the platform and access or control her DCO. Passwords, although often entered during interviews, were rarely mentioned unless prompted, and yet here we see their importance in enacting many DCOs. A Facebook page or email account cannot be accessed without a password. A similar phenomenon emerged in the context of internet connections. For instance Sue, 45, was intending to keep a travel blog during her travels in order to keep her friends and family back home updated on her journey. However, she encountered various obstacles.

> It was a travel blog for my friends… It was partly put myself out there in the world. Standing up being seen. I mean that's for a psychology project probably, but that was part of it. To document who I am, this is what I'm doing, and this is what I think. […] I had actually I'd written a list of things I could Blog about that were relevant to what I was doing solo female travel, blogging about the kit I'd taken with me. I mean I didn't, I didn't do any of this, but I had written a list of things and I also had Google alerts set up that were relevant to the country I was travelling in and if I'd been more, if I'd had more accessibility to the internet and been easily able to comment on news items and things then I would have done. So I was quite set up for, I had some avenues to explore. But it didn't happen.

As Sue spoke it became apparent that her inability to blog as desired during the trip stemmed from various network breakdowns, which prevented processes of creating and transforming (and even accessing) DCOs.

> My blog was very much incomplete because when I was travelling actually internet access was not good as I was expected, nor was the digital device I took with me, a little tablet computer, it let me down. I'm currently thinking how I feel about it, I could, if I complete that blog from my hand written notebook and my photographs that would be interesting for my friends […] I was going to, the plan originally was to use that as a diary, a journal device rather than a notebook and in the evenings type up the days blog offline and then upload it when I could. […] That was

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pretty much my plan, well I'll explain the reason, the device let me down, I couldn't store anything on it, I could use it for internet access, but I couldn't store anything. It wouldn't store anything so I couldn't use the word processing application even to just store my thoughts so I ended up using a notebook. Then you have to type it up. […] And even if I could find an internet café sometimes it wasn't convenient after dark to go out and come back to the hotel. I didn't want to put myself out there in the dark.

Here loss is only temporary: her blog does not disappear. However, without internet access she is unable to access and update this item and here the importance of internet connections becomes particularly apparent. Furthermore, once more we see that a malfunction in a device's software also prevents Jane's intended processes of creating word processing documents to be updated. Thus whilst in Chapter 7 DCOs appeared placeless, accessible from any location via the internet, we see that in instances where this internet connection is absent the DCO becomes inaccessible.

In summary, we see new instances of loss in the context of DCOs. Some participants' accounts drew parallels with prior accounts of consumers losing MCOs; in some instances DCOs exist in an unknown spatiotemporal location (e.g. where hardware is lost). However, rather than DCOs themselves becoming broken or unusable they more frequently became inaccessible; consumers knew where they were stored but did not have the correct hardware, or were missing the password or internet connection required to access these items. Here we see the importance of these actants in enacting DCOs, and indeed in their absence the importance of these actants became apparent to the consumer. Now that we have seen ways in which such loss occurred, let us consider the ways in which participants spoke of their *experiences* of loss.

Prior work has indicated that the loss of content in videogames may be devastating to consumers who seem to mourn their possessions, reluctant to form such meaningful bonds once again (Watkins and Molesworth 2012). Indeed, in some cases lost data was met with frustration, particularly where significant effort had been invested in creating and transforming these possessions, for instance when Richard talked about 'losing' his precious car collection in Forza in Chapter 7 or when Becky spoke about losing treasured photographs of her nephew, above. However, in other instances experiences of loss were met with nonchalance, and in some cases even relief, particularly in cases where the items lost were not cherished possessions but rather inactive and ambiguous digital clutter. For instance Natalie reflected that losing her "old crap" on her lost mobile phone is probably a good thing as it will enable her have a "fresh start" on a new, uncluttered device.

> I've had so many instances where a phone's been lost or a hard drive's failed, that things that I thought were kind of irreplaceable, when you do lose them, it's just kind of like… [Shrugs] So it is probably good 'cause I've got a lot of crap in there. [Laughter] And sometimes if you can do that clean start that you've never had because you usually keep everything… [Text messages] do get backed up. But honestly, I don't think I would miss them. It would be only because someone sent me information, like a house address or a phone number that I needed and then I

lost that, then I'd probably just have to text them again and ask for it again, but only information like that I would probably miss.

Here loss was not experienced not as painful or devastating, but as a relief and even an opportunity. Natalie avoids the effort required for selective divestment, yet is freed of digital clutter that has been accumulating. Tom provided a similar account when he accidentally deleted his digital film collection:

> I formatted a hard drive that I thought was empty, but there was half of it being consumed. And I thought well this seems a bit dodgy, I can't seem to access it, but I'd forgotten I'd put a lock on it, a password, and so me thinking it seemed a bit dodgy I formatted it, but it was my entire film library. But again, I can't remember when I'd actually used that hard drive for watching films, I'd just used it to keep films on there, as a store. So in that sense, it really wasn't worth keeping anyway, so now I've got a free hard drive out of it.

Again, as opposed to the lessening of the self-described by Belk (1988), participants in some cases appeared indifferent to loss, particularly where DCOs were infrequently accessed. Melissa provided a similar account. Prior to our first interview Melissa had acquired a new mobile phone and had lost some DCOs from her old phone when the SIM card expired.

> I found it quite frustrating in that I had lots of things in my memory card here, on my Sony Erickson, my phone before, and say, I had like eight hundred pictures I think on here that I didn't have time to transfer over to my new phone, because you have to Bluetooth them all. And, so I've lost them all. […] I feel a bit… a bit sad about that but it's not the end of the world. They're pictures but… [Pause]… yeah I don't feel too bad about it. I've transferred the most important ones over, the ones that were done quite recently or quite long ago. I don't feel too bad that I've lost that. […] Sometimes it's quite nice to have a fresh start on the phone, you know, just to have new stuff on there. I copied over a certain amount of things, I'll look in my gallery I'm sure I can find it... I don't know how many that I copied over, but there are a few. Um, so maybe ninety-eight I think, I Blue toothed ninety-eight [digital photos] over […] You know, sometimes you just get really attached to things that are in the past. And I don't really need them anymore. I don't need them on my phone to know they happened or to have good memories of them.

Building on prior work, we see that loss is not only met by devastation, as in the case of prized possessions, but where digital clutter is lost this may be experienced as untroubling and even as a relief, as an opportunity to start afresh.

8.3 Chapter Summary

In this final findings chapter I have observed a number of ways in which relations between consumers and DCOs may break down. We have seen that unlike the myriad divestment processes documented in studies of MCOs, in the context of DCOs divestment is largely limited to processes of deleting – the dissolution of the DCO itself. Thus the conclusion of possession can often also signal the conclusion of a DCO's biography, too. Unlike material possessions, which may have long, complex biographies as they pass between people, re-enter and exit the commodity sphere, and find new uses and meanings, DCOs' biographies often ended at the point of deletion (although other enactments of a DCO may persist elsewhere). In relation to processes of divestment we have

seen that participants tended to avoid selective divestment processes, in particular the way in which DCOs' transient enactments do not provoke such processes. Indeed, we have seen that where divestment took place software frequently enabled and even encouraged processes of mass divestment, whilst in other instances DCOs can persist despite consumers' attempts at divestment. Consequently, we have seen that in the context of DCOs divestment processes are enacted by heterogeneous networks of actants that have not previously been acknowledged in theories of divestment; whilst divestment is seen as a process implemented by consumers in order to facilitate self, their capacity to do so can be enabled and restricted by an array of actants, not least software, and here we see the emergence of new actants in consumers' identity projects. Furthermore, we see new manifestations of loss; consumer-DCO relations broke down where passwords were forgotten, internet connections were absent, data becomes trapped and must be abandoned, and devices are lost, stolen or broken. In such instances of loss, the importance of various actants in enacting DCOs that consumers otherwise made absent become present (e.g. hardware, software, passwords, internet connections, companies' servers). Furthermore, we have seen that alongside the devastation of losing treasured digital possessions loss is often met with indifference, and even relief.

Thus, in addition to exploring the ways in which consumers and DCOs related, this thesis has examined the ways in which these relations emerge and dissolve. In each of the three findings chapters we have seen significant departures from extant literature on material possessions. In particular we have observed the importance of an array of actants in enacting DCOs and shaping consumer-DCO relations, the distinct ways in which the characteristics of DCOs shaped their relation to consumers, and companies' ongoing involvement in consumer-object relations. In the following chapter I will discuss these findings in relation to the research questions set out in Chapter 3 and highlight the ways in which this thesis extends current theories of consumer-object relations in the context of possession.

Chapter 9: Discussion

Whilst prior research has illustrated that digital consumption objects (DCOs) can become personally meaningful possessions (Denegri-Knott *et al.*, 2012; Watkins and Molesworth, 2012; Odom *et al.*, 2011, 2014) their distinctive characteristics call into question the applicability of extant theories of possession (see Section 3.4). The present study aimed to explore enactments of possession in the context of DCOs, employing a method assemblage that focused attention on those aspects of consumer-object relations that are under-theorised in prior literature. I propose that drawing from the actor-network theoretical principles of relational materiality, ontological symmetry, and ontological multiplicity better equips consumer researchers to overcome current limitations to theories of possession by granting all actants equal ontological footing, breaking down a priori distinctions and accounting for multiplicity. The above findings chapters document the relation of consumers and DCOs, including the emergence and dissolution of these relations, focusing upon those aspects that presented a significant departure from extant theories of possession and spoke to the study's research questions. In this chapter I reflect upon the theoretical significance of these findings, demonstrating the ways in which this study addresses the three core limitations of extant theories of possession identified in Chapter 3, as summarised in Figure 12 below. Although for clarity three distinct contributions are depicted, addressing three distinct research questions stemming from three distinct limitations to extant theory, it will become apparent that these contributions are interlinked.

Firstly, this thesis looks beyond material consumption objects (MCOs) to conceptualise the enactment of DCOs as digital possessions and in doing so speaks to RQ1 by demonstrating that enactments of DCOs may be transient as opposed to enduring and multiple as opposed to singular, reviewing implications of these characteristics for these entities' relation to consumers. In doing so, I respond to calls for consumer researchers to turn theoretical attention towards the consumption objects themselves (Zwick and Dholakia, 2006a), demonstrating ways in which their characteristics may shape consumer-object relations and therefore possession in ways that are currently unrecognised.

Secondly, I speak to RQ2 by documenting the role of non-human actants in enactments of possession. Despite consumers' tendency to make such actants absent in their accounts I demonstrate their capacity to provoke, enable and restrict processes central to theories of possession and in some instances to displace consumer agency. Furthermore, I examine ways in which consumer-DCO relations can be disrupted and dissolved by actants other than the end consumer, responding to criticisms of consumer-centric approaches (e.g. Moisander *et al.,* 2009a, 2009b; Askegaard and Linnett, 2011) by making present the 'missing masses' of possession.

Extant theory Possession as proprietary feelings (Belk 1988)/ Possessions as singular objects (Kopytoff 1988)	**Assumptions of physical materiality** Extant theories of possession are rooted in assumptions of inert, singular, enduring MCOs. We lack an understanding of how variations in the characteristics of consumption objects may shape possession. However, prior scholarship has indicated that extant theories of possession may lack applicability in the context of DCOs.	**Privileging human agency at expense of non-human agency** MCOs are portrayed as inert, subjected to processes of 'possessing' by the consumer. This approach obscures the role of non-human actants in possession. Prior scholarship indicates that new actants such as hardware, code, and companies may play a role in possession of DCOs, although this role is not explicitly documented.	**Purification of 'cultural' level of possession from the market sphere** Material possessions are opposed to commodities, removed from locations of exchange, with possession rituals severing ties to market sphere Whilst existing theories of possession typically assume full ownership, to understand digital possessions we need to consider the consequences of other fragmented ownership configurations.
	↓	↓	↓
Research questions	**RQ1: How may the characteristics of DCOs shape their relation to consumers?**	**RQ2: What actants beyond the end consumer shape consumer-DCO relations?**	**RQ3- How does consumers' limited ownership of DCOs relate to their enactment as digital possessions?**
	↓	↓	↓
Findings Possession as an enacted by actor-networks of human and non-human actants	Transient enactments of DCOs limits their capacity to provoke processes of ordering and divestment, and to facilitate self-expression and self-reflection Multiple enactments of DCOs can produce unstable possession as DCOs are enacted in multiple networks and ontologies conflict.	Despite consumers' tendency to black box DCOs and to make absent other sources of agency, actants beyond the end consumer enable, provoke and restrict possession processes, displace consumers' agency in these processes, and disrupt and dissolve consumer-object relations.	Fragmented ownership configurations produce ontological multiplicity, whereby DCOs are simultaneously enacted as possessions and company assets. Although consumers attempt to 'singularise' digital possessions by making absent the role of the company, issues of ensnarement, restricted possession and unstable possession may emerge.
	↓	↓	↓
Theoretical contribution	**Demonstrates the ways in which the characteristics of consumption objects hold implications for consumer-object and thus may shape enactments of possession**	**Makes present the 'missing masses' of possession, documenting the role of actants beyond the end consumer, including non-human actants, in enacting possession**	**Theorises the relationship between ownership and possession, illustrating the ways in which the ontological multiplicity produced by fragmented ownership shapes enactments of possession**

Figure 12 – Summary of theoretical contributions

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Lastly, I speak to RQ3 by documenting the consequences of fragmented ownership for consumer-DCO relations. I illustrate that despite consumers' attempts to singularise DCOs they are often unable to separate them from the market sphere. The multiplicity of DCOs enables the simultaneous enactment of these entities by companies as assets and by consumers as possessions, blurring the states of commodity and possession opposed by Kopytoff (1986) and consequently the commonly purified spheres of market and culture (Slater, 2011). I highlight ways in which these ontologies conflicted, producing distinct enactments of possession that may hold significant consequences for consumers that are not currently acknowledged within consumer research. In doing so I provide insight into the often overlooked relationship between ownership and possession by examining the potential consequences of fragmented ownership configurations in the context of DCOs.

Thus this thesis contributes to consumer research by addressing three limitations to extant theories of possession and presents a framework for examining consumer-object relations in future studies of possession. I shall now proceed to discuss each contribution point in greater depth.

9.1 Beyond Physical Materiality: Ontological Characteristics of Consumption Objects and Implications for Consumer-Object Relations

The most readily apparent contribution of this thesis lies in extending our understanding of possession beyond the context of MCOs. In reviewing prior literature on possession within consumer research in Chapter 2, it became evident that this work is grounded in an understanding of possessions as material despite acknowledgement that possessions need not be material things (Belk, 1988) consumer research that explores possession in other contexts is highly limited. The empirical focus on MCOs has underpinned extant theories of possession. In reviewing conceptualisations of the ontology of MCOs within consumer research in Chapter 3, I demonstrated that theories of possession are typically rooted in an assumption of MCOs that are singular, stable, inert, and spatiotemporally fixed. However, the ways in which such characteristics shape possession is not explicitly addressed. Indeed, Zwick and Dholakia (2006a) argue that existing theories of consumer-object relations are limited in that they fail to conceptualise the ontology of the consumption object. They propose that turning our theoretical attention towards consumption objects opens up new theoretical avenues for understanding consumer-object relations. Responding to this call, I firstly conceptualise consumption objects as enacted before reflecting upon the findings presented above to identify ontological characteristics which distinguished the enactments of DCOs observed in this study from the MCOs documented

in prior research, illustrating ways in which these characteristics may produce distinct consumer-object relations and thus distinct enactments of possession.

I follow others (Ekbia 2009; Faulkner and Rund 2009; Kallinikos *et al.,* 2010; Odom *et al*., 2014) in attempting to understand how DCOs may be different from the MCOs we have become accustomed to. However, whilst much prior work aims to conceptualise digital artefacts as isolated entities, my emphasis is on their enactment as consumption objects. Prior literature acknowledges that digital materiality is non-autonomous in that it must be sustained by physical materiality, including computers, cables and screens (Denegri-Knott and Molesworth, 2010; 2012; Leonardi, 2010; Maguadda, 2012; Kedzior, 2014). This thesis extends our understanding of this relationship. In line with the assumption of relational materiality central to the actor-network theory (ANT) tradition, I understand all consumption objects, material, digital and indeed virtual, to be enacted, although the work involved in their enactment is often black boxed by consumers and by consumer researchers. The value of the ANT tradition lies in providing the researcher with the sensibilities and tools necessary to open such black boxes and explore the relational ties within the actor-network. In the context of DCOs this approach sensitises us to the complex networks of actants that enact these entities. For instance, we have seen that a digital car within the videogame Forza is enacted as a consumption object by a network of actants including an Xbox console, a TV screen, a HDMI cable, an electricity supply and a copy of the Forza videogame disk (each of which might be broken down to reveal further networks of actants). Each actant plays a role and therefore removing any actant may destabilise this enactment; a power cut which removes the electricity supply prevents the digital car within Forza from being enacted, as would a broken Xbox console, or a snapped Forza disk. Thus drawing from ANT, I reject the notion of DCOs that can be grasped 'out there' and characterised in isolation, independent of their relations and deployments (see Law, 2004), and draw attention instead to the relations that enact consumption objects. In doing so we see that DCOs cannot simply be reduced to a series of 1s and 0s, as has become commonplace in discussions of digital artefacts (e.g. Faulkner and Rund 2011; Kallinikos and Mariátegui, 2011); in order to enact a DCO, much must be 'done' by an array of actants.

I therefore do not propose 'inherent' ontological characteristic of DCOs and such essentialist approaches are rejected. Key here is an understanding of the ontological characteristics of DCOs as enacted, rather than inherent. Indeed, an ANT perspective sensitises us to the need to consider ontologies rather than a singular ontology (Mol 1999; Law 2004), acknowledging that multiple actants may attempt to enact DCOs in different ways and that it is possible for DCOs to be enacted differently. Therefore, rather than proposing 'qualities' of DCOs, I instead note common ontological characteristics amongst the DCOs documented in this

Figure 13 – Ontological characteristics of enacted consumption objects and potential consequences for consumer-object relations

Transient *e.g. Alice's ebook collection (Chapter 7)*		**Enduring** *e.g. a dining table (Epp and Price, 2010)*	
Characteristics of enactment	*Consumer-object relations*	*Characteristics of enactment*	*Consumer-object relations*
• Actor-network repeatedly enacted, broken down and re-established • Doesn't endure in any spatiotemporal location and takes up no physical space	• Easily ignored by consumers, holding limited capacity to provoke processes such as ordering and divestment • Do not facilitate enduring displays; limited capacity to prompt self-expression and self-reflection	• Actor-network persists over time as relations remain largely stable • Endures in a specific spatiotemporal location and takes up physical space	• Capacity to provoke processes of ordering and divestment • Facilitates display; capacity to provoke self-expression and self-reflection
Multiple *e.g. Louise's 'shared' photo stream (Chapter 7)*		**Singular** *e.g. a vintage purse (Ahuvia 2005)*	
Characteristics of enactment	*Consumer-object relations*	*Characteristics of enactment*	*Consumer-object relations*
• Multiple spatiotemporal enactments exist which may be distinct or interwoven	• May be experienced as ontologically liquid and unstable as consumer-object relations can be disrupted by multiple actants • Ongoing enactment of DCOs as assets results in a blurring of possession and commodity and potential for market interference • Movement between consumers involves processes of duplication and interwoven enactments	• Single spatiotemporal enactment	• Consumers may experience a higher level of stability as DCOs are more easily removed from the influence of other actants • Can anchor consumers to a specific spatiotemporal location • Follow a linear biography, transferred between people (and companies) and transported between locations

study and consider the ways in which these characteristics were enacted (summarised in Figure 13). I shall proceed to reflect upon the study's findings in order to summarise two ways in which the enactments of the DCOs studied were often ontologically distinct from the MCOs previously studied – transient as opposed to enduring, and multiple as opposed to singular – illustrating the ways in which these characteristics may shape consumer-object relations and therefore enactments of possession.

9.1.1   Transient vs. Enduring Enactments

Firstly, we can observe a distinction between transient and enduring enactments of consumption objects, by which I refer to consumption objects' capacity to persist in a particular space and form over time. MCOs are typically assumed to be enacted in enduring ways. MCOs may require complex processes of production and whilst a level of effort may be involved in maintaining some material possessions (see Gregson *et al.*, 2009) – cars need to be serviced, silver must be polished – without such maintenance these MCOs persist in an enduring albeit deteriorating form (broken down cars and tarnished silver). Whilst the economic value and the public and personal meanings of MCOs may change, and indeed a great deal of scholarly attention has been devoted to the production and re-production of such meanings (McCracken, 1986), the existence of a MCO in a particular location and form is typically more enduring. When I am not actively accessing or using them, my armchair, my coffee mug, and my car persist in a spatiotemporal location and in an enduring form. Such endurance is evident in the material possessions that consumers come to treasure (e.g. Ahuvia, 2005), and even where MCOs are displaced from active possession networks they continue to persist, eventually demanding to be dealt with (Epp and Price, 2010). Indeed many MCOs endure even as rubbish (Thompson, 1979; Parsons, 2008). It is this enduring presence that was notably absent in the context of DCOs, presenting a significant departure from the MCOs that consumers and consumer researchers have become accustomed to.

As noted above, DCOs are enacted by complex actor-networks, requiring, for example, software, accounts, contractual agreements, hardware, power supplies, data (i.e. code/'digital artefacts'), and in many cases internet infrastructures (each complex actor-networks in their own right) in order to be accessed and used by the consumer. The DCOs documented in this study exhibited transient enactments in that they were not always enacted in their accessible, consumable form. Much work was involved in generating DCOs, as opposed to 'digital artefacts' or 'bitstrings'. In order to show me their digital possessions, participants first needed to retrieve various devices, turn them on, in some instances plug them in, open a series of folders or web browsers, launch software, and in some cases enter passwords, in order to generate these DCOs. In other words, much must be 'done' in order for DCOs to be enacted (although as we shall see in Section 9.2, consumers rarely made reference to this in their accounts as such DCOs were

'black boxed'). This work must be 'done' continually, else the enactment breaks down. When the consumer turns off their laptop, places their smartphone on standby, or even switches between applications, the DCO disappears; it ceases to be enacted as a DCO in relation to the consumer (although due to the multiplicity of many DCO enactments that I shall discuss in the following section, it may continue to be enacted in other networks). Some scholars might argue that these DCOs endure as pieces of code on local hard drives or on remote servers, yet I propose that in this form these items are not enacted as DCOs. A piece of code or a digital device in isolation cannot be described as a DCO – it is only when multiple actants come together in certain ways that DCOs such as Facebook profiles, ebooks and digital music playlists are enacted. Thus the DCOs documented in this research were characterised by transient enactments, repeatedly enacted, broken down and re-established, but lacking an enduring enactment that persisted over time. This transience is particularly attractive to marketers since it requires a continued engagement with the market in terms of hardware, software, internet infrastructures, and online platforms controlled by companies. However, the transience of these enactments also holds implications for the ways in which DCOs are experienced by consumers.

We might root increasing discussion of the 'de-materialisation' of possessions, observations that "things are disappearing right before our eyes" (Belk 2013, p.478), in the transience of their enactments. Whilst scholars have criticised claims of dematerialisation, noting the continued role of MCOs (Maguadda, 2012) and discussing digital materiality (Kedzior, 2014), we see that experiences of DCOs as 'immaterial' may be rooted in transience. Here we can observe parallels with Odom *et al.*'s (2014) recognition that DCOs can be experienced as 'placeless' and 'spaceless'; in their transient enactments DCOs do not occupy an enduring spatiotemporal location and they do not take up physical space. For a period they are 'there', on the screen, enacted. However, this enactment is transient and once it ceases the DCO ceases to be 'there'. The findings presented above indicate that such transience can shape the ways in which consumers relate to DCOs.

Whilst prior studies typically assume an enduring MCO which can be displayed in a lasting way, DCOs are repeatedly enacted, broken down, and re-established, and consequently are enacted in transient and temporary ways that do not facilitate enduring displays. In line with prior HCI research by Brown and Sellen (2006), I find that in the absence of enduring displays DCOs can have a more limited capacity to provoke the processes of self-reflection and self-expression that are central to prior studies of material possessions. As became apparent in Alice's account of her ebooks in Chapter 7, DCOs had a tendency to disappear once no longer in use, easily forgotten about, although I noted potential for software to re-introduce this capacity, attracting consumers' attention through other means such as notifications (e.g. the Time Hop app). Furthermore, this

study finds that the lack of an enduring spatiotemporal enactment also inhibited DCOs' capacity to provoke processes such as ordering and selective acts of divesting. The transience of their enactments reduced DCOs' visibility to the consumer and to others, placing little pressure on consumers to deal with these entities even when they acknowledge that large quantities of digital 'clutter' had emerged. Whilst in Chapter 2 I noted that within prior literature consumers are seen to invest time and effort in curation processes, here I find that in investing little if any time in curating DCOs – rarely sorting through, evaluating, selectively keeping and divesting – consumers experienced less sense of knowing them intimately (often they couldn't remember what they had or what was stored where). Since Belk (1988) deems knowing an object intimately as one way in which an item may be appropriated as a possession, we might argue that the absence of these curation processes and thus less sense of knowing DCOs intimately may produce less sense that DCOs are 'mine', and are part of who we are. Indeed, we saw in Chapter 9 that the loss of such DCOs was in some instances met with nonchalance and even relief, with participants concluding that since they could not remember what they had lost, it couldn't be that important. The frequent absence of such processes in the context of DCOs sensitises us to the ways in which enduring enactments of MCOs mobilise such processes; in DCOs' limited capacity to mobilise such processes the agency of MCOs in demanding to be dealt with becomes apparent. Therefore, we see that the level of endurance of consumption objects may shape consumer-object relations in ways that have not been previously explored, prompting curation processes that may facilitate increased familiarity between consumers and consumption objects.

This is not to say that DCOs are inherently transient and MCOs are inherently enduring. There may well be instances whereby MCOs are enacted in more transient ways. For instance, in comparison to houses, which are typically designed to endure in a stable form over time, tents are typically only enacted in their usable form for short periods of time during a camping trip before being broken down again and placed in storage until their next use. However, even in its 'broken down' form a tent endures in a particular spatiotemporal location and takes up physical space. We might also note the potential for more enduring enactments of DCOs; many devices are designed to be turned off or placed on standby when not in use and to be multifunctional, enabling many DCOs to be accessed. However, digital photo frames are designed to give digital photographs a more enduring presence in the home. Thus rather than attempting to categorise DCOs and MCOs as transient/enduring it is more useful to think in terms of a continuum which acknowledges the ways in which enactments of consumption objects may differ in their endurance and how this may shape their relations to consumers.

9.1.2   Multiple vs. Singular Enactments

By multiplicity I refer to the potential for multiple, as opposed to singular, enactments of consumption objects. Multiplicity is not unique to DCOs, but can be observed too in the context of MCOs, which may mean different things to different people; a figurine may be a toy to a child but a prized collectible to an adult (Belk *et al.,* 1991) and whilst a wedding dress may remind one consumer of their wedding day, to a bidder on an online auction website the dress may simply represent a second-hand bargain (Lastovicka and Fernandez, 2005). Thus in some senses multiplicity is easily observed; variance in both public and personal meanings has been previously documented (Richins 1994), whilst prior literature acknowledges the potential for MCOs to be enacted as possessions in multiple networks simultaneously as in the context of shared (Belk 2010) and lent possessions (Jenkins *et al.,* 2014). However, typically the MCO itself is seen to be enacted in a singular form in a singular spatiotemporal location at any point in time. MCOs cannot be enacted in two places, or two forms, at once, or so it would seem. In this sense they are singular. This is where DCOs may be distinct.

As noted in Chapter 2, Odom *et al.* (2014) have previously noted that DCOs may be experienced by consumers as 'formless' and 'placeless', and indeed I observed that unlike MCOs they need not be tied to a particular location, device or form. DCOs were observed to be enacted in multiple geographic locations, on different devices, in different forms, and by multiple users, often simultaneously. For instance, in Chapter 7 Louise explained that her digital files, although stored on a server in her home, could be accessed anywhere on any device via an internet connection. Similarly Andrew's collection of 16,000 songs could be taken with him in digital form wherever he went, via the iCloud. Alice's ebooks were accessed via both her e-reader, her tablet device and a smartphone app, and she noted that they appeared differently on different devices, whilst Natalie's blog was simultaneously enacted as an external display or exhibition (an edited form viewed by her readers) and a personal scrapbook (containing otherwise hidden posts, that she retained in order to reflect upon). Here there is no fixed 'place' that DCOs are bound to, and in many cases no fixed form. Such multiplicity is not inherent in DCOs in and of themselves but enacted by, for example, storage devices (e.g. external hard drives, USB flash drives, CD-ROMs and floppy disks) and cables enable movement between devices, whilst more recent movements towards cloud computing that enable DCOs to be accessible from any device with an internet connection. However, multiplicity is not always desirable characteristic for companies, who may attempt to reduce the multiplicity of DCOs. As noted in Chapter 3, DRM software has long been used in the music and film markets to limit movement between devices and people via restrictions encoded into the DCOs themselves. Such measures are seen in the ebook market, for example, with both Amazon and Apple applying DRM technologies to the ebooks they sell which,

amongst other restrictions, makes them incompatible (unusable) with competing devices and applications. In Chapter 7 we saw instances where movement of DCOs became problematic as they became tied to particular people (accounts) and places (devices), and here consumers' agency in relation to DCOs is constrained. Thus, as noted in Chapter 3, companies have striven to enact profitable markets for DCOs by restricting transfer between consumers, in particular duplication, by attempting to enact DCOs as singular and here various possible enactments of DCOs are prevented (I shall explore this phenomenon further in Section 9.3).

Multiplicity produced distinct processes of movement of DCOs between consumers. As opposed to singular items following linear biographies as they pass from person to person as in prior literature (e.g. Kopytoff 1989; Epp and Price 2010), DCOs were often duplicated rather than transferred and thus they could be simultaneously kept and given as multiple enactments emerged. For instance, in Chapter 7 Tom explained that he illegally downloaded digital films for his friends, yet although he had passed on these items they remained in his own digital film collection. Not only do distinct enactments occur (e.g. a digital file stored on two separate computers), but enactments can also be interwoven, connected via internet connections. For instance, in Chapter 7 Alice spoke of her blog as one day becoming a gift for her children, yet 'giving' this her blog to her children would not necessarily result in Alice losing access to and control over the blog herself; the blog can be accessed by multiple people on multiple devices in multiple locations, simultaneously. Thus multiple enactments of this blog exist, yet unlike the digital films in Tom's account, actions on this blog (e.g. transformations) may shape other enactments; they are interwoven. Similarly, DCOs synced between devices (as in Louise's story of an Apple account 'shared' with her husband), whilst photographs on Facebook could simultaneously become part of multiple consumers' Facebook profiles (as in Holly's and Becky's accounts in Chapter 6). Thus multiple distinct enactments of DCOs may emerge as they are duplicated, however we may also see interwoven enactments of DCOs as the internet connects multiple enactments. This multiplicity may challenge established notions of sharing as involving singular items that are 'ours' as opposed to 'theirs' and 'mine' (Belk 2010); what we can observe in the instance is 'multiple mines' whereby multiple consumers are able to experience DCOs as 'mine' simultaneously. Holly spoke of 'her' Facebook photographs, and Louise spoke of 'her' photographs, despite acknowledging that some of these items had been created or uploaded by other people. Belk (2014c) has used the term 'pseudo-sharing' to describe the business relationships that attempt to position themselves as communal sharing, however we might perceive interwoven digital possessions as a new form of pseudo-sharing.

Multiplicity can have consequences for consumption objects' stability where multiple actants have the capacity to disrupt consumer-object relations. For instance, in the context of interwoven DCOs, often multiple consumers can transform this entity. Think for example of

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Holly's Facebook page in Section 7.1; she is 'tagged' in unwanted photographs which present an uninvited addition to her Facebook page, whilst another consumer's act of deleting their Facebook account and therefore their uploaded photographs results in a depletion of her own Facebook profile as photos she is tagged in disappear, including photographs of her son. Such phenomena are the result of DCOs' multiplicity. Indeed, in some instances this was the premise upon which DCOs were based; Twitter accounts and YouTube subscriptions aim to accumulate new content (e.g. new videos, new tweets) for consumption. Similarly, the value of Natalie's collection of blogs in Google Reader, and later on Bloglovin' lay in their capacity to accumulate new blog posts as other bloggers posted them. These DCOs were always in a process of becoming, never fixed but instead continually emerging, drawing parallels with the ever unfolding epistemic consumption objects described by Zwick and Dholakia (2006a). Although epistemic DCOs hold distinct characteristics, we can observe more common instances of instability or what Zwick and Dholakia (2006a) call 'ontological liquidity' as DCOs' continued to change, transformed by actants other than the end consumer. Zwick and Dholakia (2006b, p.21) propose that uncertainty about "what the object might become" motivates the consumer to persistently engage with the entity. Similarly, I found that this ontological liquidity led individuals to continuously monitor Facebook pages, in case others uploaded content which was inconsistent with their identity projects. However unlike Zwick and Dholakia's (2006a) participants who strove to turn the consumption object (the stock market) into an ongoing knowledge project, here there is a distinction between those who embrace its epistemic nature and those individuals strive to reduce ontological liquidity and to regain control (indeed, as noted in Chapter 7, Facebook has changed the functionality of the platform in order to enable them consumers' to control the contributions of others to an increasing extent).

It is not only other consumers that have the capacity to disrupt consumer-object relations. DCOs, even those experienced as 'mine' and as personally meaningful, may remain present in the networks of companies who enact them as assets and may retain the ability to act upon and change them. Consider, for instance, company imposed changes to the contractual terms regulating Natalie's Instagram account, changes to the appearance of Eve's iCal due to software updates (see Chapter 7), and the discontinuation of Google Reader that resulted in Natalie losing her gathered blog feeds (Chapter 8). Thus many DCOs are never fully separated from the market as companies can continue to restrict and disrupt possession following creation/acquisition/accumulation. Such multiplicity is typically achieved via contractual agreements that enable companies to retain a level of ownership, which in turn may be enforced by ongoing surveillance of consumer activity and by restrictions encoded in the DCO or the software itself. However, as we move towards an era of cloud computing DCOs are increasingly shifting from being bound up with consumers' local hardware as they are instead stored upon

remote servers typically owned by companies, giving companies increased agency in relation to these items and reducing consumer agency. Thus through their entanglement in software, internet infrastructures and contractual agreements these DCOs retain an ongoing link to the market which consumers cannot sever. In Section 9.3 I shall further consider the consequences of multiplicity as prior attempts at purification become eroded, the states of possession and commodity blur, and conflicting ontologies emerge.

DCOs' multiplicity may hold significant consequences for consumer-object relations. Despite some recent exceptions (Watson and Shove, 2008; Epp and Price, 2010), central to prior theories of possession is the stable, inert consumption object and the active consumer who mobilises change (e.g. Kopytoff, 1986; McCracken 1986; Belk 1988; Price *et al.*, 2000l Lastovicka and Sirianni, 2011). Within extant theories of possession, MCOs are attributed a level of stability; they are generally seen to be ontologically solid, fixed, their enactments highly stabilised. Not only are they understood as singular and spatiotemporally fixed, but they are also assumed to hold a stable form that endures over time. Although possession may be disrupted, for example in instances of loss (Ferraro *et al.,* 2007), displacement (Epp and Price 2010), or shifting identity projects (Kleine and Baker, 2004), and changing circumstances (McAlexander 1991; McAlexander *et al.,* 1993; Akhtar 2005), the items themselves are typically assumed to be stable. There is recognition that MCOs may become damaged or worn (Gregson *et al.,* 2007). However, such changes are attributed to consumers' own interactions with the items. The MCO itself is typically assumed to be ontologically fixed or solid, transformed via consumers' own interactions with the item. Within this body of literature consumers are typically seen to form enduring attachments to material possessions, which become identity anchors, giving increased stability and permanence to the consumers' identities (e.g. Mehta and Belk, 1991; Belk, 1992). The DCOs observed in this study, however, didn't present such stability. As a result of their presence in multiple networks, DCOs can be experienced as unstable, subject to changes mobilised by other actants. Akin to Zwick and Dholakia's (2006a) study of the stock market, these objects exhibited ontological liquidity in their capacity to be enacted in varying ways and in their capacity to unfold, change and morph indefinitely, and in some instances break down or dissolve. Thus whilst MCOs are discussed by consumer researchers as identity anchors that tie consumers to a particular time and place (e.g. Belk, 1992) we see that there may not only be less sense of 'place' where objects are stored online and accessible via multiple devices (Odom *et al.*, 2014), but more broadly there is a lack of the stability required for identity anchoring and assumed in discussions of self-extension (Belk, 1988).

9.1.3 Summary

The DCOs observed in the present study were distinct from the MCOs that have been the focus of much prior research; their enactment was transient as opposed to enduring, and often multiple rather than singular. As noted above, the ontological status of DCOs is not inherent but enacted and in line with the ANT tradition we are not talking of 'ontology' but of 'ontologies' (Mol 1999; Law 2004). I do not propose that the characteristics of multiplicity and transience are unique to DCOs, not do I claim that MCOs are necessarily singular and enduring. Rather I argue that MCOs are portrayed as such in prior studies of material possessions. However, in exploring these characteristics this thesis sensitises us to instances where MCOs might also be enacted in different ways. Thus the ontological characteristics discussed above are so because they are enacted as such. However, that is not to say that they could not be enacted differently. As noted above, just as cloud computing enacts DCOs as multiple, accessible from multiple locations, DCOs can also be enacted as 'solid', tied to a particular device or user account and thus enacted as singular. In particular, I observe the role of the market in enacting realities that best serve companies' interests. In Section 9.3 I shall further explore the issues that arise when conflicting ontologies emerge as consumers attempt to enact DCOs as possessions whilst marketers simultaneously attempt to market them as assets.

The above discussion illustrates that the ontological characteristics of consumption objects may hold implications for consumer-object relations (as summarised in Figure 13). For instance, we have seen that transient of enactments of DCOs produces a lack of enduring presence that can inhibit their ability to provoke possession processes whilst their multiplicity can present conflicting ontologies which may disrupt and restrict possession (further explored in Section 9.2). As discussed in Chapter 2, prior work has demonstrated that possession may take different forms. For instance, Bardhi *et al.* (2012) note that whilst studies of material possessions have presumed solidarity and stability as a key (and preferable) attribute of these items, consumers may also form liquid relationships to possessions characterised by a focus on temporary situational value, use value, and immateriality. In Bardhi *et al.*'s (2012) work, different enactments of possession are produced by differences in consumers' lifestyles and preferences, whilst other studies indicate age differences (Csíkszentmihályi and Rochberg-Halton 1981) and gender differences (Dittmar 1991). This thesis advances such observations by demonstrating that distinctions in the characteristics of the consumption objects themselves can too shape enactments of possessions. In the following section I proceed to consider in more detail the role of actants beyond the end consumer, typically construed as the 'possessor' in prior literature, in enacting possession in the context of DCOs.

9.2 De-Centring the Consumer: Making Present the 'Missing Masses' of Possession

Extant theories of possession, in line with a broader tendency within interpretivist consumer research, have exhibited a tendency to privilege consumer subjects as they cultivate possessions' meanings, move them through various stages in their biographies, and employ them in on-going identity projects. However, in taking the consumer subject as the primary unit of analysis other sources of agency are overlooked (see Chapter 3). Despite some recent exceptions (Watson and Shove, 2008; Epp and Price 2010), the material possessions studied are portrayed as inert, passive objects that are subject to processes of 'possessing' by the active consumer subject. Scholars have attributed the privileging of the consumer subject to dominant methodological approaches within interpretivist consumer research, in particular the phenomenological interview that is seen to privilege the consumer and obscure aspects of phenomena not present in their lived experience (Moisander *et al.,* 2009a). This study sought to avoid a 'consumer centric' account by making present the 'missing masses' of possession. In adopting the principle of ontological symmetry central to ANT the present study avoided any a priori privileging of actants, instead engaging in a process of tracing actants with the aim of understanding the role they played in enacting possession in the context of DCOs.

In the findings presented above, it became apparent that many of the processes central to possession are not performed by the consumer alone. I propose that possession is not 'done' by consumers *to* DCOs but is a relational effect produced in the relations *between* consumers, DCOs and other actants. In this section, I reflect on the study's findings to highlight the role of actants beyond the end consumer, including non-human actants, in enacting possession. I begin by acknowledging consumers' tendency to black box DCOs and to make absent many actants, followed by a discussion of the ways in which actants beyond the end consumer enable, provoke and restrict processes deemed central to possession, displace consumers' agency in these processes, and disrupt enactments of possession. In doing so, I shall demonstrate that in enactments of possession agency is distributed in ways that have previously been obscured by 'consumer-centric' approaches.

9.2.1 Closing and Opening Black Boxes: Presence and Absence in Consumer Accounts of DCOs

As I noted in Chapter 5 as I introduced the study's findings, networks of actants frequently including hardware and software and in many cases internet infrastructures, were observed to be central to enactments of possession in this context since it is only in these complex networks of actants coming together that DCOs can be enacted and thus accessed, used, and otherwise

interacted with. However DCOs were typically 'black boxed' by consumers whereby these actor-networks were made absent until they broke down or the consumer's agency was met with resistance. For instance, participants paid little attention to the role of the hardware involved in enacting DCOs. Whilst the importance of hardware became evident to me in my role as interviewer as consumers used various devices (e.g. laptops, mobile phones, tablet devices) to show me their digital possessions, this hardware was rarely mentioned by consumers themselves until it was removed from the network (e.g. where the hardware was lost, inaccessible, or broken). Software too was absent until issues arose. Certain software was also needed in order to access and use DCOs, since hardware cannot operate without software. Devices such as laptops and mobile phones functioned due to their operating systems, whilst specific software was required to access and use certain DCOs (e.g. media players, videogame software). Once again, whilst the role of software in enacting DCOs and subsequently enacting them as possessions soon became evident to me in my role as interviewer, their role was absent from consumers' accounts until such actants were removed from the network (e.g. the correct software was not installed). Similarly, internet connections were taken for granted until participants were unable to access files stored online and passwords were not mentioned unless they had been forgotten. In particular the role of companies in consumers' relationships with their digital possessions was often made absent, something I shall discuss further in Section 9.3.

In summary, DCOs were, to use Latour's (2005) term, 'black boxed'. Just as consumers may refer to their car without reference to the engine, wheels, gearbox, and other components that enact this vehicle, consumers discussed their DCOs with reference to the actor-networks that enacted them. That is, until the networks broke down. When a car breaks down the driver becomes suddenly aware of the engine, the gearbox, and other components – the black box is opened. Similarly, although DCOs were frequently black boxed, treated as finite entities, the role of actants came to light when they were removed from the network, or resisted consumers' agency. For instance, we saw in Chapter 8 that consumer-DCO relations broke down where passwords were forgotten, internet connections were absent, data became trapped and had to be abandoned, and devices were lost, stolen or broken. In such instances of loss the importance of various actants that consumers otherwise made absent becomes present. Reflecting upon the above findings, I shall proceed to document the role of various human and non-human actants in enacting DCOs and subsequently in enacting possession. I propose that not only is agency invested in possession processes distributed across multiple human and non-human actants but that consumers' agency may be restricted and displaced by such actants, and that consumer-object relations may be disrupted and destabilised by these entities.

9.2.2 Enabling Consumer-Object Relations and Restricting Consumer Agency

The findings presented in this thesis document processes that are central within extant literature on the topic of material possessions; acquiring, creating, accumulating (less frequently acknowledged in prior literature), transforming, ordering, protecting, moving, divesting, and losing. However in comparison to prior literature these accounts draw our attention to the networks of actants involved in such processes, enabling us to move beyond the fairly limiting view that these processes are 'done' by consumers to inert DCOs. From an ANT perspective agency does not reside in any single actant, but in relations between actants; no actant can act alone but rather actants are afforded the capacity to act by their relations to other actants (Mol, 2010). Thus in those instances where consumers exerted agency in relation to DCOs their capacity to do so emerged in their relation to other actants.

The above analysis illustrates that where consumers are involved in creating, acquiring, transforming, ordering, protecting, moving and divesting DCOs they are afforded the capacity to do so by software; the option to do so is encoded in the software itself. Software in turn cannot act without appropriate hardware on which to run. Software is afforded the capacity to act by hardware, just as software affords consumers the capacity to act. The importance of hardware became particularly apparent in accounts of loss in Chapter 8. Where hardware was removed from the network, as in the case of Becky's lost mobile phone and Andrew's broken hard drives, DCOs could no longer be accessed – they too were lost. However, in an era of cloud computing where DCOs are increasingly stored on companies' servers and accessed via the internet, consumers' local hardware becomes merely a portal or access point. In such instances loss of hardware does not necessarily equate to loss of DCOs. However, this does not mean that hardware becomes unimportant – hardware is still required in order to access DCOs. Rather we may see that the device becomes more interchangeable. In Becky's account she needed her own (now lost) mobile phone in order to access certain DCOs – no other mobile phone would enable Becky's lost contact list and photographs to be enacted. In contrast, Louise's DCOs stored on multiple servers can be accessed from any device so long as she has access to her log in details and an internet connection; the hardware used to access DCOs is an interchangeable part of the network. Here internet infrastructures emerged as key actants; without internet connections many DCOs could not be enacted, as in Sue's account of her travel blog in Chapter 8. However internet connections were typically so widely available (all participants had broadband connections in their homes, often with unlimited downloads, whilst most had mobile phones with 3G/4G that enabled internet access whilst out of the home) and so reliable that the loss of access was uncommon and short lived. Thus internet connections were largely absent from participant's accounts. This analysis draws our attention to the complex networks of actants that produce processes central to

possession; possession isn't done by consumers to objects but is enacted. Where these actants unproblematically enable consumers to enact DCOs and relate to them in desired ways the work done by these actants is often made absent.

These actants not only afford consumers agency in relation to DCOs but may also restrict these relations, and here software's role is once again particularly apparent. Software held the capacity to restrict consumers' agency, both due to the inevitable limitations of code (only so many possible options can be encoded) and due to more deliberate restrictions imposed by companies in order to enforce the restrictions on consumer-DCO relations set out in contractual agreements (e.g. restrictions on movement between consumers). Here software emerges as a key actant that may set certain parameters around consumer-object relations, restricting consumer agency. Let us review some examples from the findings that illustrate software's role. Firstly, consistent with prior research (Watkins and Molesworth 2012) this study indicates that consumers' role in processes of creating and transforming DCOs facilitated their appropriation of these items as their own, yet the ability to create (Chapter 6) and transform (Chapter 7) DCOs was enabled and restricted by the software's code. Building on prior work by Watson and Shove (2008) in relation to DIY practices I demonstrate the role of non-human actants in such creative processes. The role of 'code' was often made absent by consumers – for instance beauty blogger Natalie preferred not to deal directly with the code of the blog itself. However, its role became apparent in the analysis presented above. For instance in James' story of customising his avatars in the videogame Dark Souls he explained that he was limited by the available options and had to compromise, unable to realise the vision in his mind. Thus whilst Denegri-Knott and Molesworth (2010) propose that 'digital virtual' spaces are free from the boundaries of material reality here we see that processes of creating and transforming DCOs are limited by code; new actants emerge which constrain consumer agency.

Whilst in some instances the limitations of code constrained processes of transforming and creating and thus, we might speculate, the level of personal meaning these items may come to hold, enabling consumer agency did not always produce more personally meaningful possessions. In Chapter 6 we saw that enabling consumers to establish consumer-object relations quickly and easily, requiring them to exert very little agency, eliminated the enjoyable experiences of desiring, anticipating, hunting and discovering that are prominent in prior accounts of acquisition (Campbell 1987; McCracken 1988; Belk *et al.,* 1991, 2003; Belk, 1995b; Bardhi, 2003; Bardhi and Arnould, 2005). Where DCOs did little to resist acquisition, little pleasure could be taken in pursuing these items and consumers had limited opportunity to demonstrate skill and competence by exerting their agency over easily acquired DCOs. In contrast, where DCOs were elusive and resisted acquisition (for instance in videogames where the software demanded a level of in-game

credit that must be earned through skilful gaming) consumers have an opportunity to demonstrate agency in a way that was experienced as an achievement, an act that demonstrates skill, knowledge and persistence. Here it was in DCOs' capacity to resist consumers' attempts at acquisition, requiring a higher investment of consumer agency, that they became personally meaningful. However, such elusive DCOs were rare outside of videogames since DCOs were all too easily acquired.

As noted in Chapter 2, research on material possessions documents an array of curation processes, including caring for, maintaining and cleaning possessions, as well as organising, storing and displaying them (Csíkszentmihályi and Rochberg-Halton, 1981; McCracken, 1986; Belk *et al.*, 1989; Belk, 1995b). In Chapter 7, I examined processes of protecting and ordering DCOs. However, the processes of protection documented here are distinct from those noted in prior literature accounting for the role of non-human actants such as devices, locks, and software. Networks of actants enabled processes of simply protecting everything with little effort on the part of the consumer. For instance, Tom protected all DCOs stored on his laptop with physical and digital locks, whilst Louise created multiple back-ups of all data on all devices, rather than selectively choosing which items to protect. In other cases, consumers lacked the capacity to protect possessions bound up in complex actor-networks, as in the case of DCOs hosted on companies' servers such as blogs, social networking profiles, and items in online videogames; consumers expressed confusion as to how they might to begin to protect these items since in order to do so they must confront the range of actants (e.g. code) normally made absent in their relation to these DCOs and consumers avoided opening these black boxes. For instance, Natalie and Alice expressed confusion as to how they would go about 'backing up' their blogs in their entirety, and both resorted to simply entrusting the safety of these items to the blogging tool WordPress. Furthermore, in exploring processes of ordering we see that consumers' capacity to order DCOs in desired ways can be both restricted and enabled by software. For instance, videogame Forza's organisation options did not enable Richard to organise his digital cars in a way that separated his 'collection' of prized cars, from his more mundane, less highly valued cars. Here we can observe a distinction from prior literature in which the agentic consumer subject imposes desired order on material possessions as a means of creating and reinforcing meaning (Belk *et al.,* 1989; Belk, 1995b), as software emerges as an actant that restricts their capacity to do so. Here we see that the curation processes seen to be important to cultivating meaningful possession are shaped by a network of actants that have not been previously recognised.

We also see that consumers' level of control over digital possessions is limited in terms of their ability to move possessions between people and places. DCOs can become highly interwoven with particular networks of actants (e.g. software, hardware, people). Movement of DCOs varied significantly. Some fully owned DCOs moved easily between multiple consumers,

however in other instances (e.g. legally downloaded ebooks and mp3 files) such instances were conspicuously absent from participants' accounts. In some instances movement was complex. For instance, moving DCOs between mobile phones made by the same manufacturer and with the same operating system was described as effortless, yet moving these items to a new type of device (e.g. from Apple to Android), as in Richard's and Jane's accounts in Chapter 7, was highly complex and time consuming. Here the ease of movement is shaped by software designed by these companies. Once again, this process can be enabled or constrained by software and here we see a distinction between agentic consumer subjects freely moving DCOs through stages in their biography, and choosing to share (Belk, 2010), lend (Jenkins *et al.,* 2014) and pass on (Price *et al.,* 2000) to others. Furthermore, where divestment took place software frequently enabled and even encouraged processes of mass divestment, enabling consumers to easily and almost effortlessly wipe laptops, empty entire folders, and delete entire text message conversations. In other instances DCOs can persist despite consumers' attempts at divestment. Whilst divestment is portrayed as a process implemented by consumers in order to facilitate self-cultivation (McAlexander, 1991; McAlexander *et al.,* 1993; Kleine and Baker, 2004; Lastovicka and Fernandez, 2005), their capacity to do so can be enabled and restricted by an array of actants, not least software, and here we see the emergence of new actants in consumers' identity projects.

9.2.3   *Mobilising Possession Processes, Displacing Consumer Agency and Disrupting Consumer-Object Relations*

In addition to enabling and restricting consumer agency, actants beyond the end consumer may have the capacity to mobilise possession processes. This capacity became apparent in the discussion of accumulation in Chapter 6. Consumers accumulate increasing quantities of DCOs that are not actively sought, such as text messages, emails and metadata, whereby the emergence of consumer-object relations has little to do with the agentic consumer. Whether valued or regarded as undesirable these object-consumer relations may emerge with or without prior invitation by the consumer and must too be dealt with. In other instance I noted items' limited capacity to mobilise processes. For instance, in Section 9.1 I noted that due to the transience of DCOs' enactments they may not demand consumers' attention. They don't remind us that they are there and as noted in Section 9.1 they may not mobilise possession processes in ways that more enduring MCOs may. For instance, we saw that Alice's ebooks do not have the enduring presence of her material book collection; they do not remind her they are there or prompt spontaneous browsing as they present themselves for viewing. In contrast to enduring libraries, Alice's ebook collection only presents itself when summoned via an e-reader, which displays one or a few items at a time. Similarly, we saw in Chapter 8 that DCOs hold limited capacity to

mobilise divestment processes, easily ignored and forgotten about and hidden from the view of both ourselves and others in comparison to MCOs enacted in an enduring way which take up physical space, clutter up our homes, impede activities and eventually demand to be dealt with (see Ekerdt, 2009). Thus we see that DCOs have a limited capacity to mobilise processes such as ordering and divesting, in comparison to MCOs. How might the capacity for DCOs to mobilise such processes shape consumer-object relations?

Processes of organising DCOs were typically automated, mobilised by the software without the consumer's input. Typically the consumer may purchase a MCO and brings it into their home, decide where to place it, and may integrate it with their existing possessions (e.g. deciding where to place an ornament in a display cabinet, or making space for a new book in an alphabetised collection). Here the consumer is involved in the initial process of ordering, however often with DCOs they were not. Richards's digital cars appeared automatically in a set order, organised by racing class, and Eve's digital music collection is automatically alphabetised by the iTunes software. New additions are automatically integrated. This is not exclusive to DCOs; we may move into a furnished flat that we are renting where some of our possessions (the furniture) have been organised by our landlord. However, such phenomena were particularly prominent in the findings of the present study; software mobilises processes of ordering without the consumer's input. However, mobilisation was most apparent in processes of protecting.

In some cases participants mobilised protection processes but played little role in choosing what to protect and how; Alice explained that she would plug her old Blackberry in, launch the software, and wait whilst the software performed a process of backing up. Again, this is not exclusive to DCOs; plugging in our phone and letting software back it up is similar in many ways to relying on a washing machine to clean our clothes; in both instances the consumer plays a role, yet elements of the process that may once have been performed by the consumer are delegated to non-human actants. However, in some instances the consumer's agency was entirely displaced from protection processes. For instance, Louise's iPhone backed up periodically to the iCloud without her input; she played no role in backing up this data. Here material equivalents are less common, although of course they may exist. Imagine, for instance, a machine which retrieved and washed our clothes and returned them to our wardrobe without us knowing how exactly this was achieved. This is where a significant departure emerges. Where protection processes are largely mobilised by consumer agency, as appears to be the case in prior accounts in the context of MCOs (McCracken, 1986; Belk *et al.*, 1989; Belk, 1995b; Gregson *et al.*, 2009), they may produce highly meaningful enactments of possession since such acts may produce and strengthen feelings of knowing, controlling and mastering possessions as well as creating order in the form of hierarchies of meaning which distinguish precious and irreplaceable items from more mundane

possessions. However, where protecting is mobilised by software and consumers' agency is displaced, it no longer becomes a marker of such meanings.

Thus software not only enables and restricts the actions of consumers in relation to DCOs but itself mobilises various processes related to DCOs such as organising and backing up these items independently of consumer input. Here we can observe that consumers' agency is not only afforded and denied by software but is increasingly displaced as it becomes unnecessary to such processes. The current design of software separates us from our possessions since it performs automated processes central to possession. Whilst we might see the software as aiding consumers by taking on these problematic tasks (labour saving devices that free us from the burden of laborious curation processes), we might also note that this may weaken consumers' relationships with their digital possessions since they have less opportunity to develop control, knowledge and mastery of these items (Belk, 1988), nor to engage in the sense making that is so important to prior studies of possession (e.g. Belk *et al.*, 1989; Belk, 1995b).

The capacity for other actants to mobilise these processes not only resulted in the displacement of consumer agency, but also held potential for consumer-object relations to be disrupted. We see a significant departure from the MCOs studied in prior research; whilst such objects are largely stable and it is the consumer who transforms their form and meaning, here we can observe the existence of unstable DCOs that, due to their multiplicity, may be transformed by other actants. For instance, as previously noted in Section 9.1, other consumers also mobilised the transformation of DCOs (e.g. Holly's Facebook page – Chapter 7) whilst companies imposed changes to the contractual terms (e.g. Natalie's Instagram account – Chapter 7) and to software (e.g. Eve's iCal – Chapter 7), and discontinued services (e.g. discontinuation of Google Reader – Chapter 8). Here we see that prior emphasis on the consumer mobilising change is limiting; possession is not stable and secure, with possessions transformed by the consumer to adapt to ongoing identity projects, but may be disrupted by other actants that may change or break down the enactment.

9.2.4   Summary

This thesis argues that consumer researchers should understand possession not as something 'done' by consumers but something that is enacted by, in some cases highly complex, networks of actants. I demonstrate the capacity of various actants to enable and restrict processes central to theories of possession. Furthermore, I examine ways in which these processes can be mobilised by such actants, which may displace consumer agency and disrupt consumer-object relations. In doing so I respond to criticisms of consumer-centric approaches (Moisander *et al.,* 2009a, 2009b;

Askegaard and Linnett, 2011; Bajde, 2013) by making present the 'missing masses' of possession. Doing so draws our attention to the non-human actants that might be made absent in studies of material possessions; locks, keys and security systems, for instance, are central to processes of protecting MCOs and to enacting stable possession, whilst shelves, drawers, cupboards, and display cabinets play a role in processes or ordering.

I argue that just because something is not phenomenologically important to the consumer, that does not mean that it doesn't act (code was almost always made absent from consumers' accounts of their digital possessions, for instance, yet without code there are no DCOs) and in this thesis I have demonstrated the value of an ANT informed account in making present that which is not present in consumers' experience of a phenomenon; in tracing actants the researcher becomes aware of actants that might otherwise have been overlooked. Thus the value of the method assemblage employed in this study lay in making present the missing masses of possession that may be made absent by consumers and by other research methods.

9.3 Overcoming Purification: Fragmented Ownership, Multiplicity and Conflicting Ontologies

There has been a tendency to separate the states of possession and commodity, and the spheres market and culture, with consumers' possession work severing ties between an object and its market origins. Commodities are generally defined in relation to their exchange value whilst singular possessions are defined instead in their relations to cultural categories (Kopytoff, 1986) and personal histories (Belk *et al.,* 1989; Richins 1994). Kopytoff (1986, p.75) describes commodities as being "comparable", "having something in common with a large number of exchangeable things" in opposition to a singular possession that is "uncommon, incomparable, unique, singular and therefore not exchangeable with anything else". To move a commodity from the homogenising market sphere into the domain of personal possession requires self-investment (McCracken 1988; Wallendorf and Arnould, 1988; Belk *et al.,* 1989; Richins, 1994) including imbuing items with personal meanings that attach an object to a time, place or other person (Csíkszentmihályi and Rochberg-Halton, 1981) and customising, cleaning, repairing, displaying and maintaining the preferential status of a meaningful or sacred possession (Belk *et al*., 1989) (see Chapter 2). Thus in prior work possession and commodity are presented as distinct states, between which consumption objects transition via a range of rituals. Kopytoff (1986) explicitly proposes that the singular and the commodity are opposites, and since understandings of possession are rooted in singularisation, possessions and commodities are too understood as opposites. Indeed in Chapter 3 I noted a broader purification of the cultural sphere of possession from the realm of markets, commodities and exchange within marketing research (see Slater

2011). However, in this study such attempts at purification break down. Possession and commodity are no longer opposed but may blur.

In Section 9.1 of this chapter I demonstrated that DCOs may exhibit ontological multiplicity, enacted in different spatio-temporal locations and often accessible by multiple consumers simultaneously. This ontological multiplicity may also facilitate the ongoing enactment of DCOs as company assets, as companies retain the capacity to assert agency in relation to DCOs even once they have entered consumers' possession networks. Such multiplicity is typically achieved via contractual agreements that enable companies to retain a level of ownership, which in turn may be enforced by surveillance and by digital rights management (DRM) techniques (as discussed in Chapters 2 and 3 of this thesis). Furthermore, as we move towards an era of cloud computing, DCOs are increasingly less bound up with consumers' local hardware as they are stored upon remote servers typically owned by companies, and here companies may have even greater control over DCOs. Through their entanglement in software, internet infrastructures and contractual agreements these DCOs retain an enduring presence in the market that consumers cannot sever, blurring the market-culture divide that often obscures the role of the market in prior studies of material possessions in consumer research. Consequently, we see DCOs characterised by multiplicity, simultaneously enacted as possessions on one hand and on the other as commodities or services within companies' profit making networks, each characterised by distinct and often clashing ontologies.

I shall consider consumers' attempts to make absent the role of the company in their relations to 'their' DCO, arguing that whilst this may serve to enable consumers to (at least temporarily) experience digital possessions as singularised in many cases it does not serve to sever DCOs' connections to the market which may present consequences for consumers including ensnarement, restrictions on consumers' interactions with DCOs and unstable possession.

9.3.1 Making Alternate Enactments Absent: Consumers' Singularisation Attempts

Not only did participants in this study make absent the work performed by other actants, as noted in Section 9.2.1 of this chapter, they also made absent alternate enactments of DCOs, and in doing so made absent the ongoing role of companies in relation to 'their' DCOs. As noted in Chapter 2, the term 'singularisation', stemming from the work of Kopytoff (1986), is commonly used in studies of material possessions to refer to the process of decommoditisation whereby a commodity enters the home and is imbued with personal meanings, transformed into a possession that is separated (at least temporarily) from the market sphere, its exchange value made absent. However, in the context of the DCOs observed in this study consumers' attempts to appropriate

these items and imbue them with personal meanings often did not separate them from the market sphere in this way.

Such processes did, at least temporarily, enable consumers to experience DCOs as 'singular' possessions by making absent other enactments, much in the same way that we may experience a bench in our local park as 'our' bench by making absent other enactments of possession involving other individuals. Consumers' attempts to make alternate enactments absent became evident in their ignorance of the contractual agreements they had subscribed to. The findings of this study are consistent with prior work, which finds that contractual agreements are rarely read (Gross and Acquisti, 2005; Bakos *et al.*, 2009; Cotton and Bolan, 2012; Debatin *et al.*, 2009; Chee *et al.*, 2012). As noted in Chapter 5, these agreements were not mentioned by consumers unless prompted, at which point participants admitted that they had not read these agreements and could not describe their content. Participants frequently attributed this to a lack of time, or a lack of understanding. However, we might also interpret this as a reflection of consumers' tendency to make absent outside influences upon their digital possessions. In reading a contractual agreement the consumer is acknowledging that a digital possession may not be legally theirs and may not be fully under their control. However, in avoiding these agreements the company's ongoing role, and consumers' limited rights to 'their' DCOs, could be made absent. Thus whilst the multiplicity of DCOs can blur the boundaries between the spheres of market and culture, consumers themselves engage in an act of purification by making companies' ongoing role absent. Thus in sum, acts of 'singularisation', for instance via acts of transforming DCOs that mirror prior work by Watkins and Molesworth (2012) and Denegri-Knott *et al.* (2012), did not serve to sever DCOs from the influence of the market.

Such attempts by consumers do not break down alternate enactments, but simply enabled consumers to make them absent from their experience of their digital possessions. However, the absence of companies from consumers' experiences of DCOs was often only temporary. In the same way that we might one day find that 'our' park bench is in use by someone else or has been removed by the council, so too might alternate enactments involving DCOs be made present when they disrupt or restrict consumers relations to these items. I shall now consider some of the issues that arose where consumers' attempts to enact DCOs as possessions and companies' attempts to enact them as assets conflicted.

9.3.2   *Conflicting Ontologies and Implications for Possession*

We can observe a number of ways in which DCOs' ongoing enactment as company assets can be problematic in relation to enactments of possession. In this section I shall describe three phenomena observed in this study whereby conflicting ontologies held significant implications

for DCOs' enactment as possessions; ensnarement, restrictions on consumers' agency, and disrupted consumer-object relations. Here we shall see some links with the discussion of multiplicity presented in Section 9.1 and the discussion of disruption to consumer-object relations presented in Section 9.2 exploring further those aspects pertaining to companies' involvement.

Firstly we can observe issues of entanglement/ensnarement whereby consumers invest significant effort in creating, transforming, or otherwise appropriating DCOs tied to particular platforms, software, and even hardware from which they can never be separated. Rather than separating DCOs from the market sphere, such processes may instead produce a phenomenon of consumer ensnarement, tying consumers to items that cannot be separated from the company's influence and thus tying consumers into market relations. This becomes particularly problematic when companies implement changes, including changes to the terms of contractual agreements intended to regulate their use of DCOs. Most of these agreements include terms that retain companies' right to change these terms at a later date. For instance, Instagram's (2013) Terms of Use state "We reserve the right, in our sole discretion, to change these Terms of Use ("Updated Terms") from time to time." However a particular issue emerges where consumers are too invested in platforms to reject these new terms and leave the platform. For instance, Natalie explained that after investing substantial time and effort in cultivating her Instagram account, developing an extensive network of followers and uploading and editing many photographs, she found it difficult to leave the platform once the terms of the contractual agreement changed. Here Natalie is ensnared by the effort she has invested in developing a meaningful relationship with this DCO, rendering it increasingly difficult for her to leave the platform. This may be particularly problematic where ongoing access to DCOs comes at a cost (e.g. World of Warcraft) and this presents an important area for further exploration.

Secondly, we can observe how consumers' level of control is compromised since control is retained by corporations who, through the use of software, restrict consumers' access to and use of DCOs. For instance, Alice expressed concern that she may not be able to pass on her ebooks to her children whilst others struggled to transition DCOs between devices. Whilst property norms appear ubiquitous within Western society, where DCOs are concerned these norms remain to be concretely established and yet we see that this becomes of little importance in practice since norms play a less significant role in shaping the ways in which we use DCOs (as previously noted by Lessig (1999, 2006). It seems that we may have little room to decide how we and others should relate to digital possessions; often rules for use are coded into DCOs themselves that lay the groundwork only for certain consumer-object relations. Companies increasingly enable a level of transfer; iTunes has introduced Home Sharing and Family Sharing, and Barnes and Noble's Nook now accommodates restricted 'lending' of certain ebooks. However, even here the ability to share

appears to be controlled by companies who dictate such social processes. It is important to note that companies' attempts to impose restrictions were not always effective in constraining consumers' interactions with DCOs. In this study we saw that Louise shares an Apple ID (account) with her husband, enabling processes of 'sharing' DCOs as the devices 'sync'. Sharing an Apple account is prohibited and yet this process occurs and Kelly makes no reference to any such restriction. Similarly Jane engaged in a copying her iTunes music to an Android device and explained that she doesn't feel she is doing anything wrong, making reference to her prior use of CDs to rationalise her actions. Thus the findings of this study indicate that companies' restrictions on use may not always effectively restrict consumers' interactions with DCOs.

Furthermore in some instances DCOs' ontological instability, as documented earlier in this chapter (Sections 9.1 and 9.2), resulted from changes inflicted by companies. In addition to the changes in contractual terms described above, in Chapter 7 we saw that new software updates imposed by Apple changed the form and appearance of Eve's digital calendar whilst Google's discontinuation of Google Reader led Natalie to lose her collection of blogs within the platform. Their lack of stability again leads us to consider how such relationships with personally meaningful yet unstable DCOs may relate to consumer identity projects since Belk (1988) notes the potential for significant 'lessening' of the self where highly appropriated possessions (facilitated by the ability to access, use, transform and manage these items) are lost. Where we incorporate unstable, partially owned DCOs into our sense of self, might our 'self' become increasingly unstable, and more prone to disruption? The relation of digital possessions to identity in light of this ontological multiplicity presents an intriguing area for future study, although this is beyond the scope of the present thesis.

9.3.3   Summary

Highlighting limitations in the current trend towards dichotomising full ownership and access-based consumption (Chen 2010; Bardhi *et al.,* 2012; Belk 2013; 2013b) this thesis recognises a broader, more complex array of 'fragmented' ownership configurations in the context of DCOs and illustrates ways in which they may shape the way in which possession is enacted. In a significant departure from prior studies of possession we see that processes of transformation and other processes of appropriating DCOs do not necessarily sever these items from the influence of the market; many continue to be hosted online on company's servers whilst in the context of purchased and locally stored DCOs the rights that companies retain in contractual agreements enable them to retain their influence. Thus whilst acts of transformation may enable consumers to experience DCOs as highly meaningful possessions, with the role of the company made absent, they do not produce singularisation as understood by Kopytoff (1986) in that they do not sever the DCOs' ties to companies and to the market sphere. They may remain present in companies'

networks as assets and the above analysis brings to light instances where consumers' scope of action relative to DCOs is constrained, and where consumer-DCO relations are susceptible to disruption as companies continue to transform DCOs, changing their form and function and even changing the terms of contractual agreements. Furthermore, singularising processes which elsewhere de-commoditise (Appadurai 1986; Kopytoff 1986) or sacralise mundane objects (Belk *et al.*, 1989) may here ensnare consumers, tying them into market relations rather than separating DCOs from market. Overall this work highlights how multiple, potentially conflicting, ontologies may interact with and shape one another. In contrast to the highly liquid relationships with DCOs suggested by Bardhi *et al.* (2012) this thesis demonstrates that emerging business models hold significant consequences for consumers.

Despite criticism that ANT produces overly descriptive accounts without critical capacity (Bloor, 1999; Restivo, 2010), the notion of ontological politics (Mol, 1999; Law, 2004) enables critical accounts since it presents power as the ability of an actant to enact a desired reality. In this study we see that companies attempt to enact DCOs in a way that provides opportunities for ongoing valorisation whilst consumers wish to enact DCOs in a way that enables them to interact with DCOs as they wish. These actants are each attempting to enact a particular reality of DCOs and power might be seen in terms of which actants are able to act and which are not. Upon reflecting on prior work through the framework of DCOs as ontologically multiple, we see that such tensions have been previously documented. For instance, if we reflect on Gielser's (2008) study of the ongoing struggle between corporations imposing legal restrictions on digital music consumption, and consumers' attempts to resist them, we might see this as a clashing of ontologies as different actants (consumers and companies) simultaneously attempt to enact DCOs in different ways. In summary, the market comes to play new and significant roles in shaping the way we come to relate the consumption objects we buy and create, challenging prior tendencies to purify marketing research into distinct spheres of market and culture as noted by Slater (2011). Perhaps most worrying is the tendency for consumers to make such multiplicity absent until issues arise, and here we see a potential need for consumers to be made aware of the business models implemented in this market.

9.4 Chapter Summary

This chapter has reflected on the study's findings in order to consider their theoretical significance in relation to our understanding of consumer-object relations and of possession. This thesis does not simply translate prior understandings of possession to the context of DCOs, but rather DCOs present a fruitful context via which this thesis advances extant theory. In doing so, it overcomes the three key limitations to prior understandings of possession identified in Chapter 2 (as

summarised in Figure 12). Firstly, this thesis contributes to consumer research by identifying common ontological characteristics of the DCOs studied and demonstrating the ways in which these characteristics may shape enactments of possession. In doing so it not only expands our understanding of possession beyond the context of MCOs but also demonstrates that enactments of possession are shaped not only by variations in consumers but also by the characteristics of consumption objects themselves.

A second contribution of this thesis lies in demonstrating that consumers do not 'do' possessing to consumption objects, but rather that possession is enacted by a heterogeneous network of human and non-human actants. Whilst consumers tended to black box DCOs and thus to make absent many non-human actants (e.g. laptops, internet connections, passwords, software), they frequently came to light as networks broke down and shifted beyond their control. In this thesis I demonstrate the role of many non-human actants in enabling, restricting, and provoking possession processes, displacing consumers' agency in such processes, and disrupting and dissolving enactments of possession. In doing so, this thesis makes present the 'missing masses' of possession that are obscured in previous consumer-centric accounts.

Finally, this thesis demonstrates that their multiplicity enables DCOs to continue to be enacted by companies as assets whilst simultaneously enacted as possessions by consumers. Whilst consumers tended to make absent the role of companies in their relationships with their digital possessions, enabling them to be experienced as singular, consumers' processes of transforming possessions often failed to sever these items from the market. Indeed, processes typically seen to singularise DCOs may ensnare consumers as they unwittingly tie themselves into market relations, whilst companies often held the ability to restrict and disrupt their relationships with their digital possessions. This analysis contributes to consumer research by highlighting the limitations of dichotomising full ownership and access based consumption, highlighting the consequences of fragmented ownership configurations in the DCO market.

This analysis presents a distinct departure from prior studies of possession; not only does this work examine possession in the context of DCOs but in conceptualising possession as enacted this work de-centres the consumer, acknowledges the blurring of possession and commodity, market and culture, and highlights the ways in which consumption objects' characteristics may shape enactments of possession. In this thesis I have demonstrated that a perspective informed by actor-network theoretical sensibilities can extend our understanding of possession. Understanding possession as consumer-object relations characterised by proprietary feelings, enacted by networks of both human and non-human actants, can provide a fruitful lens for consumer researchers.

Chapter 10: Conclusion

I have argued that drawing from the actor-network theoretical principles of relational materiality, ontological symmetry and ontological multiplicity better equips consumer researchers to overcome current limitations to theories of possession by granting all actants equal ontological footing, breaking down a priori distinctions, and accounting for multiplicity. Conceptualising possession as enacted in the relations of consumers, consumption objects, and broader networks of human and non-human actants, the present research employed a method assemblage that aimed to make present those actants made absent in prior studies of possession, drawing from multiple in-depth interviews with twenty UK consumers conducted over a two year period and subsequent interrogation of relevant actants (e.g. software, hardware, contractual agreements). Drawing from these findings this thesis documents the way in which digital consumption objects (DCOs) are enacted as possessions, observing the relations between DCOs and consumers, including their emergence and dissolution. Reflecting on these observations, this thesis advances consumer research's understanding of digital possessions, and in doing so demonstrates ways in which this new category of consumption object prompts a re-consideration of prior theories of possession. In concluding this thesis, I shall summarise the theoretical contribution that this research offers to the field of consumer research before critically considering the limitations of the present study and the avenues it presents for further research.

10.1   Theoretical Contribution

In adopting key principles from actor-network theory (ANT) this study developed a method assemblage that aimed to make present those aspects of possession not acknowledged in extant literature. In doing so, this thesis presents three distinct theoretical contributions to consumer research's understanding of possession.

Firstly, it moves beyond the context of material consumption objects (MCOs) to explore relations between consumers and DCOs. Drawing from the actor-network theoretical principle of relational materiality this thesis conceptualises consumption objects as enacted; the characteristics of consumption objects are not inherent, but an effect produced by networks of actants. This understanding informed an analysis of the ontological characteristics of the DCOs observed in this study. Distinct from the singular and enduring MCOs documented within prior research, upon which theories of possession are premised, DCOs were observed to be enacted in transient and multiple ways, characteristics which hold implications for their relation to consumers. These findings indicate that variations in enactments of possession can be linked not only to the characteristics of the consumer (e.g. age, gender, lifestyle), as indicated in extant literature, but

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also to the characteristics of the consumption objects themselves. In conceptualising DCOs as enacted, and acknowledging key ways in which enactments may vary, this thesis provides a framework for future exploration of this relationship.

Secondly, this thesis makes present the 'missing masses' of possession. The principle of ontological symmetry that informed this study demanded that all actants be assumed a priori as ontologically equal, rather than privileging the consumer. The subsequent analysis traced the actants that enact possession in the context of DCOs and in doing so demonstrated the role of actants beyond the end consumer in enabling and restricting possession processes and in mobilising these processes in ways that may displace consumers' agency and disrupt possession. In doing so, this thesis makes transparent the instability of possession and the constant work required in order to achieve stability; examining the networks that enact DCOs and enact possession in the context of DCOs sensitises us to the enactment of all consumption objects, including our seemingly stable material possessions. In conceptualising possession not as something 'done' by consumers to consumption objects, but as proprietary feelings emerging from consumer-object relations enacted by networks of both human and non-human actants, this thesis presents a fruitful lens for future studies of possession to move beyond consumer-centric approaches.

Thirdly, the principle of ontological multiplicity stemming from the ANT tradition enabled me to account for multiple enactments of DCOs. Most notably, this thesis demonstrated that in their multiplicity DCOs blur the states of possession and commodity, and consequently the spheres of market and culture, that have previously been purified in studies of possession as DCOs are simultaneously enacted as possessions in relation to consumers and as assets in relation to companies. This ontological multiplicity is seen to be produced by fragmented ownership configurations that have not been previously recognised as consumer research has dichotomised full ownership and access. Furthermore, the thesis highlights the potential consequences of this ontological multiplicity, noting instances of conflicting ontologies that may produce both consumer ensnarement and restricted and unstable possession.

Thus rather than simply re-producing the established narrative of possession in the context of DCOs, this thesis revisits and reconsiders our understanding of possession, drawing from ANT sensibilities to highlight aspects of consumer-object relations that have previously been obscured. In doing so, this thesis develops an understanding of possession that moves beyond the affective dimension that has dominated prior studies (see Belk *et al.*, 1989; Tobin, 1996; Price *et al.*, 2000; Ahuvia, 2005; Lastovicka and Sirianni, 2011) to document the ways in which possession is enacted or 'done'. Shifting my emphasis from consumers' emotional attachment to DCOs (see Denegri-Knott *et al.,* 2012; Watkins *et al.,* 2012), enabled me to examine the relations that are

important in order for 'possession' to take place, and here we have seen that the act of 'possessing' that seems to have been attributed to the consumer is rather distributed across a broader network of human and non-human actants. Thus this thesis contributes to consumer research by addressing three limitations to extant theories of possession and presents a valuable framework for examining consumer-object relations in future studies of possession

10.2   Limitations and avenues for further work

This thesis does not claim to provide a total or complete understanding of digital possessions. The aim of this thesis was never to document the observed relations between consumers and DCOs in their entirety but to focus upon aspects of these relations that presented a significant departure from extant theories of possession and spoke to the study's research questions. I shall now critically reflect upon the limitations of the present research, highlighting questions that were beyond the scope of this thesis and discussing ways in which future work might build upon this research to further develop our understanding of digital possessions, to explore the marketing and public policy implications of these findings, and to further develop critical debates that are provoked by the study's findings.

Firstly, in line with prior studies of material possessions (Csíkszentmihályi and Rochberg-Halton, 1981; Ahuvia, 2005; Miller, 2010) this study did not focus on any one 'type' of DCO (e.g. digital music, avatars), enabling broader observations regarding possession in the context of this category of consumption object. However, there is potential for future to work to build upon the understanding developed here by adopting a narrower focus in exploring possession in the context of particular types of DCO, conducting fieldwork that restricts its focus to one market, product or platform. This narrower focus may enable further tracing of complex actor-networks that produce particular enactments of possession. Research might also benefit from focusing on particular 'types' of possessions such as collections, heirlooms, gifts and shared possessions. Although due to the inevitable space limitations of this thesis they could not be explored here, the findings of this study indicate that some of these well documented enactments of possession may occur in distinct ways and meet new opportunities and obstacles in the digital realm; each presents a rich topic of study in its own right and this thesis lays the groundwork for such research.

Secondly, whilst Latour (2005) calls for researchers to 'follow the actors themselves', ultimately he recognises that we always have to 'black box'. In this study I was unable to trace all actants in full and did not unpack black boxes where I concluded that doing so did not enhance my ability to answer the research questions posed. For instance, in referring to both the discontinuation of Google Reader and the release of new iTunes software I black boxed the

networks of actants that produced these changes (from the multiple staff members who made these managerial decisions, the changes within the market that prompted these decisions, and the employees who implemented them using a variety of tools and techniques). This process of black boxing was an important part of this study's method assemblage. However, further research might choose to focus upon unblackboxing some of these actant. For instance, how is it that end user licence agreements are enacted and how might we transform this enactment in a way that benefits the end consumer? Researchers might choose to focus on the software itself, to consider in greater depth how it is that software comes to act in the ways described in this study. Furthermore, in this study the importance of hardware in the possession of DCOs becomes evident and future work might further explore devices themselves as possessions and unpack the device-DCO relationship. Thus although it was necessary, as is always the case, to black box actants in this analysis, future research adopting a narrower focus may present opportunities for further tracing of actants.

Thirdly, future research may wish to return to the characteristics of the consumer and examine the ways in which they may shape their relation to DCOs. Might age, for instance, be important in shaping enactments of possession in the context of DCOs, as has been suggested to be the case for material possessions (Csíkszentmihályi and Rochberg-Halton 1981)? Within my participants' responses there appeared to be distinctions between the ways in which younger participants who had grown up with DCOs discussed these items and the stories of participants in older age groups who drew comparisons with earlier experiences of material counterparts (for instance, comparing emails and text messages to letters, mp3s to CDs and even records, digital photographs to analogue photographs). However, this study was not conducted with the aim of understanding generational differences in enactments of possession and therefore participant selection does not reflect such an aim. Prior studies of digital possession with consumer research (Denegri-Knott *et al.*, 2012; Watkins and Molesworth, 2012) do not make reference to this relationship, whilst HCI research (e.g. Odom *et al.,* 2011; Bales and Lindley, 2013) has focused heavily upon teenagers and young adults. Thus future work might choose to purposively sample participants in order to unpack distinctions in various age groups' experiences of possession. Furthermore, all participants were British and living in the UK and therefore their accounts were likely situated within traditional Western notions of property and possession; prior literature indicates cultural differences in possession norms (e.g. Belk 2010) and studies within other cultures may find that consumers provide distinct accounts of their digital possessions.

Finally, although the central aim of this thesis was to make a theoretical contribution to consumer research, there are further marketing and public policy implications raised by this research that cannot be fully explored here due to space limitations. These findings provide insights for marketing practitioners producing DCOs since they raise awareness of issues and opportunities in designing DCOs and related software and hardware. As has been previously

noted in HCI (Odom *et al.,* 2011, 2014) a stronger understanding of possession can enable design that facilitates more meaningful relationships with digital possessions. For instance, in terms of curation consumers might be provided with better tools for managing digital possessions, enabling them to better impose order by organising them as desired, in contrast to the tendency for current software to impose organisational schemes that can undermine individuals' sense of control. Thus software design may enrich curation processes, enabling a greater sense of control and mastery on the part of the consumer. Whilst this is beyond the scope of the present thesis, future work within consumer and marketing research might consider the marketing implications of this study's findings by examining the ways in which software and hardware design might intentionally shape consumer-object relations in desired ways.

Ethical and policy issues are also raised by the findings of this study which provides accounts of the ways in which current business models shape enactments of possession. We have seen that due to the involvement of contractual agreements, software, and online platforms, consumers may be forced to continually engage with the market in order to access their digital possessions and thus the spheres of market and culture become blurred. In particular, I highlight issues of ensnarement that have not been previously identified, alongside ways in which companies may restrict and disrupt consumer-object relations. In this rapidly developing market things rarely stand still; new platforms enter the market, business models change, new regulations come into play, new hardware and software products are developed, and, of course, broader shifts in consumer culture continue to occur. Consequently, new enactments of digital possessions are continuously emerging and it becomes important that consumer researchers document these enactments in order to consider how we might ensure that they serve not only the interests of companies, but also the end consumers in whose lives these items may come to develop significance. Furthermore, despite criticisms that ANT is an overly descriptive approach it may enable critical perspectives when drawing from the notion of ontological politics and whilst spatial limitations prevented their elaboration within this thesis the analysis presented above opens up various critical avenues. In particular, future research might examine the historical trajectory towards increasingly complex actor-networks enacting various consumption objects and the increasing displacement of consumer agency, considering the benefits of such network complexity for companies and the potential consequences for consumers. In whose interests have these complex networks been enacted?

In summary, this thesis provides initial insight into an emerging area of consumer culture by examining relations between consumers and DCOs, extends theories of consumer-object relations and possession by addressing three core limitations of extant theories, and presents a number of avenues for further exploration.

Appendices

Appendix A – Letter of Consent

Appendix B – Example Interview Transcripts

Rebecca D. Watkins
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Letter of Consent

I understand that I am being interviewed by Rebecca Watkins, a PhD researcher from the University of Southampton,[4] as part of her doctoral research on digital possessions. I consent to the interview data and other materials collected (e.g. screenshots, photographs) being used in Rebecca's doctoral thesis and any resulting publications. I understand that all personal details will remain confidential and that I will not be personally identified in the research. I also understand that the interview will be recorded and that the recordings will not be made available to anyone other than Rebecca, her supervisory team, and the examination board.

I have been given Rebecca's name and contact information and I have been told that I may stop the interview at any time. If I have any concerns about the interview, I understand that I may contact Rebecca to discuss these.

Signed: ....

Name: ....

Date: ....

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[4] In earlier interviews that took place during my PhD candidature at Bournemouth University, prior to my transfer to the University of Southampton, the same letter was used but with a different affiliation and contact details.

Participant: Natalie

Date/Time: 11/9/2012, 6.30pm

Location: Natalie's living room

Interview Duration: 1hr 39 mins

R=Rebecca, N=Natalie

R: So to start with do you want to tell me a bit about your background? Where are you from?

N: Yeah, well I'm from London, southwest London, and that's kind of where I went to school, where my parents are from. And then I moved to Bournemouth to study. So I did a year of computer animation, because I wanted to go into that industry, but bailed on that because it was really, really hard. So I finished the year, and then I moved to an interactive media course. So I did that for my degree, did that for three years, and in doing that we had to do six weeks placement during the summer and I knew I wanted to do it in visual effects and postproduction, something like that. So I what I did was to kind of do running work for places in Soho, and then I realised I didn't want to be a runner. So I thought, "Well what can I do at uni to kind of stop me from having to be a runner?" So I finished my degree, and I thought, "I know I'll do a masters," because if you stayed on at Bournemouth you got a certain per cent off and you could save money, it was cheaper. And then I also thought that having a piece of paper saying I could produce might help me get into the sort of production co-ordinater roles and the industry and I was like "Oh, yeah, that will all be fine". And then, um, before I started my masters, to help kind of fund it and because my friend on my course had graduated, we set up a software development company, so we did that for a year, kind of like doubled up doing my masters and running a company as well, but I was like "Oh, it's good because it'll help me get to my dream job at the end of it". Finished my masters, completed that, um and then tried to get a job in the industry, but I couldn't because there were no jobs available. So we moved the business from Bournemouth to London. I carried on with the business until December, which was December last year. Um, and then I was kind of like, this is great and all but it isn't really like what I want to be doing. So I decided to leave and to do something else. I still couldn't get a job doing what I wanted to do in the industry so I was kind of panicking and kind of really turned left wing and got a job in the beauty industry. So I went to do an internship on no money for like three months, so I was just kind of helping out. I got taken on there, got offered a full time job there and whilst I was working there, the whole time I was there I was applying for jobs in the industry to try and kind of get in somewhere. And then out of the blue someone emailed me, and was like right we've got a position available, it's slightly different because it's in Bournemouth, it's not in London. Obviously, I'd moved back home but because I'd lived in Bournemouth that wasn't really a problem for me. So I was like, um OK and I accepted it and then I went backwards, went back into the industry, moved back to Bournemouth and kind of left everything else. And in the midst of that, probably, I think... was it during my Masters or during my third year? I set up my blog as well. And then I was doing that, I've been doing it for three years now so it must have been... I can't even remember... might have been the summer... I think it was the summer before my masters that I started it up, and then I was doing it alongside everything else. Multitasking (laughs).

R: With the special effects business, what did that involve?

N: Um, so what we do is, it was because my course mate is an insane developer, he's like a genius with development, he can just make anything, and he set up the development company but he really struggled with organising it and things like that, so he came to me and was like do you want to set up a company, and he said this in our second year of uni. I kind of thought nothing of it and it was only getting towards the end of the degree that it was getting serious, and obviously I needed money for my masters so I was like as long as I can work part time I'll happily run the company for you. So, um, we had our first client Sky because he brought them on from a freelance job he had, that's what we do is we do kind of like website, internet, installations and things like that, and I was kind of like the project co-ordinator and managed all that side of things.

R: Do you have an understanding of the coding side of things?

N: I do, but like in very laymen's terms. I liked to know what was going on because it kind of helped me do my job, if I didn't I would kind of be clueless. I kind of call myself the interpreter, I was the middle person between the client and developer so interpret what each person was saying so the other could understand because the developer would be saying something and the client would be like "What?" So I had to kind of change the wording, and it was useful to understand what was going on, but if it got into too much detail I'd zone out.

R: So with the job you do now, what do you do there?

N: Um, I'm a production co-ordinator, I work for a visual effects company, um and what I do is I manage all the tasks. So, the artists working on the shows, what I've got to do is make all their tasks done on time, when we get new ones schedule them in, manage priorities, manage any problems, just make sure that everything's running smoothly and everything's getting done on time. Pretty much. I can be a bit of an agony aunt as well because everyone tells me all their problems (laughs).

R: What is visual effects, exactly?

N: Visual effects... I work for a company called _____, and what they do is they do all the special effects for feature films, so they worked on _____ and _____ and things like that. So what they do is get the right shot, create all the fire and flames and if anything explodes, or even simple things like adding in more characters or changing the set a bit, they do all the CG special effects, to bring it to post production point and then into a feature film. I think it's hard because I kind of struggled to get into the industry, because it's so hard. I never thought I'd get here and I was worried that I'd hate it. Because I've done things before that I loved, for example I loved beauty and I worked before on a beauty counter and I *absolutely* hated it, I only lasted a month because it was the worst job I'd ever had. And it kind of stopped me, because I always thought things that I loved would be great as a job, so I sort of worried that it would be something I hated, but I'm such an organisational person that I love just spending my days with a schedule.

R: What was it that you didn't like about working on the beauty counter?

N: I think because I've always had a retail job all throughout my studies, since I was fourteen, to obviously earn money, so I'd worked in retail for a long time. It's just so sales based and pushy, especially, the most I found with the beauty counter. Everything was targets. I was told

if in the first three months I didn't sign someone up to a store card, which is like a credit card, then I wouldn't be able to keep my job. We weren't allowed to stand still, we had to keep walking around, pushing people... it's just too forced, too in peoples' faces. I know that as a customer I don't it when people do that to me so I felt uncomfortable forcing other people... I was much happier for, if people needed help then I'd be happy to help them, but they can approach me as opposed to me hunting them down in the store.

R: When you first started your blog, what made you decide to do it on beauty, or was it always going to be on beauty?

N: I've always kind of been into beauty stuff, when I was about ten or eleven my best friend was about thirteen or fourteen, a girl who lived on my street, so I've always had a friend a bit older than me and she was starting to get into makeup and stuff, so she introduced me to it when I was younger. So I kind of picked up her habits, and you know when you're young you kind of copy other people, I was like "Oh my god, this is amazing". So I used to copy her, and buy what she bought, and have all these kind of toys to use, different hairsprays and things like that. So I've always kind of stuck with it, I've never really taken it seriously I just thought, "Oh well, all girls like makeup" and as I got older that's what I would spend money on. Some people are into shopping, clothes, shoes and things but for me it was always makeup. If I had some spare money, or if I saved up it would be for a makeup item as opposed to anything else. That was kind of what I wanted to go out and buy, so I was building up quite a collection around me. And then I kind of... well I don't really know how I found beauty videos. I know, actually, I was reading the Metro and I found a feature on YouTube videos on people who make makeup videos, and I was like "Oh my god, this is amazing; why didn't I know about this before?" One of the ones they mentioned was Laura from Lollipop26 when she still made videos and I remember watching her, and then through her I found all these others. And I was just watching them for ages, and watching all these makeup tutorials, and I would kind of copy them and learn from them and things like that. And then one of the YouTubers, I think it was a lady called MakeupEverythingGuru liked to a blog post, she was like "Oh, if you want to look at any more swatches look at my blog" and I was like "Look at your what?" so I clicked on it and I was like "Whoa." I had no idea that people did blogs as well. So I was looking at blogs for a long time before I decided to give it a go because I wanted to see what it would be like. So I started to make YouTube videos but I found it a lot harder because it's a lot more technical and it's a lot more time consuming, I didn't really know what I was doing, whereas when I saw blogs, I was like this is already a lot easier and I can update it more regularly, because I blog almost every day except for Saturdays now, for the last eight months or so and I find it's just natural for me to every weekend to write all my blog posts, that's kind of what I enjoy to do.

(0.10)

R: Do you still do YouTube videos too?

N: Recently...I mean I've always kind of done videos off the fly, like every now and again I'll do a video, but the thing is recently people are so critical, they're like "I can't see the colours clearly," "I don't like your background," "I don't like your voice" and because all I had was like my Mac, I had my little webcam and iMovie, and everyone was buying nice cameras and had this professional set up, and I felt like it was like almost if you didn't have that it wasn't

good enough, nobody would watch your videos or take you seriously... and I felt, not that I... "Compote's" probably the wrong word, but I felt like I couldn't get to that level. And also I found that with bloggers as well is that you have to be consistent, if you want people to read or to watch and follow, you can't just once in a blue moon have a post because people won't keep checking back, and I couldn't stick to YouTube enough to kind of keep it valid. So I've kind of fallen away from it, but I'm hoping... my plans are within the next six months to reignite it a bit. I kind of want to plan it a bit better now that I know what I expect. But people always say that YouTube is just the world of haters, you just have to be prepared for everyone to kind of slate you and hate you, just be mean. Blogs are lovely, blogs are just a nice, happy, rainbow place where everyone's just so nice to anyone and you hardly ever get anonymous hate unless you're one of the massive blogs. But on YouTube even the smallest videos just get random people pop up and be like "You're awful," "What do you think you're doing?" You kind of need to be aware of that, and decide if that's something that you want to dedicate your time to. If you do great, but if not then I would just stick to blogging or just keep out of it really.

R: Have you had experiences of stuff like that?

N: It's weird. Some people say "You know you've made it when you get your first anonymous hate comment" because then you're at a level where people will say things like that. Because it's kind of a backhanded thing, where people say it doesn't matter, but if someone's saying something not very nice to you it's never easy to read, and to see it happen to your friends... I've seen people stop YouTube because of it, stop videos for a while or put up videos saying "Please stop saying horrible things to me." It's hard to sometimes want to be a part of it, because you just know how many people can just be so horrible. Unless it's something you really want to do, it can be a case of "Why would you want to?" I think because I've been blogging for quite a while now I feel I like blogs that have blogs, and YouTube because you get more of a complete package from someone. What you get in a video is very different from what you get in a blog post, and there's certain things that's just easier to talk about in a video and ramble rather than have to write concisely for a blog post, that's kind of now why I want to get back into it.

R: You say you know people that this happened to, are they friends you know from offline or through blogging?

N: Yeah, friends I've met through blogging and YouTube, I don't know... it's weird it's kind of like it's a community of friends even though half of them you've probably never met, but because you're reading their blog posts every day and watching their videos you feel like you know them. It's a community, sometimes you get invited to blogger events and blogger meetups, so you can meet other people, and it's very much a community. Bloggers want to stick up for other bloggers, and like YouTubers want to look after each other and kind of protect each other because there are just so many haters in a sense. They just want to be like "No, you can't say things like that."

R: Did you go to the blogger events?

N: Yeah, when I was living in London obviously I could go to a lot more. Um, but it's quite nice to go, if you do spend the time on blogs companies are starting to notice that, and I think the thing that's so great about blogs is that they're so interactive, whereas in magazines, once they're published they can be kind of old or, in magazines it's hard to see whether someone's

opinion's right or not, whereas blogs are raw, they're honest, they can say what they want. If someone from a PR company sends you something and you hate it, then you can say you hate it or you don't have to write about it, so I think people sort of trust opinions more, and I think companies are starting to notice that and they're putting a lot more effort into meeting bloggers, inviting them to events. I mean there's one fashion blogger, of the top of my head, I remember she posted about a makeup bag or something on her blog from Topshop and within fifteen minutes everywhere had sold out. It's insane how many people buy what other people buy what other people buy, and follow it, and companies are really kind of listening to that, paying attention and hoping the same will happen to them in a sense.

(0.15)

R: If you go to these events what do the companies do to try and get you to talk about them?

N: Um, obviously they try to put on a really nice event, some champagne, some cupcakes, an informal talk from either like a brand leader or someone, explaining what the new range is, what it can do, why it's so great. They set up sometimes little stations where you can get their nails done, get your nails done so you can try out their products there and then. Obviously you get a chance to see all your friends, other bloggers and YouTubers that you haven't seen for a while. And then sometimes they do either a goody bag or a press sample to send you home with, and obviously what you do is if you like something then you want to tell other people that you like it so that's when you blog about it?

R: Do you have quite a lot of samples and stuff then, through them?

N: It's weird because it varies. It varies throughout the year, because I mean, ultimately companies only have so many samples and so much money to spend, and they can't send samples to everyone. Obviously, they want to send samples to people who blog a lot, and they know that if they send them a sample, if they like it they will mention it, as opposed to just sit on it, use it or give it to someone else. So I think, sometimes yeah. Like a month out of the year, if it's coming up to Christmas or things like that, or certain special promotions, you can receive a lot of samples. It's kind of, you do feel slightly obliged. Because if a company's taken the time to contact you, find out about your blog, speak to you, send you free beauty products, sometimes if you don't talk about it you feel a bit bad for them, and you're kind of like "Sorry, thank you for sending me something for free but I don't want to mention it" or something but then you've got to think back to why you do blog or why you read blogs and that if you knew another blogger was just giving a good review or writing about something just because it was free it kind of demeans the whole point of blogging in a sense, so I kind of stick to a sense that I will talk about things if I like them, if it's free or if it's not free, if I'm talking about it it's because I like it. If it is something I do really hate I will say so. Some bloggers just say if they don't like they just won't talk about it, but if there's something I don't think anyone should spend their money on then I'll tell them (laughs). But companies contact me still from it saying, "We saw from your review that you didn't like this, but would you like to try something else?" and I've found apart from one product which I hate anything else they send I absolutely love. But it can kind of sway your opinion, because otherwise I probably wouldn't have tried anything else by them, even though some of it is really quite nice.

R: Can you describe the process of deciding to set up a blog and how you went about it?

N: Yeah, well I set up my YouTube first, I had videos and I was struggling to do that and that's when I saw someone blogging, and then I saw that their blog was their name dot BlogSpot dot com, so I googled what BlogSpot was and it was basically Blogger which was basically like a Gmail, Google kind of blogger platform, so I was like shall I use this? And I noticed that a lot of the blogs that I was using were dot BlogSpot, it seemed like the blogger norm, like I know that you can use WordPress and things like that, so I googled comparisons and Blogger was very simple, you just create an account, set up how you do your blog posts, it was all very used friendly, whereas WordPress was a lot more html, a lot of coding things, and things like that and also Blogger has this thing called GFC, Google Friend Connect, which is a way that people could follow your blog, but it also shows how many people follow it, through GFC. So, I mean that's not a very good representation, but sometimes companies go off that kind of figure to get an idea, so I kind of went into Blogger, set that all up, um, and then a lot of it is just a lot of Googling. Free templates, free layouts, free blog designs, and cutting and pasting different things, and putting it all together. In the first stage... you kind of pick things up along the way the more blogs you read, like I saw someone who has really big pictures and I was like why are mine so tiny? So I googled how to make pictures bigger on Blogger and then I find out how and make those little tweaks, so I think that over time you kind of see what other people do, and also you see what you like the look of, and you can do things like adding borders or taking them away, or changing widgets and spaced and things like that. (0.20) So it's very much kind of like, and I mean I even changed my blog name. I was called something completely different, so I changed my URL. I changed my design quite a lot of times, it's very much kind of as I grow up and change it's kind of growing with me, so it's changed a lot.

R: When you changed the URL did you have to transport the blog?

N: Yeah, because, um, it was weird I went to an event for bloggers and PRs where people kind of speak to each other and a PR was saying for them it's quite hard to find blogs because a lot of blogs don't have anything like "beauty blog" in the name, so if they type in "beauty blog" into Google, unless your SEO's amazing you're blog's not going to come up, because a lot of blogs are called lots of really, really weird names that have nothing whatsoever to do with beauty or blogging, so that's what made me realise that my name was kind of a silly, girly, ridiculous name and that if I did want to take it more seriously and maybe do it more long term then I needed, not a sensible name, but a name that more reflected the blog, and that I could stick with for a long time and not cringe about when I tell people and something I could be kind of a bit proud of. So, um, I decided to make the change, and the thing is with Blogger that everything's so simple, all they do is you create the new blogger name and then there's a tab where you can switch over the domains and then if forwards your old feeds to the new one, so it kind of does it all for you which is good.

R: So have you kept all the posts from when you started?

N: Um, I made them private (laughs). It's weird because I always had everything there and I didn't ever look at them or anything, but as my blog... I kind of had changed a lot of the quality of the photos, the sizing of the photos, the way I light, the style and also the font and how I typed and stuff. Because it all changed I didn't want people to see those old posts. It's not that I'm ashamed or anything them it's just that I want them to think of, I don't like the way that sometimes you can have a link to other posts related and there might be a link to one I don't want people to see. So I haven't deleted them, I've just kind of hidden them so they're kind of private. It just looks a bit neater.

R: Do you ever go back and look at them?

N: Yeah, a lot (laughs). Yeah, because when it gets to the end of the year especially, and the last couple of years I've done a blog post on what I've loved from the year, so I'll go back through the year and see what I've done and also I've got a weekly feature on Sundays called "My week in pictures" where I put all the pictures I've taken through the week, it's more like a lifestyle post, kind of like this is what I get up to other than Blogger and stuff. And sometimes I go back to those, like even for me, it's like an old diary, I can look back and see what I was doing, like I've done almost a hundred of them now, it's like two years that I can go back and see things that I've done. And it's quite nice because it shows me how I've grown as well and how my style's changed, and also I like going back to see if there's any products that I still use or that I've forgotten about, or anything like that really, but I don't know if I'd want them to be live again.

R: Had you ever kept a diary or anything like that before?

N: I used to when I was younger, mainly because everyone else did. And I thought that's kind of what you did. But I could never stick to them ever. I'd always buy a really nice diary from Smiths or something and a new pen and I'd be like right. And after a few days I'd give up, I've never stuck to it. I think there's only been one time where I've kept a diary and filled an entire book, and that was because I was on holiday with my parents and I was a bit bored so I'd write a lot every day. But other than that I don't think I've ever written a diary.

R: But you've stuck to it well online...?

N: I think it's because, I don't know it's weird, a lot people say, "I don't know how people find the time to blog." When people first start blogging they're very much like "I don't know how people do this; I don't know how they find the time." For me it's not finding the time. I like talking about beauty products, my Mum is sick of hearing about it, I don't have any sisters, and I'm kind of, not running out of people to tell, but my Mum was getting sick of hearing about the fifteenth lipstick that I'd bought and she was like "I don't care." Because I'd get excited almost about telling people, like "Wow, I've got this amazing new product and I just want to tell you" and it's nice to get comments saying "I love this too" or "Oh, you use it differently; I use it like this" and it's kind of something I'm excited to do, as opposed to something where I'm like "Oh no, I've got to sit down now and do my blog" (0.25). It's more become a routine and a part of my life, like on a Saturday I'll wake up and take all my blog post photos for the week, and I have a little book where I plan my blog posts, so I've become a lot more organised about it to make sure I do have things planned. But also, it's kind of quite natural, and it's something that I like doing and I kind of stick to it because definitely when you do build up quite a bit of a readership and see people hitting back onto the site every day... it's not that you feel bad, but you almost feel kind of, not that's it's your job that's the wrong word, but like you should be doing it, and that if people are going to come and read then you should probably give people something to read. And I appreciate people who do blog every day, and I kind of go back and read them more, because they've got more things to say really.

R: You say you take the photos on a Saturday, how do you organise your blogging during the week?

N: All I do, I've kind of fallen out of this routine recently, after moving back and getting a new job, but what I used to do is throughout the week I plan everything I need to take photos of for the next week, or if I've been sent anything that week, because I'm quite anal in the sense that I won't use anything until I've taken a photo of it because I want it to look all pristine and nice until I can use it, so I try to take a photo of it as soon as I can. I usually have everything set aside, and then I'll wake up and do it on Saturday morning so I can do it in natural light, and then on the Sunday, Sunday afternoon and Sunday evening is my blogging time, and I'm used to that from school because on Sunday nights you were either cramming for your homework, or at uni you were working on your assignments. I've always been used to working on a Sunday night so that's always been quite natural for me. So I'll sit down, go through the photos, pick out what I do and don't want to talk about, and then I'll usually go through and write all the blog posts for the week, and then I'll either schedule them or save them as drafts to wither add to later or re-read, or... for example you might schedule something for the week, but then you might be sent something amazing or you might go buy something in the week that you just have to talk about the next day, so obviously it chops and changes a bit depending on what happens.

R: Do you ever feel like you're running out of stuff to write?

N: It's weird, um, everyone laughs at work because they found out I had a beauty blog and I work with a lot of men. So they're basically just like, you're just some blonde girl who always talks about makeup, and they're like how do you have something to talk about every single day? And, there's *so much* to talk about, and the thing is like blogging goes through phases, there's always the latest product, the latest brand, the latest thing that's on all the channels and you want to get your hands on it, you want to give your opinion on it. It's weird there really is something to talk about every day, whether it be a new product or because mainly my point was reviews and I've mixed it up a bit, so the first day of every month I do a favourites post, I've started doing an ingredients post because I'm interested in what's in the products I use so once a month I talk about a certain ingredient and how that impacts, and what it's like and what it actually does. Um, I do posts called "Blast from the past" now, so looking back at something I either used to use, don't use any more or still do, and sort of really talk about it and see whether what I think about it now, say two, three years later or something like that, so I've broken it up a bit more. And you have features like that that give you a lot more to talk about so you have less days almost to do reviews, so you end up with not even enough time to do all the reviews you want to do, so it's amazing how you can probably just talk about anything. The beauty world is a big old world (laughs). There's always something new coming out. Before I started blogging I owned two Mac lipsticks that were pink, but since I started blogging... or within the space of starting my blog and like six months I owned five new ones that were more neutral, so it's amazing how you can kind of pick up new trends from people. I used to not own a single neutral eye shadow, everything I had was colour, and pretty much everything I have now is neutral. So, it's kind of reading other peoples' blogs your habits change and what you buy changes, and then also if you read like ten blogs that are all saying this skincare is amazing, it will change your face forever, you're going to try it out (laughs) and then I'll give my own opinion saying do go out and buy it, or nah it didn't work for me, that was a bit of a waste of money but oh well.

(0.30)

R: Mm-hmm

N: What I've found in blogging in the last six months is it's about style and opinion, so it's not just a case of I will blog about anything and everything, it's almost forming our opinion. People want to know what you will and won't use. And there's some blogs which I very much want to know what they're using because I like the stuff they use. I agree with the kinds of products they use, I like what they go out and buy, so I'm intrigued to see what else they're buying because I think it's things that I would like? And it's very much forming a level of opinion that people trust, and therefore you only talk about products that you know work. And then you kind of do talk about certain products that you know work, and then there's certain bloggers, like they can have a similar style, but I know what they will and won't use in a sense, and that's why I want to know when they find new things because they'll probably find things that I haven't tried before or seen before, so I think that looks new, I might try that as well.

R: Who are your top beauty bloggers?

N: Ummm... that's a good question. I think at the moment the ones that I go back to all the time, I think my main one is Viviannadoesmakeup, I worked with her briefly for three months when I was working at the beauty company so I know her on a personal level, but her blog is kind of, it's what I mean with style, with her taste, if she says something's good, you know it's good. She has good taste in products... there's no kind of 'filler' products on her blog, nothing that isn't very good, she knows what's good, she knows if it's work. So if she says it's good, then I'll probably go out and buy it (laughs). There's other people as well, like there's a blog called ghostparties, and she's started doing videos as well, and she's got a very good opinion on skincare, and she tries out a lot of skincare brands that I like so I listen to that a lot. And there's also a blog called "whatIhearttoday", a girl called Lily, and again, they've all kind of got a similar... they kind of like the same stuff, obviously it interchanges a bit. When you see a product that all three of them like that you know it's something you want to go out and buy.

R: If there's something you go back to all the time, do you have a way of doing this? For example do you bookmark it?

N: Yeah I use Google reader. A lot of people use Bloglovin' but I don't like the interface of it, and a lot of people use, there's this new thing called HelloCotton, a lot of people are now kind of making new blogging platforms of how you follow blogs. A lot of people used to do it via an email and RSS, but I do it via Google Reader because I find that's the easiest way to see when something's new, I mean on Google Reader I follow over 500 blogs, it's ridiculous. If I don't check the blogs for a day I have over 300 posts that are unread, so there's a lot, you can go through and pick through the ones that you want to read and see all their most recent posts as well. So when it comes to that I'll probably go through and find my favourites and see what they've posted about.

R: Could I have a look at that? Have you got your laptop?

N: Yeah, let me go grab it actually, I'll bring it in here

Natalie leaves the room and returns with her laptop

N: Yeah, so I have a tab that just says blog reader, and it goes to Google reader, and then when that loads it gives you kind of a preview page with some of the top stories, which I never read. But then you can go through and these are all the blogs that I follow. So, for example, there's

quite a few to read (laughs), so for example, anything that's bold that has a new post to read, and that's like how many are new. You can also see how much someone blogs, so for example this blog BritishBeautyblog, she's massive, she does loads of new releases and things, I read her blog this morning and she already had three new posts. Some people can blog that much, some people obviously don't blog as much but, for example I can pick out a favourite (0.35)... well that's ones no good because it doesn't load. And then it comes up within the reader, so I don't have to click to a new page, and I just scroll down and it's like blog post over blog post, and once the bold's gone away I know I've read everything.

R: Does it bother if you can't read it in the Google Reader and you have to click through?

N: Um, well... with Ana's one it doesn't it just comes up like that, but because I like the blog so much I do. I mean, a lot of blogs don't do that. I think they, if they do it on WordPress you have to click to read the post anyway. A lot of blogs don't do that but if it's a blog that I like I don't really mind, like sometimes it's a bit of hassle, unless it's a blog that I'm not really interested in reading and then it probably doesn't matter to me.

R: Could I take a photo of the interface?

N: Yeah of course. I can show you Blog Loving and Hello Cotton as well.

R: Do you have an account with them?

N: Yeah, I don't really use them very often as I do, like with this I use daily. And um, some people prefer this, but I don't. So all the blogs are down there and all the posts come up there. I don't know if it shows a full post or not, because I never really use it.

R: What is it about Google Reader that you prefer?

N: I think it's the fact that if I now go onto Bloglovin' that I have to re-follow all the blogs, I have to find their Bloglovin' page, click follow and then it comes up on Bloglovin'

R: So they have to be on Bloglovin' whereas on Google Reader you can follow anyone?

N: Yep. And with Google Reader if I go to a blog and click on follow on Google Friend Connect then it comes up automatically on my blog reader. So I don't have to do anything extra. I find it, I think with Bloglovin' I have so many blogs that I follow, having to find them and re-follow them is a lot of hassle, I've kind of given up on that. Ummmm. And then... I don't know whether I have, I don't know if I have... Hello Cotton is the most recent one.

R: Have most people moved onto it?

N: It's kind of like a phase "Oh my god, Hello Cotton is the latest thing, I want to do it on Hello Cotton" and then it'll be like a third of people join, and then you don't really hear any more about it. I don't know if anyone uses it anymore. But you want to have your blog on there because, in case someone does use it, you don't want to miss out on a reader or something like that because you're not on the website or something.

R: Do you follow anyone on there?

N: Umm, on Hello Cotton I have no idea... I don't know how many... I can find out how many followers I have, but I don't think I follow very many. I think... I follow forty-five, and on

Bloglovin' I follow, by the looks of things, around seventy. I like to be systematic so I was going to go through and re-add everyone on Bloglovin' but I got really bored (laughs) and I was like I like Google Reader, it does the job for me, and I'm happy to kind of stick with it, so I have done really.

R: Mm-hmm

N: They all do the same thing, the main reason why I have Bloglovin' or Hello Cotton is for people to follow me, not for me to follow other people. Um, because the thing is with GFC, Google Friend Connect, it used to work on WordPress but they stopped that. So, for example if you wanted to follow a WordPress blog you couldn't do it through Google Friend Connect, so people would do it through Bloglovin' or other things. Um. So I think for some other blogs maybe it's very important and it's their only way in a sense, unless you go onto it and put in the URL specifically, it's the only way that people can kind of follow it.

R: Is it important to have a lot of readers?

N: No, not really, I mean... it still shocks me that anyone reads my blog because I just think that I witter on about nonsense half the time. (0.40) Like, it does and it doesn't. There are times when your blog's really popular, and times when you get a lot less readers and then you think "What am I doing that's not right?" or "Why aren't people enjoying my blog?" or "Am I missing a trick or something?" But at the end of the day I've never blogged for anyone else. I've only ever done it because it's something that I enjoy. If people do or don't read it it's never really mattered too much. Probably a lot of people I know have become professional bloggers and live off their blog; it's now their full time job, so to them it's obviously very important because that's what earns them money every day. But because for me this is still a hobby it doesn't really keep me up at night.

R: Do you put ads on your blog?

N: Yeah, I signed up with an agency, so what they do is I give them space on my blog, and I put adverts on my blog, and then I'll get money depending on how many people. So obviously if you want to make money it's in your interest to have as many hits as possible because the more hits you get the more revenue you get from the adverts, and you make more money. So in that sense it's important, um, but for me it's just like pocket money, it's just a little bit extra that I'll go out and spend on makeup anyway, I don't spend too much time worrying whether hits are high or anything.

R: Have you ever thought about doing it professionally?

N: I don't know, I have thought about this and I've kind of been in two minds about it. I think, part of me would, because it would be nice to do something as a hobby for a full time living. It's not a bad life if all you have to do is sit and blog, go to events and talk to PRs, that's a pretty nice life to have. But, I don't know. I think it then becomes a lot more about your writing. And, like my blog, I don't say my blog is the best, well written one, it's quite simple, I'm not really a writer at heart. I just kind of, I like writing about makeup and stuff, but I don't sort of sit and wonder about my words, things like that, or try and make it really eloquent or anything like that. I just try to get the message across. So I think if it did come professional there'd be

more pressure on what I wrote, and I'd find that hard. I like it at the moment that I'm still quite free to say and write whatever and however I like.

R: Do you check the stats on your blog?

N: I used to not, but now it's been quite addictive and I do check Google Analytics every day. It's mainly because I do it to see what people are enjoying if that makes sense. I don't want to write about things that people don't care about, and you can kind of see what posts are popular. So for example, when I do a new feature or something if no one likes those posts I'm not going to stick with it. Yes I write them for myself, but also if you have a blog that you want people to come to you want content that people are going to find interesting. So I think, it is important to kind of see what people do and don't like. Because if it's not content that people like then no-one's going to come back and carry on reading it.

R: Did you have to install Google Analytics?

N: Yeah, you have to join it, you create an account and they give you code to have to put on your blog. You put this code on your blog, and then it starts almost tracking your blog, and then after like a month you'll have enough stats you can look at it and be like "Oh, OK." And also it's kind of cool because you can go and look real time, you can go and see how many people are on your blog at that second reading it, what pages they're on, what pages they clicked on first, where they went next, what they searched for your blog, what country they're in, what language they speak. So although I'm not kind of hung up on this stuff sometimes it's kind of cool to say, "Oh my god, there's someone in Spain reading my blog" or something like that, it's kind of nice to see that.

R: How does it feel to see people engaging with your blog?

N: It's weird, it's kind of like it doesn't feel real if that makes sense. It's like "Oh yeah, internet people read my blog. That's cool." Like, I forget that they're actual real people. Because as soon as it's saying a thousand people have read it in a day if that makes sense, it's like who has the time to kind of do that. It's really awesome when you meet people and people mention your blog you kind of think, you forget, you're like "Oh my god, you read my blog, how embarrassing!" and they're like "No, I really like it!" and you kind of forget that they're actual real people that do read it and do have thoughts about it.

R: When you're writing or planning your posts do you have an idea in mind of who you're writing for?

N: I'd like to say I do but, it's not that I'm not smart enough to do that it's just that if I think about it too much I'd worry too much. I mean ultimately I don't write about anything that I don't find interesting, if I don't want to write about something I don't. (0.45) I might have a blog post planned about lipstick but if I've found a brand new eye shadow I'd rather talk about, I'm not just going to force myself to write something. People can tell. I think a boring blog post, they can tell your heart's not in it, people will tell and they switch off completely, I mean, you can't blog for other people, you have to blog for yourself ultimately, because otherwise people just aren't going to read it.

R: Is it yours in the same way that the makeup you're blogging about is?

N: It's hard sometimes to think of it like that because it on the internet, I mean it's not something I can kind of pick up. I mean I can pick up all the makeup I have because it's everywhere (laughs). I do feel like I own it but then at the same time I feel like my blog wouldn't be anything if it wasn't for the people who read it so then I feel like I don't really own it, it's kind of the readers who own it. It's a very fine balance between doing what you want to do and keeping it interesting for other people as well, and I think unless you have that balance you're blogs not going to grow, your readerships won't grow. I mean, I'd probably still be blogging even if I only had like two followers because I still enjoy it, and I think if you're still enjoying it and you're doing it for the right reasons I think that's what matters. Did you hear about the GoDaddy thing? Everyone was going *mad* on Twitter and I was like "I'm so glad I don't use them!"

R: Have you ever thought about whether that could happen to your blog?

N: Um... (Pause) I kind of do, but then because I don't live off it I guess I don't really mind... like, for those people if they don't get their hits for that day they don't get their money for that day, which creates a major problem for them and they can obviously get very frustrated. Like if they've got a sponsored post that a company has paid them to do and no one can see it, I don't know if they'd get the money, I don't know if it would cause issues like that, so I guess in that sense it could be annoying. But, I had my blog hacked into about a year ago and I couldn't use it, and it was frustrating because I can't of lost that outlet and I was kind of like "Oh, what am I going to do now that I can't blog?" but it wasn't in a sense that no-one can see it or anything like that.

R: Can you describe what happened?

N: It was weird, it was like I logged in one day and some of my settings and options had gone and I was like "That's weird" and I was trying to find out on help forums, but trying to get Blogger help is literally impossible. There's no like Blogger Help you can email or anything like that. Trying to find out on a Google forum what to do was like impossible. And then I think one day I put a blog post up being like "Oh my god, I think I've been hacked," stressing out, wondering what to do, maybe it's fine but I don't want anyone's computers or anything to get infected, so I was like what do I do?' And then I had an email saying "Oh, I'm your hacker" and I was like "Oh, hello, can I have my blog back please" and they were like "Yeah, I just wanted to try something out. Here you go, it's back" and I was like "Cheers, don't do it again" (laughs) and kind of left it to it. I could probably have got their username and kind of done all that, but I haven't had any problems, touch wood, since so hope it's going to be OK (laughs).

R: Was it all fine afterwards?

N: Literally everything was the same, nothing had gone. I think he was just, I don't know what he was doing, just checking some code worked, but luckily it wasn't too drastic. I read a massive blog called ModelRecommends by a lady called Ruth, and I think someone hacked it, and I think she lives of a blog because she has a massive base of people, she sends out like newsletters... I think someone hacked into her blot and deleted loads of posts, then it becomes much more serious, and a lot more of a problem, but if it's very much like a hobby it doesn't really impact you too much I guess.

R: How does it make you feel to hear those kinds of stories?

N: Ummm... I kind of did worry but then I thought why would they want to because I don't have the millions of numbers of hits or followers or anything that she does, so if they wanted something I guess they'd get it from her or from me, so they probably wouldn't, I wouldn't see the point in them doing it so I don't really worry as much about that. If it did happen I think it might be a shame... because I've spent a lot of time writing these posts. So yeah, I think it would be more of a shame than anything else rather than an actual problem. Like, the ones in the last month wouldn't be a problem but if they deleted everything then, cause companies sometimes like to see how long you've been blogging for or something so they look at how many blog posts you've done, so if they find a blog with no blog posts they'd be like "Oh, who are you?" kind of thing (0.50), like I don't know what you blog about things like that.

R: Do you back up your posts?

N: Um, I'm sure have looked into it before, and there are websites you can sign up to where they will back everything up for you, but I think I got bored investigating it and looked quite complicated so I gave up. I think if it became more serious then perhaps I would. I even know some people who write blog posts in word first and then upload it to their blog, so they have a backup as actual documents saved on their computer. So it could be a case of doing that, but I think... until it's something that becomes an issue, I don't know whether I'll look into it more.

R: Mm-hmm

N: I don't know, I mean I think it's nice I'm quite lucky at the moment because it's still very much a hobby. Yes, I'm still earning a bit of extra money from it, but as you can see it's still quite light-hearted. I can imagine if people were living off it becomes a lot more serious, a lot more like work, and then they have to be a lot more careful about what they say and what they don't say and what they talk about. They have their own image and people want to buy that image. I mean, I know people that have done videos for companies because people like their brand so I guess if that's the kind of route you want to go down then it's absolutely perfect for you.

R: You know when you said you write all your blog posts on a Sunday, do you need any special equipment?

N: Um, well this is the thing. A lot of people, when I first did YouTube and my quality was pants I was like I have to have a good camera, obviously you don't. With my blogging, I only ever use a cheap one that I bought for nights out, and I can get decent enough quality. I always said to myself that I won't buy an expensive camera until I knew that it's something that I really wanted to do. Because I don't think it's worth investing like £600 into something that you might get bored of in a week's time. Like, I know I can be quite fickle with what I do, so I wouldn't spend the money until I knew it was something I wanted to do as a hobby. A lot of people are like "I can't start a blog unless I have a decent SLR camera," and I'm just like that's ridiculous, you can get decent enough photos. As long as the photos are clear, you can see what's happening, you can see what's being said, what the lighting is, that's all you need. You don't need some fancy camera and set up just to get a photo. Saying that, that is something that I'm looking to get, because now I have been blogging for quite a while, I do care about the quality on my blog, I want it to look nice, I want other people to think it looks nice. And so I want to invest the money to kind of take it that step more in that sense.

R: Mm-hmm, do you think you will upgrade to an SLR?

N: Um, well at the moment it's taken me two and a half years (laughs). I mean, it just depends whether it's, I mean to be fair I'd be quite happy carrying on with my point and shoot in a sense, it's only because that's got quite old and scratched and it's marked on the screen that I feel like I want a camera upgrade. And it's something I've always kind of, I'd like to also use it for other photography and maybe take a class and actually understand the camera. And that's something that I'm interested in and I have the time to do now, and I think I'd really utilize it as opposed to just "I need it for blog photos."

R: Do you find that you take a lot of photos?

N: Usually, I wouldn't say I'm a photographer fanatic. Mainly it's just friends and family and when we're going out that I take a lot, because I like having them for the memories and stuff, but because I never understood SLRs I've always got a bit scared by them and it's something that I've always wanted to spend the time to understand because I think they're amazing things that you can take amazing photos with, and I'd like to spend the time learning how to do that. It's not just about having a blog anymore, it's about having a blog, a Facebook, a Twitter and an Instagram account. Like, you almost need all of that to have a blog. Like, obviously you can have a blog on its own, but I mean, if you can't blog every day you can always do Instagram every day, and like people Instagram like, rather than an entire blog post on what makeup you're wearing that day, just put a little Instagram picture up or something like that. So I think it's become a lot more accessible. (0.55) And also, I think that for example if Instagram goes down that's a huge problem, more so sometimes I think than blogs, for example if I'm walking to work and I'm a little bit bored I go on Instagram, so if my Instagram feed doesn't work then I'm like "Oh my god, what am I going to do with my life?" You feel like you have more of a connection with people. And I probably feel like I own... not that I own that more, yeah possibly even own that more, because it's interactive in a sense and people instantly like it or instantly comment on it and you can see all your friends' photos, so I think with things like that, and Facebook and Twitter, all of those together I probably feel like I own in a sense.

R: You need to be on all those platforms?

N: I don't think they *have* to have it, but it just kind of helps because you reach out to everyone, you want to make it as easy as possible. If people go on Facebook every day you want them to see an update from you being like "Hi, I've updated my blog." If people go on Twitter all the time, like some people don't use any of these things, they just click on links on Twitter so those kinds of people, when a blogger they follow tweets a link to a blog post, that's when they'll click on it. Like, they won't go via any other means. So, it's not kind of like you have to do it, it just makes life easier for people. And also, I think like you want to get to know the blogger, and through following their Twitter feed you can find out more about their personality and what they're like and what they do. Um, same as kind of Facebook in a sense, it just makes it more of a complete package, and I don't think it makes you any less of a blogger but I think sometimes it shows how much you're willing to invest time in things. And, you get more updates from people, so it's not just "Here's my blog post" and you know nothing else about me and that's all you're going to get. Like bloggers are real people, they have lives, they have things they do and don't like. Sometimes it's nice to see that and then you get to know people.

R: Do you have a way of integrating Facebook and Twitter and things?

N: I did actually do it so it's automatic, so if you go on websites it'll be like "Link your Blogger and Facebook together!", "Link your Twitter" so whenever I made a blog post it'd automatically to tweet and post on my Facebook page that I'd done a blog post. But then I was kind of like...but then I saw my feed was just these automatic posts because I wasn't going on it enough and updating my status, and I didn't like the way it looked, so I was like nah I'd rather do it myself and if I do forget then I forget.

R: Do you do it all at the same time... so do you...

N: Blog post, then a Tweet, then Facebook if I remember. Facebook's very much, I kind of ignore... I'm very bad with my Facebook. I just find, because I have a blog as well, I just can't sit on the whole thing all the time. So Facebook's kind of like "Hey, I've done a blog post" and that's pretty much it. Whereas Twitter I'm always on Twitter, I'm always Tweeting people, so that's more like an running day to day dialogue of my life, whereas Facebook is the occasional "I've done a blog post" (laughs). There's so many people... I'm not sure because I don't really (pause) it sounds harsh, it's not that I don't pay attention, but I don't look at every individual person and see what they follow me on, I just think "Oh great, I've got this many on this site and so many on this site." It's kind of like, I do want to be "Oh, it's all so nice and lovely and you can start a blog or whatever." You can, what's great about blogging is that you can do whatever you want, but if you are serious about it and you do want readers and you do want to ever make money from it or do it professionally, want to be a beauty journalist, then you do have to be a bit serious, a bit more tech savvy, realize what's good and what's not good and kind of do things a bit more properly really.

R: Have you had to become more tech savvy?

N: Ummmm. I don't know because as part of my uni degree course I did a bit of web design, so I guess it's always been there. I'm a bit geeky, I'm quite happy to sit on Google and read how to do something step by step and do it myself. A lot of people just get scared and like "Oh my god, I can't do it" but it's simple, if you can find a tutorial on how to do something step by step then you can do anything. (1.00) So I don't know if it's made me more tech savvy but I think it's made me kind of logistical, and very much like if I ever want to make changes I know if I can sit down, take the time, research it and I can do it.

R: What kind of things would you Google?

N: Simple things like how to remove a border on a photograph, how to add another dashboard, how to change and put my own font, how to change the background, how to change the width of my blog post. Um, how to integrate the new Twitter button. How to make Facebook appear. Anything like that really. How to centre a post, things like font, layout, pretty much anything and everything you can do I'd try to find out how to do.

R: Is it difficult? Is it coding?

N: It's not coding, a lot of Blogger is kind of drag and point, but if you really want to make it customisable then you can use code, and like I said you can find blog posts that really do take you step by step, so then you can find things. I think it's really easy to do, I know a lot of people who know *nothing* about html and they can still do it, it's pretty much just copy this and paste it here, and they point to where to do it and you just do it. It's simple.

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R: Does having the degree help?

N: I don't know. I don't know whether it just makes me more willing to try...? More willing to do different things. More envious when other people can do it and I can't because I'm like "Aargh why have they worked out how to do that and I can't?" For example you can tell the people who've done graphics, because they've got amazing headings and really nice designs, and sometimes you are like "I wish I had that." But I mean, some people *pay* people to design their blogs and their layouts and templates and stuff, but I think it depends how far you really want to go with it. You can see, like people who are the serious blogger lot, they have their features... you can tell a flimsy blogger when every blog post is like "Oh, sorry I haven't blogged for ages!" and then the next one is like "Oh, I haven't blogged for ages." It might sound harsh, but I kind of think either do it or don't. Like, I blog five days a week, no, six days a week. When I went on holiday I did two posts. Mainly because I was on holiday, you can have a break, you are only human, like if people have a go at you they're being a bit harsh because at the end of the day you're just one person you're doing it yourself half the time. But, you can kind of tell the ones that will take it seriously, and also you can tell the people who just do it to get free stuff. So they think just because they have a blog companies will send them free stuff. You can tell them a mile off. So I think you can very much tell what type of a blogger someone is from looking at their blog.

R: How did you go about blogging on holiday then?

N: Well (laughs) I made my Mum find me a hotel with free Wi-Fi (laughs).

R: Did you take your laptop?

N: Yeah, we always take my laptop anyway because we always check in online, so every time I go on holiday with my Mum she's like "Oh, take your laptop with you, so when we're away you can check in and print off our boarding passes and everything." So pretty much the last three or four holidays I've always taken a laptop with me regardless of blogging, because it's just, something, because, like with my smartphone as well, it's always something that I've always had and always taken on holiday and my mum's always wanted me to. But now when I take it on holiday it's turned into blogging as well. Um, it's not like something, like it's not like something I take time out to do, it's just like "Oh yeah, I'm going to blog today" and I'll stick some photos on the blog.

R: Is it different doing it on holiday to blogging here?

N: Yeah, it's very much, like with time, I can't plan things, I can't stay in on a Sunday and plan all my posts. It's very much like "Oh, it's too hot. I'm going to go inside for half an hour, maybe take some photos" if I like how they turn out, if I'm in the mood to blog I'll sit down and write a blog post, put it live, send it out, and then that's it and if I have time the next day I'll do it, if not... I don't get stressed about it, I don't worry about it. I'm not like "Oh, my god, I have to blog" but if I get the chance to then I will. Uhh... sometimes I do like holiday ones, so for example like, I like seeing what people take on holiday, so like what haircare products they take on holiday. So it focuses more on what I'm taking and using on holiday. Because I think it was weird if I reviewed something like I'd do at home even though I was away because you can't lie about where you are. I think, it's very much kind of like, it was a bit different, the posts that I did.

R: Is there a Blogger or Google Reader style app or anything for smart phone?

(1.05)

N: I think there is, but I've never really found one that I'd use, like I think you can get Google Reader on your smart phone, but I don't think you can comment and stuff. I've never found something that I've felt comfortable enough to use. I know a lot people blog off their iPads, so I think they might have got a WordPress app or a Blogger app, and they blog all the time on their iPads, which is fine but I don't have an iPad and I don't find it something that's easy to do on my iPhone, so I've never really bothered with that.

R: So when you do blog or read blogs is it always at home? Do you have a routine?

N: I read blogs at work (laughs), that's probably how they found out about my blog, like "What are you looking at!" (Laughs). If I'm waiting for something to load, if I'm waiting on an email, it takes like half a second to scroll through to see what blog posts are there, like some people in the day are on Facebook, some people go on Daily Mail, I just go to my blog reader and look at a few blogs really.

R: Do you still go on other stuff online?

N: Yeah, well, when Twitter came out I became quite an avid Twitter user, I don't really use Facebook any more, I found Facebook to really be a uni thing. Like, I always did statuses, always going out, always got events, went out and got put to photos up. But now I don't do anything interesting I work, I'm always there (laughs) so I find on Twitter you can put a lot more frivolous things, be like "Oh, I fell over" or something happened, whereas I wouldn't put that on Facebook anymore. So I think, I spend more time maybe like, watching YouTube videos and things like that rather than going on Facebook.

R: Do you still log onto Facebook?

N: Yeah, like, now and again I try to do it for my blog. And also, because to connect with friends and stuff. And I like seeing what everyone else has put on. But, yeah I don't really update it much myself anymore. Like all my uni stuff, like all my Facebook history is still there, but it's just my activity has gone down.

R: Have you ever looked back at your Facebook history?

N: Always, I don't do it with the timeline on my page but I do it with photos. Like, I'm forever, it sounds really strange but I'm always, it's kind of memories, kind of like going through a Facebook album, like how you sit down and look through a photo album, look at pictures of friends and stuff, I do that on Facebook. So it's every now and then I'll kind of like, I'll go through and remember things, and see things, I don't really do it on the Timeline, because then I'm just looking at the stuff I was posting and seeing stuff I was saying. Like, any important messages from friends are usually in my message box anyway.

R: When you go back and it brings back memories, can you think of an example when that's happened?

N: Well for example, I recently got my hair cut short and blonde, it's actually naturally brown and long, well not naturally long but I had it long, so sometimes I go through just to see, because I had my hair done before I came back to Bournemouth, so they all think of me as a

blonde person. So sometimes I look back through to think about how I used to look and things like that, and see how long it was and what colour it used to be, and think about what I want to do next with my hair, and just keep scrolling back to times when I used to have it short. That's kind of why I've been looking it more recently as well.

R: When you compare it to looking at a photo album, can you explain why?

N: I think it's similar because you're going back through loads of photos, like a photo album is a collation of photos of a time period or something, so I made a photo album of my twenty-first, so I put in all the photos I had taken of my twenty-first birthday, but on Facebook I can go and see all of those photos, or all of the photos my friends took, all the other ones. So I guess it's the same in that aspect. But then it's obviously different because photo albums were a lot more, I think, specific. You'd print certain photos. Back when you only had a photo film you didn't know what the photos were going to come out like, if you didn't like a photo you'd rip it up and bin it, so you're a lot more selective, whereas on Facebook you tend to just chuck everything you've got on there half the time. (1.10)

R: So you've got a photo albums of your twenty-first, the offline one and the online one. Is the printed album a lot smaller then?

N: Yeah. Yeah.

R: What are you looking for when you're selecting photos for the album?

N: Um, I think it's just. It depends like, you tend to pick photos you think you look nice in, you don't want photos from an important occasion where you think, "God, I look horrible there." Also ones which have a lot of other people in, like nice big group photos, things you might wanna frame, ones where you've got everyone in them so you remember more, people who were there, as opposed to just putting the decor or something like that.

R: When you said you used to put pretty much every photo taken on Facebook, do you always do that or do you sometimes take off ones you don't like?

N: This is something that me and my friends always talk about because we have a friend who's really selective, so like we'd go on a night out on the Friday and we'd have to wait ages for the photos to go online because she'd be going through editing photos, mainly of herself. So thinking "Do I want on these on Facebook?", "What do I look like?" She's so selective, whereas me and my friends who used to joke about it, we found it funny. We didn't like sensible photos. We liked the ones where you're pulling a silly face or something funny's happened because they're the ones that make you laugh, so we kind of preferred those photos as opposed to the ones where we're all posing and pulling a certain face and things like that. The funny ones that made us laugh, we'd be more inclined to put those up. I know for myself I take a photo of anything and everything. No matter how, people say I'm mental with a camera. Like, anything I can take a photo of I do. Because I know I can then delete it. I can edit it. And I know I have the space to take that many. It's nice to have that many. Like, when I went to New York I came back with like four hundred photos and my friend was like that's ridiculous, but it's nice to have them. I'd rather have that than just like two photos. So um, on photos nights out and things like that, you're probably more likely to take photos like, if someone's doing something silly you'll take it anyway because you're like "If it's crap, you

can just delete it." You're more likely to take things because if you don't like it it's not permanently there.

R: Did you ever have an analogue camera?

N: Yeah, I can remember putting the film into the camera. Going to the chemist and picking it up, walking to the chemist to my house, going through it and then I'll be like "Uh, this picture's horrible" and things like that. So I do remember the process of doing that. And also looking forward to it, because you didn't really know what there was, you'll be like "What did I take a photo of?" and "I wonder what they'll come out like" so you were excited to pick them up because you almost forgot what photos were taken as well.

R: What about with a digital camera? Do you look at them the next day or...?

N: Sometimes like when we go home I look at them. I don't usually do it when I'm there. Sometimes I look back. Say I've taken like five photos. I'll look back and see whether the five were any good. Sometimes I don't care because I know I can do that later, but usually I'd look at it the next day. You've got like a second of suspense, you take it, was that nice? Yeah, it was. No it wasn't. There's no suspense or anything like that. What I used to do because obviously there was no way of to take a film into a chemist to get it developed or whatever, so what I used to do was this thing where you get all your photos developed dirt cheap. So what I used to do was go through every so often and get all my pictures I liked, and also see if there was any photos I was tagged in that I liked that other people had taken. And then I'd go and get them printed off as well.

R: Do you do that anymore?

N: No, but then I don't really go out anymore (laughs), I don't really take photos. That's probably why my Facebook activity's gone down, like I probably had like a photo album every week, or something ridiculous like that, but now it's kind of like "Oh, this is a photo album of everything that's happened in the last six months," like there's not really, I don't have as many photos and I don't really have as many... it's not that I don't have as many memories but you're not having all these nights out, or meetings with groups of friends, I'm kind of falling out of that habit in a sense.

R: So are you more likely to take a photo of a big night out?

N: Subconsciously, I think it's what you think other people want to see. So, if you're just sitting at home eating a takeaway for one, do you really want people on Facebook to know that. You want to be like "Hey, look at me I've been out with twenty people. We had an *awesome* night, bet you're jealous." So I think there's an element of that. Um, I think it depends what you're comfortable with, so if I had friends round for dinner I'd feel a bit awkward taking pictures of them. 'Cause I'd be like oh this is a bit weird, "Do you like the food?" Snap snap. And I'd feel a bit weird, and I think if someone did that to me I'd feel uncomfortable. Whereas on a night out when people've been drinking and stuff nobody cares, everyone's happy to have photos taken, I think you're more willing to do things like that, whereas more intimate things, I think it's just a bit more awkward and a bit odd to be like "Oh look, I had dinner last night" and everyone's like "OK. That's weird."

R: Can you explain why that's more "awkward"?

N: I don't know, I know some people who do that. I guess it just depends what you want photos of, what you feel comfortable with and what you want to remember in a sense. Personally for me, that's not the kind of thing I would print out and put in a photo album or frame or anything like that, I mean maybe if it was a birthday dinner, yeah, but if it's just a Saturday night sitting around with my friends watching XFactor then I don't think I'd photograph the memories. But then, things are different as well, I'd probably Instagram it. So if I was having a takeaway with my friends I'd probably Instagram it and be like "Look what me and my friends are having on a Saturday night." Like I've got an Instagram case on the back of my phone that's all Instagram pictures that I took and printed. So I guess it's slightly different in a sense.

R: It more acceptable to do that?

N: Instagram... is a lot more, what's the word, I don't know what the word is, not pointless. Some people still use Facebook, people who use Facebook and don't have Instagram and Twitter put everything on there, and they'll use it for their daily rubbish, whereas all my daily rubbish is now on Instagram and Twitter, and Facebook's more for important updates, like I've got a job, or things that are really happening that I tell people about. And with Instagram, just so many people do it, I follow, I don't know how many people I follow, it's just reams and reams of pictures saying this is what I had for dinner. I think because a lot of people do it, it's almost more acceptable, because my Facebook feed isn't filled with peoples' dinners, whereas Instagram is. So I'm like, all right, here's my dinner then (laughs), more to join in than anything. I guess it's just like reality TV where you sit in a house doing nothing. It's weird, you want to, not watch people that sounds creepy, but... you feel part of peoples' lives in a sense, you're kind of like "Oooh, what are other people doing? Am I doing similar things to them? Oh, look we're having the same dinner, or somebody's having a Dominos. Oh, I want one now." You've got an Instagram of Dominos, now I've got an Instagram of Dominos because I copied you, it's weird. Because it has that frivolousness of it, and because it's digital and because it's kind of like quick, doesn't take a lot of time, you can do it on a phone, a lot of people do it really.

R: Do you tend to connect with the same people on Instagram as you do on Facebook?

N: No, it disturbs me when I have my Facebook friends on Instagram, I *hate* it. A lot of people now, it keeps popping up on my phone saying "Your Facebook friend has now joined Instagram" and I'm like "Why?" Because I had Instagram for my blog, like my Instagram name was my blog name, all the people I follow are people I follow with my blog. So... mixing blog and personal life I find a bit weird. Because I'm conscious that if my friends follow me, all they're going to see from me are pictures of lipstick, and I'm sure they don't want to see that. So at the moment I find it very weird when the two come together. I do have two Twitter accounts, I have a personal one and a blog one, and what I put on each one is different.

R: Is there a way to stop Facebook from automatically syncing with it?

N: Yeah, I don't have it so it does. But obviously, if one of my Facebook friends follows me, I can't stop them from following me. So then they'll see my Instagram feed. And if I want to follow them they're going to know what my Instagram account is. So... you can't have two Instagram accounts, you can't kind of keep it separate or anything like that.

R: You have two separate accounts?

N: Well, I had my first Twitter account that I started when Twitter kind of started, and had when I was at uni and it was very much a uni thing. And then when I started my blog, a lot of normal people use their normal Twitter accounts for their blog, but I kind of wanted to keep it separate, because I was tweeting about different things, and I didn't think that people who followed me from uni would want to hear about things I was saying to do with blogging. It's like two separate followings; my personal account has like ten followers, and my blogger one has like a thousand. So it's a very different medium and it's the people I follow and what I say is different. Look at this.

[Natalie shows researcher phone case made from Instagram photos]

N: It's from a website called Casetagram. And basically you can just go through your Instagram feed, pick out the photos you like, arrange it in a pattern, and then they'll make it into a case for you.

R: How did you hear about getting that done??

N: I can't even remember how I found it. I think I just stumbled across it.

R: You talked before of taking photos of meals and stuff like that, but you haven't included any in there?

N: No, because when I look at photos I like seeing photos of friends, family, places I've been to, as opposed to everyday stuff like what I had for dinner (laughs).

R: You wanted to put your digital stuff, your digital, onto the outside?

N: They're nice photos, and these photos I don't have printed anywhere, or in a physical form. So, just because I've got Instagram I don't see why I shouldn't be able to look at them somewhere else... Like I know people... I know websites where you can print of Instagram photos as little cards and stuff, and lots of people make massive collages out of them, I think it's just another way of printing photos. And because you do have the filters and effects, and because it is very mobile, you might get photos you've never had before, because you'd be like oh I wish I had my camera to take a picture of that, because camera phones are so much more accessible and instant, so you have all these photos you wouldn't have had otherwise.

R: It's interesting because you've got the photos on your iPhone and you've then got them on the back as well.

N: I think, because, when I go onto my Instagram, I don't really ever look at photos I've Instagrammed because I've got *a lot.* So if I wanted to find a specific one I'd probably have to go through a lot of photos to find it, whereas if I print it out like this my favourite ones can be almost highlighted and I can see them everyday, as opposed to trawling through all the pointless dinner ones, until you find a nice one of me and my friends or something like that.

R: So would that be time consuming to do?

N: No, it was really easy, you just pick like what style you want, like a mosaic or a heart, or what pattern you want. And then your whole Instagram feed. And at the time I didn't have Instagram very long so I didn't have loads of photos, probably now it would take a bit longer because I have more to kind of go through, and then I might not be able to make the decision as easily because there's more to choose from. But when I made this it was pretty simple.

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R: Is there any other digital stuff that you use quite often?

N: Um... let me think (laughs) Um... I go on WhatsApp all the time, I use, I mean... I couldn't live without apps. I know that sounds pathetic, but I wake up, I check Instagram or Twitter, I talk to my mum and my friends through WhatsApp, which is an app. Um... I use like their maps, I use like their banking things, travel... Instagram is kind of the most popular. I mean, things come and go. Like there's been people trying to make more photo apps, trying to get them to cotton on and become popular, and it does for a little bit, but then it always goes off unless it really sticks out. There's always like, kind of the "latest thing!" and you all sort of jump on it and then you either like it or you hate it. Like with Instagram, when I first got it I never used it, I didn't really see the point in it. I had no-one to follow. But when the blogging community jumped on the Instagram bandwagon I suddenly had *loads* of people to follow, and loads of interesting photos to see, and that's when I became more addicted to it, and a bit more involved (1.25). You're much more likely to want to see lists of photos or lists of what someone's said if you're constantly seeing updates and stuff to see what people have done.

R: Yeah.

N: Sometimes, like sometimes... it's weird because you'll look at other peoples' Instagram feed and it'll be like 'this person's posted over a thousand photos' and I'm like "How the *hell* have you done that? Oh my god, I don't post enough." I'd have to post like pictures of walls and stuff just to post about things. I mean unless it's Instagram-worthy I'm not going to force myself to post about things, just to have more pictures. I mean, I know some peoples' Twitter, they've sent over *twenty-three thousand* tweets. I don't physically understand how someone can talk that much or tweet that much, I think some people just have more to say than others.

R: Is it important to keep your feed updated?

N: Sometimes, like sometimes if I haven't for ages I'm like "Oh, I should really remember to tweet something soon." But I guess because my blog makes me organised, and the things I'm saying about my blog so it reminds me to do it. So then I think it keeps it all linked as well.

R: With your apps, you know you can have folders, do you have a system of organising them?

N: They are kind of organised, the ones I use the most are on one page, I have a games page, and I have a lifestyle useful stuff page. Yeah, that's pretty much about it. Seeing as I am really organised that's probably not that organised.

R: Do you find it easy to find stuff?

N: Yeah. Um, it's weird, I even like seeing photos of what apps people have, and how they organise them. I like seeing how people organise things and kind of copying them, seeing what their ideas are, so ... There's also things you get used to. So if I download an app and it's on my fifth page, and I have to scroll through five pages, but if I then move that to the first page I forget that. I'll scroll through all the pages and then be like "Oh crap, I've moved it." It's a habit, you don't think about things. I do it automatically. It's easier to just leave it where it is, because that's where my brain automatically goes to find it, rather than reprogram it to go to the first page.

R: Do you find that you get into a routine then with using the apps? Like in the morning do you check them? Do you have things you need to check?

N: Completely. I do things religiously. I more do it to pass time. So I'll wake up and my alarm goes off and I'm lying in bed and I'm like "I don't wanna get out of bed yet. What can I do?" So I'll look at Facebook (laughs) and then ten minutes have gone and I'm like "Crap, I really need to get out of bed now!"

R: Do you ever run out of stuff to check?

N: Yeah, like you'll see people Tweet saying "Is Twitter broke?" 'cause no-one's tweeted for three minutes. It's like if you're bored and you check things constantly and there's no updates you always get frustrated, you're like "Come on people, say something!" You want someone to entertain you or to say something. It's like, if no-one tweets or Instagrams, what else are you going to do? What else can you check? Go on Facebook (laughs). I'm always one that I don't like to follow a lot. You can follow too much to keep up on. Like on Twitter I only follow two hundred people, more than that and I find it impossible. Reading what people say and... it's just so hard. I followed a few more American people and when you wake up in the morning there's so much more to look at. It takes up so much time, sometimes I'm like "Oh my god, there's so much to catch up on, I can't do this."

R: Do you always go through everything?

N: I want to look at everything. Not with Twitter. I've let go of that because it was impossible. Like, I can let twenty minutes go by and there's two hundred new tweets. I'm like, I can't sit and read all that. A lot of it is garbage as well, I can't do that. But things like Instagram and blog posts, I don't like to miss them.

R: Okay.... what about music, do you download music?

N: What, on iTunes? I do yeah. Sometimes I have a playlist, like if I get a new album I've got a playlist which I keep up to date with all my new albums, so I make sure I listen to them. Otherwise they can get lost among, however many songs and stuff I have. And then sometimes I make playlists which I keep updated with new stuff, so I'll go to that if I want to listen to newer things. That's about how organised it gets.

R: Do you update your iPod regularly?

(1.30)

N: I don't now because of this new operating system that syncs it automatically. But I always used to plug my phone into my laptop to charge anyway.

R: Oh, so you plug your phone into your computer?

N: Yeah

R: Do you have a normal charger?

N: No (laugh) it's at home. Back in London (laughs).

R: Do you find that difficult?

N: No, not really. It's only difficult in that it needs to be charged overnight because it needs to be in my laptop to charge. But then my laptop's never usually far from me.

R: With music, do you download it from iTunes or do you have other ways of getting it?

N: Half the time. I'm quite a big music fan. I love looking for music, I spent pretty much my school years spending all my money on music. And, it was only really went to uni and I was on a strict music that I just, I couldn't! I couldn't afford to go out and buy CDs and risk not liking it or stuff like that, so I turned to illegal downloading, and it's just that ability to get that fix, get that album you want. If you don't like it, delete it, kind of thing. It doesn't matter if you don't like it 'cause it's all free. It makes it very hard to get yourself back into HMV. I've got this kind of like wishlist sort of thing of all the albums I want to go and buy, I like having CDs, I like having the album artwork, I like having something physical. It's just getting the money to do it really. I do keep saying to myself if I have a spare hundred pounds at the end of the month I'm going to go to HMV and re-buy all the albums that I love, but the proper, like have it in physical form. But that happens. I just don't have that money sitting there, I can't do it.

R: Do you have a CD player?

N: I don't think I have anything to play it on. I don't think I could. My god, that's quite depressing. I remember when we were at home the other weekend and we were clearing out my cupboard I came across my old CD player and I was like "That can go. I'm never going to use it again." And I just realised that I have nothing to play my CDs on. Bugger! (Laughs) That's quite annoying actually, I wish I hadn't done that, but I don't use it, I don't listen to them. I won't throw them away, I love my CDs, I love my CD collection, but now I have nothing to play them on!

R: What've you done with your old CDs?

N: They're just sitting in boxes. Either sitting in boxes or, like all my most recent ones are still on my CD rack that I have in my room, the other ones are kind of like stacked away.

R: So you'll never get rid of them?

N: No. I dunno, I guess it's all about memories. You remember when you bought it, you remember when you listened to that band. The songs on CDs remind me of things. I don't know. I've spent money on them. I like them, and I like having them around. And I don't think it's something I just want to put in a bin and forget about really.

R: Do you feel that way about any of the digital music that you've downloaded?

N: No. And I think that's why, with bands that I love, I do want to go out someday and buy the physical CDs 'cause then I know I'll have that for ages. Whereas with digital music if I haven't had it for six months, then I'll usually end up deleting it. 'Cause I know I can always download it if I want it again.

R: What would motivate you to delete them?

N: To free up space on my phone because it's full! I have a lot, I have like over, almost twenty-three, twenty-four gigs of music, I have a *lot*. So it's mainly trying to delete something so I have more space!

R: Do you find that you get round to listening to it?

N: No. There are certain things I can't bring myself to delete, because I'm like "Oh, but what if one day I want to listen to it?" Bands I love, songs I love I won't delete ever, even if I haven't listened to it for ages.

R: If you have that many songs, how do you decide what to listen to?

N: I think that's why I have my playlists. If I want to listen to an album and I'm at work and I want to put music on then I'll go to my new album playlist and pick one of my new albums and listen to that. If I'm getting ready for a night out and I want to listen to some more chart music, then I'll go to one of my playlists of all the new songs that I've downloaded by different artists, or I just shuffle through everything.

R: When you shuffle do you listen to every song?

N: It's weird, it depends what mood I'm in. Like, if I'm in an agitated mood I'll keep skipping but sometimes like, if I'm just wanting volume then I don't care what I'm listening to so I'll just let it play. And I might hear a song and be like "Ugh, I hate that song" but I won't skip it but it doesn't bother me.

R: How do you find out about new music?

N: I usually go onto like, my favourite radio stations and go onto their playlists, see what music they're playing, and then if I don't have anything then I'll download it.

R: When do you download, do you miss stuff like album artwork?

N: Yeah, I always download album artwork too. I always want to make sure I have the album artwork, cause I do like it, and also it appears on your phone. Artwork comes up, otherwise you've just got an ugly empty space.

R: What about things like genre?

N: Usually. I don't go too far. I don't always do genre, but I make sure I've got the years right 'cause that helps organise my music. The artist, the name of the album, then usually because sometimes I'll have compilations of stuff, I'll make sure every track number's right (laughs). Sometimes I am like what am I doing? I've just spent an hour tidying up my iTunes but then every six months you have that morning with all that time when you sit down and sort through it all in a sense. I guess it's like when people used to maybe go through an attic or something, now you go through your iTunes instead.

R: The physical CDs you have, have you put them onto your iTunes.

N: Yeah, everything's on there.

R: And you uploaded them from your physical CDs?

N: Yeah. 'Cause the quality's always better.

R: So you see a difference in quality?

N: Yeah. Like, my friends always laugh because I rip things from YouTube, and then when I play it in my car it sounds horrible! But I don't care. But they always laugh at me for having this god-awful sounding music in my car, but...

R: So is that how you go about downloading?

N: It varies. If it's a torrent, I usually go for a torrent or something, but if I wanted an individual track I'd probably just do it via YouTube or something like that.

R: Have you ever had a look at Spotify?

N: Spotify I've never used, because I like sometimes obscure indie bands and they never had their albums, I never wanted to pay for it because it never had the music I wanted. And then it always used to clog my Facebook feed saying what my friends are listening to and I didn't care. So I'm kind of anti-Spotify.

R: What is your f music taste, then?

N: It's kind of weird, it's quite eclectic, I love indie music, alternative indie and indie pop, but on a night out I love hip hop and RnB and things like that, so it varies quite a lot.

R: What radio stations do you listen to?

N: XFM, Radio 1 and 6 probably.

R: So you would download songs just 'cause they're on these stations' playlists?

N: Sometimes, yeah, because like, I like the music XFM play, and usually I'll either listen to a song on YouTube and then if I like it I'll download it, but I would go off their recommendations because I usually like the stuff that they play.

R: Have you got any other thoughts to add?

N: No, I think I'd better shut up now (laughs). No, I don't think so. I don't think there's anything else.

Participant: Natalie

Date/Time: 26ᵗʰ March 2013, 7pm

Location: Natalie's Living Room

Interview Duration: 1 hr 35 mins.

R = Rebecca, N=Natalie

R: So, one of the ideas behind conducting these interviews with a gap in between to see if anything's changed…

N: When was the last time I saw you?

R: September.

N: OK, cool. I'm trying to think of what's changed. I'm like, "When did I see you?" I don't want to say things that happened before or after that, so... Well, I don't know if it was before or after my birthday, but I got a new camera.

R: Oh, right! I think you said you were thinking of buying one.

N: Yes, I got one. [Laughs] I've got a digital SLR, so that's kind of changed my photography. I've kind of upped my level. I did a photography course at the art institute as well so I could learn how to use it, so that changed, and then I change my blogging platform. So I did used to blog on Blogger, but now I moved everything over to WordPress, so now I have my own self-hosted domain through Wordpress.org and then I, like, manage everything now on there and then I'm in the process of getting a company to redesign it for me.

R: So what made you decide to change to WordPress?

N: Um… I don't know. It was weird. It was kind of like it was the thing to do, in a sense? Like you see all these people on Twitter being like, "I've just moved to WordPress!" or "Look at my blog. I moved over here." You're like, "What are they all doing here? I want to go." And I was kind of like, "Hmmm," and I thought I wouldn't but… because blogging changes so quickly, you kind of have to keep up. And I was worried being on a different platform would put me at a disadvantage and also what I liked about WordPress is you get so much control, like too much, that I had no idea how to use it but you can customise it to the dot, like, anything you want to do is possible; you can make your entire own website kind of thing. So I like the option for that because then if I do want to change the design or things like that, you can kind of just set yourself apart a little bit more whereas all the Blogger blogs looked a bit "clone-y."

R: Yeah.

N: So I was like, "Aaah!" And then I think it's meant to be better for SEO as well. Because there's so many Blogger blogs, it gets a bit overwhelming. But there's less WordPress ones so usually SEO picks up better on them, so you're meant to get a better Google ranking and things like that, so… that's what made me move.

R: So is there a reason why you choose Wordpress.org instead of just getting a Wordpress.com?

N: Yeah, because a Wordpress.com, you can't really customise it at all.

R: Yeah?

N: I looked to that, because I was really confused when I was moving to WordPress and all these people were like, "Oh yeah you can customize it as much as you want" and I was like, "What!" because all I could see when I signed up was if you wanted to change the CSS, you have to buy this thing for like £60 a month and if you wanted to change this, you had to pay more and I was like, "I don't understand what all these add-ons are!" But what I didn't realize that what you do is you go... like, I'm with Host Gator or something like that, like my domain's bought through them. And then I create, like, a WordPress blog through them, which is then through WordPress.

R: Mm-hmm.

N: So… what was the question again? I just keep talking.

R: Why is it that you wanted to have your…

N: Ah! That's it. [Laughter] But then once you do that, it means you host all the files yourself and then you can go into the nitty gritty, like the CSS and PHP pages, and completely customise it and change any code you want for it to do whatever you want, whereas on the normal one you can add or… and then I think you're also limited because it's then your blog name.Wordpress.com. I don't think you can remove the WordPress on it.

R: Yeah? So is it still the same title?

N: Yes, yeah, yeah, that's all the same. Like, my blog kind of… Um, the girl who transferred it over for me kept the design as similar as she could. I tweaked a few things, but not very much but I kind of wasn't very confident in what I was tweaking. It's very easy to break, whereas with Blogger, you can kind of undo and it goes back to normal. But with WordPress, if you break something, you just get a line in the code, "Syntax error on line 490" and I was like, "Hmmm! I don't what it is."

So I kind of got a bit scared and then I saw, like, a lot of people have used, like, a certain company. A lot of people just going to just like other bloggers who do design and stuff; some people getting templates and stuff. But over the past... Like since January, everyone seems to have moved to WordPress and everyone seems to have had their blog redesigned, so I kind of… I wanted to kind of make it look more professional so I was like, "If I go to someone else, they can deal with all the problems and sort it all out, whereas otherwise, I'm going to have a headache and if I break it, I'm screwed. At least if they break it, they're… being paid to fix it." [Laughter]

R: So did you have much say in the actual design?

N: Yeah, it's an ongoing process at the moment, so nothing's kind of changed as of yet. I've had my first like wireframe, if you will, sent to me and then I just went back with a few changes, so I'll waiting to see that come back and then we'll go from there. I think with Host Gator, it's mine, because... Well, um, I don't know… I didn't really set it up. This girl set it up for me 'cause I had bought my "www" through Blogger, so it was then hosted through Blogger. So

what I did is you can transfer that over somehow. I'm not sure how, but, like, all my files and my server, and all that stuff, are hosted by Host Gator. I don't… The domain I think is still through Blogger, but I think all my files and everything and all my server space is all through Host Gator. They, like, host all my files. I think that's how it works.

R: OK.

N: But I kind of got myself really too complex now with the whole WordPress thing. I'm like, "I don't understand what's going on!" [Laughter]

R: In terms of the domain name, is it the case if you pay per year, it keeps that domain?

N: Yeah, yeah. It's like, um… I know with my Host Gator, I don't know whether it includes my domain name or not. I'm not sure if that got transferred over. Um, but that's usually that's like six dollars a month… to host however much space I've got with them. And then I think… my domain… I think I pay for it once a year. I'll probably find out when the bill comes in that I'm still with Blogger [laughs] and then I'll be like, "Oh. OK. " And that's usually, like, nine dollars a year, if that. It's not much at all.

R: Mm-hmm. So has the way you blog or anything like that changed since you moved over?

N: Um… Not really… No. I kind of obviously like the interface and things like that are slightly different. I still take the photos in the same way, edit them the same way. I always upload them to Flickr and then, um, grab the code from Flickr to embed them into the blog post, but I did that with Blogger. So no, I don't think it's changed in that sense.

R: Have you looked at the end user license agreements? You know, like when you sign something, there's, like, a terms and conditions. Have you read them for things like Flickr and WordPress?

N: No, but I should have, no. Because I know all these privacy agreements and there's all these things at the moment now with cookies and how cookies have changed. I know a lot of websites come up with a pop up saying, "Do you realise how to use cookies?" Um… I know with the company that host my ads through, my advertising company, they've got this new thing where you have to have a…. privacy document, so you have to have a page on your blog that links to a document that you've written explaining what data you do and don't use and what sites you're associated with and what *they* do and don't use, so I know that's all changed a lot. It's something I kind of skim over, which I probably shouldn't, but I *know* a lot of people are more hot on it now and people more kind of disclaim more about what they, like, advertising they have, what links they have, and what kind of cookies and stuff and what it's kept for.

R: In terms of, um, things like ownership of your blog, do you know…

N: [Interrupting] I hope it's mine! [Laughter] I guess I don't know, because yeah, if my photos are hosted… well, sitting on Flickr, I guess I don't know what their kind of agreement is. Um… and in terms of the actual data… I mean, I'd like to think it's *mine*, because I pay and I signed up for all of the other bits I've used, but it depends on what their policies are what I do actually own.

R: So do you pay to use Flickr as well or do you just use the free version?

N: No, I just use the free one. So far, I have no need to. I'm not done anything or run out of space, so... [Laughs] Yeah, I've only ever used the free one.

R: And you know, when it does comes up as an end user license agreement?

N: Yeah?

R: What would you do?

N: Yeah. Well, I'd like to say I scan it, but I don't anymore. I used to back in the day, but you get knocked with so many things, all the terms and conditions, that you just assume they have your best interests at heart and that you can do what you want when you're on the site, so I usually just click "OK" and then if I notice a problem down the line, then I'll leave. But so far I haven't. [Laughs]

R: And that's the same stuff Facebook and Instagram? Have you ever come across anything there?

N: Well, there was this big hoo-ha over Instagram when they changed their policy and people, like, threatening to leave and all this stuff and… It's hard. It's kind of like you want to stand your ground, but if you have a certain amount of followers on Instagram that aren't leaving and then suddenly you leave, you very much get kind of left in the dark and then you can't be part of something that everyone else is.

So if I'm the only one who takes a stand and I go, "I'm not happy with their change in policy. I'm leaving and never using Instagram again," yet all the other bloggers still do, I'm then out of the loop, so it's… You're in two minds. You want to do … what you agree with, but then also, you feel very much that you have to, kind of, stick with what everyone else does to get all of the readership and the followership and all that stuff as well… But I kind of choose because a lot of people got ticked off about it and then they changed it back, so… I guess it's kind of two-fold in a sense.

R: So how did you feel when you found out you heard of Instagram's change of policy?

N: I don't know. Personally, it didn't bother me because I couldn't really understand why Instagram would ever want to use pictures of my dinner for anything, so why… I guess celebrities would have more an issue, because their image…where they could sell their photos, in a sense, so it's much more about monetary value for them. But I honestly couldn't see what they would want with any of my pictures. I mean, I'd probably find it weird if they've got, where there's a website somewhere and see a personal picture or picture of me but when you're a blogger, you're kind of used to that happening because you're going to put your pictures up on an open space, on the Internet – you don't know who can steal them, who can take them, who can put them anywhere. So I guess, in that sense, it didn't bother me as much as it did with other people, no.

R: Is there anything that you do to try and stop people from taking your images?

N: No. Um, some people get really funny about it and have, like, watermarks across the image. Some people disable right click. I personally have never had an issue. I know certain bloggers, like, they see their photos on eBay perhaps, they go the blog verse, and "People have stolen them!" Like, they have a lot of issues, so I could see the need for them, but for me, no one's ever tried to steal a picture. I don't know whether that's a good thing or a compliment or not

[chuckle], but to me, it's not… Maybe if it was more of an issue, it would be something I would look more into, but I think the more that you kind of, like, put watermarks and things and change it all, it kind of makes it a bit less user friendly, you know, just assume people are going to steal it as opposed to just sharing your content with them.

R: Would you mind if someone did take some of your pictures?

N: Um, I think I would if they didn't say it was mine. There was a case, a comment board it was. I got a tweet from someone being like, "Oh, did you know this girl is using your blog, like stealing your blog posts?" and I was like, "What?!"

And I went onto this blog that had been set up, and basically, this girl had gone through loads of different blogs and had just stole it, like all the pictures and the word-for-word text, and pretended it was hers. And I was kind of like…. I just kind of wrote a comment on it and I was like, "I'm sorry. I don't know if you realise this is mine or not, but do you mind taking it down?" And in the end, it turned out that she was… a scammer of some sort and those people were like, "You're not going to get her back?" I was just like, "I just want my stuff taken down."

But in the end, it was all completely, like her Twitter was closed down, her blog was closed down. Apparently, she makes loads of them all the time and she's a bit crazy, they say, but I just kind of kept out of it and said, "As long as it's taken down..." That's all that really kind of mattered about…

R: Do you back up any of your blog posts?

N: No! I guess…. Well, this is the thing 'cause I mean, I know some bigger bloggers like Ruth from Blogger Recommend, she said before that her blog has been hacked and that she had lost all her posts. And to be honest, I wouldn't know how to back them up, because I don't write them in Word beforehand. It's like all my pictures obviously are backed up on my hard drive, but in terms of, like, the words I've written, I don't have, like, a carbon copy of it or anything, an electric copy. I know sometimes you can, like, export out all of your blog posts and do it that way, but that's not something I ever thought of doing because I like to think that the people that I have it hosted with and when I had it on Blogger beforehand that everything was quite secure, and so, nothing like that would happen.

R: Mm-hmm.

N: I guess if it was more I was running it as my business and it was my main source of income and I had a lot of people trying to hack it, it would be something I would look into, but as it's not been a problem I've been presented with, I've not really done anything about it as of yet.

R: Mm-hmm. What about other digital stuff, like do you back up anywhere?

N: Um… I guess I usually have, like, another copy of it somewhere. So with my Facebook photos, I usually have it on my camera, which I put it on my computer, then I can upload it from my computer. I keep those photos; I don't delete them. Um… With my phone, whenever I take, like, an Instagram picture, that picture's saved on my phone as well, so unless I delete it because that photo was meant as just like a blog purpose or something I didn't want to keep, I

think that may be the only backups that I have. Like, I back up my phone, so I guess there's a backup of that. All my pictures on my computer for that.

R: Mm-hmm.

N: But in terms of anything else, like, any, like, data or, like, any tweets that I have written or any, like, status posts I've written on Facebook, I don't back anything like that up.

R: In terms of backing up your phone, is that to the iCloud?

N: Um, it's just to my iTunes.

R. OK.

N: Yeah, when you plug it in, it makes a backup on your computer. Yeah, that's the only one I do.

R: And do you do that regularly?

N: Yeah, usually, and then I back up my computer with Time Machine as well. So any photos or anything, all my documents, all my software, everything like that has been backed up by Time Machine as well.

R: And when you back up to iTunes, is that stuff like texts and photos, or is that just…?

N: I believe so. I don't think it's in terms of something like, "What's that?" so if it's a different software, it doesn't take it over. But in terms of… It's like all my texts, all my pictures, all my apps, so if it were to... If the phone was to break or something and you need to get a new one, the idea is that you can plug it in and restore it and it's basically like your old phone is right back there in front of you, but I think things like Word stuff, it wouldn't save those kind of conversations. So I guess if you had, like, um… if you didn't take your pictures through the camera, if it wasn't saved on the actual phone, if it was saved in a different app, then things like that might be lost, but I'm not sure if there's any apps that do that.

R: Is there anything like that you'd think you'd want to keep, like Word stuff?

N: Um… Part of me says "yes." But I've had it in some many instances where a phone's been lost or a hard drive's failed, that things that I thought were kind of irreplaceable when you do lose them, it's just kind of like… So it is probably good 'cause I've got a lot of crap in there. [Laughter] And sometimes if you can do that clean start that you've never had because you usually keep everything, so I don't think there's… anything… There's nothing sentimental or sad or anything like that and any media that I sent or pictures that I send or receive, they get saved on my phone separately, so they stick around. It'd be more conversations though but I don't think I'd mind much about that.

R: What about text messages and stuff like that?

N: Um… They do get backed up. But honestly, I don't think I would miss them. It would be only because someone sent me information, like a house address or a phone number that I needed and then I lost that, then I'd probably just have to text them again and ask for it again, but only information like that I would probably miss.

R: Do you ever have any conversations over text that you may want to keep?

N: Um… I used to be like that, a lot. I used to be the kind of girl that would save an MSN conversation back in the day to re-read because I was like, "Oh my god, I'm the new kid!" [Laughter]

But, like, seeing old computers I had like backed up on hard drives and going them through those files and think how cringe-worthy they are, I don't think I would do that again. [Laughter] I like to think I'm more mature than that. I'd like to think that my keepsakes are more personalised things and I have actual things, like tangible things, you can hand-hold as opposed to old stuff in a phone. But, yeah, I think, like back in the day, I used to… when I had, like, an old Samsung or something, I used to have software where I could back up all my texts on my computer because I didn't want to lose them. But that all got a bit much and I realised I was being a bit nutty, so I stopped that. [Laughter]

R: What did you do with those?

N: Some of them I still have. Some of them I kind of go through, like if it was an ex or something, and I'll read through all the conversations. Half of them make me cringe now and I can't bear to look at them. Sometimes it's just kind of funny to remember old conversations or friends you used to have or things you used to, like, talk about or, like, when you were planning to go out and do something, you kind of remember what you were doing at that time. So, sometimes I do like coming across them because it kind of makes me laugh, but then I kind of cringe at how I sound and stuff I was saying, I wish I wasn't saying it.

R: But you keep them anyway?

N: At the moment, yeah. I don't think there's anything that I've gone back and found and then deleted because I do think it's funny to re-read. I think that's something…. Um, even my MySpace page. I think I still have it, but I think it's because I go on there a lot because I have, like, messages from old friends. Um, like, I think it was something I set up when I very first came to uni, so, like, I can see, like, the relationships forming between then and now we're really good friends. So things like that, I do kind of keep because I kind of like whenever I do, like, go back to it and have a look….

If it's something that kind of went away and got deleted, it would be a bit of a shame but I wouldn't worry too much about it. But I do kind of like keeping them if they are and saying, "Aww!" because I like going back onto them so I think even with all my mobile phone devices, all the texts are still on there, so if I ever find the battery that works, I can turn it on, and I'm like, "Oh, that was funny!" But I don't do that very often. [Laughter]

R: So when found this old conversations before did you look for them or did you…?

N: Sometimes I look for them. Sometimes I come across them. Like with emails and stuff, like I used to have a Hotmail account, which is still active, but I don't use it. Sometimes I will go back to that to re-read old emails that I know are there, but whether I want to think or remember something, I'll go back and read those. Sometimes I'll just stumble across things or I'll glance over a folder that will be like old MSN convos and I'll be like, "Oh, do I want a laugh?!" and I'll go into it and start giggling with myself, but I know how stupid that sounds all the time.

R: So what do you do with old stuff like that?

N: Um, usually on an external hard drive, because sometimes, like some of the things that, like, old relationships that I don't necessarily want to do delete, but I probably should; I can't let go. [Laughter]

But I kind of put them on external hard drives, because it's not something I want to look at every day, but if I was, like, backing up or something would happen to make me go through the files, it's something I don't mind coming across and then I'll have a look, but I've kind of... It's almost like a reassurance in a sense. I know that might sound weird, but you know they're there somewhere if you need them, so I'm not going to read them every single day, thank God, but if I was to kind of plug in my external hard drives and have a look at them, they'd be there.

R: Have you got many external hard drives?

N: Yes. Yes, I do. I think I have… three or four, because they change in technology, so my first external hard drive, you had to plug into the wall and, like, it was really massive and it didn't have much space at all. And then, I think I had one, which I think broke. And then I had another one, which is more like a flash drive, so you could just plug it in. But again, it didn't have a lot of space, but that was one that was useful and I think my mum now uses that one.

And then, you could start getting, like, the terabyte hard, external hard drives, and I was like, "Ah, I want more space!" so I bought one of those. But that's now back to the plug in the wall one because it was one of the first terabyte big ones that you could get, so now you can get like a terabyte one and a flash one, so you don't need to plug it into an external power source, so now I've bought one of those. [Laughter] Because sometimes when you have to put it in, it's a hassle and you just don't back up as much as you should.

R: Mm-hmm.

N: But I kind of buy them as they go. It's kind of as technology develops and if I run out of space… um, because I remember my first one was probably 250 gigabytes and I thought that was loads of space, but now you keep… things get bigger, you download more stuff, and you have more files, so I always end up getting bigger hard drives and things like that.

R: Have you kept the…

N: The old ones?

R: Yes, the old ones too?

N: Yes, because I'm scared to throw away hard drives in case someone gets it and uses it and sees any of my horrible MSN conversations. [Laughter]

I don't look at them. I don't think I've plugged my old wall-to-wall one in, like since I bought my new ones. Um, but I think it's more for safety, because I don't know *how* to dispose of a hard drive, to, like, delete all the information on it and make sure it's all *gone*, 'cause I don't want someone to steal my identity or anything, so I kind of keep them more because I wouldn't know how to throw them away than because I want to check the data on it. But usually whatever data's on it, is on my new hard drive and then I add to it. So every time I get a new

hard drive, it usually has all the old data and then I add to it as I go along. I think I even still have all my old GCSE work and A level work and things like that.

R: Did you put it in a …um….

N: A "do not read" file? [Laughter]

R: Yeah.

N: Yeah, yeah, so I have like "old hard drive" and then I have an "old, old hard drive", and then I have all my different... Like, I must have, like, the same file in about twenty-five different places because I always… not worry that I'll lose it, but I'm not sure what's in where, and if I was to go through and clean it all out, I'd probably have, like, twenty-five versions of the same thing backed up in different places, which I don't need, but I just kind of leave them as they are and just… keep backing them up. [Laughter]

R: So where do you store the hard drives, the ones you don't use?

N: Um… just in my bedroom back home in London, so they're kind of like, just in my wardrobe. Yeah. It's all in a big box in my wardrobe.

R: And would you ever consider getting rid of them?

N: I would. I think if I knew *how* to. Um… If I knew all the data was corrupt and no one could, like, on the street could pick it up and be like, "Ah!" and then access all my old files, then I would, but I think I'm a bit "iffy" bout people being too technologically good and being able to access corrupt hard drives or do anything like that, I'm not really kind of edgy enough to get rid of them.

R: I think in the last interview, you talked for a bit about, um, a kind of "digital spring clean" so the way that you'd clear out your attic you might clean out your digital music instead…

N: Yeah.

R: Have you done anything like that recently?

N: Yeah, all the time. 'Cause sometimes, I'll complain to my friends that I don't have enough space on my laptop. They'll be like, "Well, why not?" and I'll be like, "I don't know. I just…. my laptop's old. I need to get a new one. I need more space." And they'll look at it and they'll be like, "But you have six seasons of '*The Big Bang Theory'*… sitting on there which is like twenty-five gig of data. Do you need that?" And I'm like, 'Well, no, but it's nice to have it if I want to watch it." And they're like, "Put it on an external hard drive!"

So, sometimes when I run out of space or if I'm a bit bored or if I come across a file and I'm like, "Why the hell do I have that on my laptop?!", I do go through and clean things out. Even with my music, like, a lot of time when I'm in the car, I have my music on shuffle and then songs will come on and I'll be like, "Why the hell do I still have this song?!" So sometimes, I'll go through and, like, clear out like old albums or I'll look at, like you can look at the play count to songs on iTunes, and I'll go through the ones that don't have a play count that were added in 2009… and I kind of realise that I'll never listened to it. So things like that, I try and kind of clear out, because even though I've got a lot of space on my phone... My phone's like

thirty gigs, but my music's only like thirteen. Even though I could add to it, I quite like having a collection of stuff I know I'm going to listen to that I'm going to use less space than use all space just because I can.

R: Mm-hmm. What about, say, old music which you don't listen to at the moment?

N: Like nostalgic music?

R: Yeah?

N: I put it on my hard drive! [Chuckle] I do, because I have all my Christmas music on my iTunes and I was like, "Oh, I don't need this!" and I went to delete it and I was like, "Oh, no, no! I did this, not last year, but the year before." Yeah, last year before Christmas and when it came to Christmas time, I had to re-download, like, all my Christmas music, 'cause I had nothing. So I was like, "I'm going to be smart! I'm going to put it on my external hard drive so I don't need to worry about it, but when it comes to Christmas this year, I can plug in my external hard drive and be like, 'Hey, I have the Michael Bublé Christmas album! This is brilliant!'" So it's all kind of there for me.

So sometimes, if there's stuff that I know I might want to keep, I'll put it on my external hard drive… or sometimes there's some music I do keep on my iTunes and then I'll go, "I'll just skip that one," [laughs] but I like to hear it.

R: Can you remember when you first started using iTunes?

N: Oh, my good lord! Um… I remember I had the first ever iPod, the all pink one. I still have it, because I can't bear to part with it because it kind of reminds me of… the technology or whatever. Um, yeah, I remember that was one of the first ones that came… Well, not the very first ones. I think the very first ones were the white ones with the four buttons across the top. Um, but I think when they had the iPod Mini, I think they called it. Um… I remember I was still at school. I must've been, like, Year 10… or 11, something like that, and then I didn't have that for that long, 'cause I remember then I bought the big white ones which held, like, sixty gigs, 'cause I was like, "I'm far too into my music! I need so much more space." I think my pink one had like eight gigs, so I was like, "Whatever that!" and I still use the white one. I remember getting the white one when I was in... Um, first or second year of sixth form and I still use that because I'm not draining out the battery on my phone, so I usually still listen to music on my old iPod. It still works absolutely fine and it's got loads of space on it! [Chuckle]

R: You know when you said about the first one and how you liked that because of the technology. What do you mean by that?

N: I guess because I'm a little bit of a geek in the sense. I like seeing how technology has changed and I like… It's kind of retro in a sense, like some people go out looking for like cassettes and like Walkmans or a boom-box to use. Like, I don't know. Sometimes it's nice to have something a bit retro or even if it was just to kind of look at and be kind of like, "Oh my god! Can you remember what they used to be like back in the day and how that, like now, it's…?" Yeah, it's not exactly a spare or anything like that. It's just in a cover. But for me, it doesn't take up a lot of space. I quite like it more being there and seeing what I used to be like.... I think. [Laughter]

R: And what sort of music did you have then?

N: Um, I'm trying to think. I tried to be very cool, so I had a lot… I think I listened to a lot of Snow Patrol and things like that. But that's what I listen to now, so maybe I'm still trying to be cool. [Laughter] Um… I'm trying to think what else I used to have. I used to have, before my iPod, I used to have a mini-disc, which I don't mini-discs ever caught on, but I thought they were going to be the latest things, so I thought, "I'm buying a mini-disc!" And I had to like... It was basically you put a floppy disc into, like, a cassette player as opposed to a tape and I used to have to plug it into my computer and, like, record songs onto the tape— something weird like that – and you could only fit twenty songs per mini-disc and I remember going on a holiday with, like, twenty mini-discs, being like, "Oh, god, this is amazing!" Um, I remember having that and that had a lot of music that I used to kind of download from the radio and things like that, a lot more kind of dance stuff or pop stuff. And then I bought my first ever, like, mp3 player off eBay, which was like this tiny, little thing and you could fit, like twenty songs onto it, if that. And then, you'd plug it into the computer and somehow get songs onto it and me and my friend used to sit on the bus and listen to it and be like, "Oh God, this is totally amazing!" thinking we were like... the king of everything but we so weren't. [Laughs]

R: Have you still got those ones as well?

N: Uh, the mini-discs I gave to my mum, but I think she was like, "Can I finally throw these out?" and I was like, "Yeah, alright," because mini-discs aren't cool to keep. IPods are, I think. [Laughs] Mini-discs – I don't really want to show people that I had mini-discs [laughs], so that has gone. My little MP3 from eBay – I had that for quite a while, but I did throw it out because it was completely broke and it didn't look that cool and it was only like twenty quid, so I was like, "Yeah, I can probably throw this out now."

R: And when you first had your iPods was it still a case of buying CDs?

N: Yeah.

R: And putting them…

N: Well, back in the day, I used to, like, use a tape and record songs off the radio so when you had to press "record" on the tape machine and it would hear the music, you couldn't speak or anything because it would pick up any sound, so I used to like record music then mute. But you used to have to, like… 'cause obviously, the radio host would start talking as soon as the song ended, so you had to be, like, right on beat to make sure you didn't kind of catch someone saying something. So I used to always make things like that off the radio for the latest songs, and then, um… Yeah, then I used to get CDs. I used to be a big CD buyer. I loved buying CDs. I loved the artwork. I loved having, like, a massive CD collection and I think it was only really that I was… when things started getting digital and then people would start downloading torrents and stuff. A lot of people do that and I was very anti-that, like, "No, no, no! I love buying my CDs. I'm always going to buy my CDs!" And then, I became a student and became poor, so I stopped. I still have them all. I still keep them all in the same place in my room, but then I just started buying music on iTunes and things like that instead.

R: And have you still got all of your CDs?

N: Yeah. How sad is that?! Yeah… I still have my CD tower , 'cause I remember I used to organize my tower in a sense that any new CDs would be put at the top, so I think my most, like, the last CD that I ever bought is still at the top of that tower. And then, that only held twenty, so the best twenty would go in that tower and then the rest of them were all, like, stacked underneath my desk so you could kinda couldn't see them. My mum says I should get rid of them or hide them away. I don't know – I quite like them, like I spent good money on them. They're CDs I really like. I think I did have a bit of a clear out of any CDs that I then hated or I never listened to… or I didn't really like the band anymore or something like that, then I'd just sell on eBay or just throw away. But the majority of them, I still have and they're still kind of on display in my room, yeah.

R: Since you've transferred your CDs to a digital copy, would you ever consider getting rid of the cases and the CDs?

N: I don't know! I kind of… Well, I wouldn't want to say, "No, I'd never do that." Obviously, I don't know… how things are going to change and if I move, I'd probably be like, "Oh, I don't really want to lug, like, a lot of CDs to a new house" kind of thing. Like, I've never had to move them from where they are, so it's never really been an issue. If anything I've ever move them out of, it was like maybe into a box or out of a box or things like that, depending on, like, what storage I needed in my room or whether they could be on display or not. But, um, I like to think I'd always have them because I know my dad… still has all his vinyls; he won't throw any of them away. Um… and he has all his CDs still.

I think… Maybe it stems from him because my dad doesn't throw his CDs out and he's got, like, four hundred CDs in the dining room kind of thing, so I'm like, "Oh, OK! That's my kind of mind." But he has all these vinyls as well. I guess I kind of remember, when I was a kid, him looking through his vinyls and remembering things or listening to old music that he loved and, like, sharing it with me. So maybe there's a part of me, subconsciously, that wants to kind of share it with people when I'm older or, like, looking back on CDs when they're a thing of the past and my children don't even know what CDs are, so maybe there's an element of that in it somewhere.

You have, like, a moment of nostalgia to maybe a song, but if you're flicking through iTunes and you see a an album, you'll just be like, "Oh yeah, that's cool," whereas if you had like an actual CD, you'd probably spend time to put it in the CD player or listen to it or flick through the album art or actually look it and think of other things, whereas because digital, you can see things so quickly and just scan past it, you might have an instance of, "Oh, maybe I'll listen to that!" but then soon as you play it, you'll get bored and then put it on shuffle, change it around. I think it's hard to get nostalgic over something. I think the only things that I can get nostalgic over that are digital are photos or like videos. For example, like, I know when my friend came to visit recently we were looking at old photos on Facebook from when we were at Meridian, having a laugh, and things like that, but… Yeah, I don't think you can in terms of music…. It's digital.

R: You know when you talked about having your CD rack and the top twenty CDs?

N: Yeah.

R: Do you do that now with iTunes?

N: Um… kind of in a way… same way, I guess. I have playlists. I have playlists by different genres of music, so I might have, like, an indie one, or like a dance one, or things like that. And then every time I get a new song, I either put it at the top of the playlist. And then, see – if I go through, like, a downloading spree and end up with, like, twenty new ones, I'll likely put them in a playlist together, so they're in an order I like or something like that. So I kind of have… playlists of all my latest music so I kind of… whereas with my CD rack, I have twenty, then if I use them up, like, stuff would go.

But the playlist is infinite, in a sense, so I keep adding to the top and don't delete from the bottom, so now my playlist is, like, two hundred songs long. I kind of... I like it, in a sense, because I can see how I know what songs I like or if I wanted to, like, listen to a song I liked last year, all I have to do is go through the playlist and that song will kind of still be there.

R: Do you ever kind of look down and…

N: Sometimes. Yeah, yeah. And then, sometimes, that's when I'm like, "Oh god, I really need to clear out my music!"

Because maybe… I remember. Um… once when I was living with my housemate, she really liked… Whitney Houston when she was released, like, her last kind of dance hit, and I downloaded it and put it on my iPod because we were in the car a lot and we listened to my iPod. I wanted that song to come on because I knew she liked it. And then, when I didn't live with her anymore, I was kind of like, "Why the hell do I have this song?!" [Laughs] I know I didn't like it – she liked it. So there's certain things when I do go through and I'm like "OK, I don't need that one anymore" and then I can delete the music completely.

R: Do you delete a lot of stuff?

N: Yes. Yeah, I think, especially… in blogging, in a sense, because I can take, like, fifty photos and only like one, so I delete a *lot* of stuff.

I download a lot of TV shows. Once I've watched them, I now usually delete them, because… unless it's something I'm going to re-watch. I think, with TV shows, because I love having, like, DVD… I love having box sets, so if it's a TV show I really like, I know that even to this day, I'll go out and buy the box set because I like having it as a collection; I like seeing it. Anything else, if I know I'm not going to re-watch it, I'll just delete it.

R: When you say "download", where would you download it from?

N: Either iTunes or more illegal places... [Laughter]

R: Is there a difference in… if you've downloaded it from iTunes, would you still delete it?

N: Um… probably not, because I paid for it. Um… And if I did want to re-watch it, I wouldn't want to have to re-pay for it. I know now it's different with iCloud – so if you delete something, you don't really delete it. You can go back and re-download things you've purchased through iTunes. So no, 'cause I know when I was clearing my music out the other day, I deleted something. And instead of just showing me the song track, it then came up with a little cloud next to it, and I was like, "What the hell is that?!" And I went to delete it again and they're like, "Do you want to hide this even though it's still in your iCloud?" and I was like, "Oh my

god, you can't really get rid of these things, can you?" But I was like, "Yeah, just hide it, 'cause I don't want to see it at the moment", unless I want to go through it and re-download things from my iCloud.

So back in the day, I would say I really wouldn't, because I know… once my hard drive broke and I lost everything and I had to, like, speak to iTunes to try and get some of my music re-downloaded, without having to pay for it so I was a lot more careful then, but now I'd probably be a little bit more frivolous and just, like, delete it.

R: Yeah?

N: Yeah, like hiding it on… yeah, my phone— so hiding it from my iTunes. So it didn't come up in my iTunes. It didn't come up in my phone. It didn't come up in my iPod. I think you have to go to, like, some cloud service. Maybe it's an app or, I'm not sure how you do it – but some tab in iTunes you can go to and see everything that you've downloaded, like through iTunes, and then you can re-download from the cloud, so it's never *really* deleted.

R: How do you feel about that?

N: Um… I think it's weird for apps, because sometimes you can be bored at a train station and download hoop jumper for penguins or something like that and then you can be like, "OK! This is a real shit app!" and then delete it. But then you can go back through and be like, "Oh my god, I downloaded *that*!" So yes, maybe if a friend was to find it and go through it, they'd be like, "Why the hell did you download this stuff?" Like, sometimes you might want to download something in private! Or if it's like… something you were trying to… like, it's something you used for a short period of time and then go and delete, you kind of then can't ever get rid of that history of ever downloading it because it'll always be there, so I think that's a little bit weird.

R: Is there no way to delete it completely from the cloud?

N: Apparently not, no. 'Cause I remember when they first… changed it, I was like, "Oh my god, I don't want to see everything I've *ever* downloaded!" because I download *loads* of random apps because I'm bored and then I delete them because they're shit. I don't want to see them if I did that. And then, it clogs up the feeds sometimes, like if you're looking for something important, it'll be like, "Ah, look at 'Penguin Jumpers!'" and I'll be like, "I don't want to download 'Penguin Jumpers.'" Um… so yeah, I didn't necessarily want that to happen, but it's one of those things you're ok they've changed it, I'll accept it and move on.

R: So have you been through and seen anything that you've already deleted?

N: Um, no, because I don't look. I think… if it's something I downloaded, it's for free and I delete it, I just re-download it. Or, like, I research it, like, in iTunes… in the Apps Store and then it comes up and then it'll be like, "Download again." But I don't go through the entire list, because I remember I once did and I was like, "Oh god, there's a lot of stuff on here!" that I don't want to know… Not that I don't want to know about, but kind of doesn't apply anymore so I don't go through that method to, like, re-download anything at all.

R: Can you remember what sort of stuff is on there?

N: Um, I think it's just, like, loads of pointless games and things like that, like "Draw Something" was really popular for a while and then I went on and deleted that. I was just like, "I don't want to play that." Like stupid, little games that I had… that I no longer want to play them, 'cause I probably downloaded... It's when you first get an iPhone as well. You're like, "I want to download everything!", like everything's important, but you download thirty different little "no" apps just because you want to see which ones you like, kind of thing, so I think there's a lot of just rubbish I didn't need anymore. I think cult games like that [Draw Something] would be cool, but otherwise, they'd just highlight points in your life when you were really bored. [Laughter]

R: I think when we spoke last you were quite anti-Spotify.

N: Yes. I still am.

R: Have you tried it?

N: I don't… I, personally, don't see… why people would use Spotify. I guess if… OK. I guess some people use Spotify are really anti-downloading music illegally, which I get, and good for them because yes, downloading music illegally is bad, it ruins the music industry, and it's affecting the artists that we love to listen to and all that stuff. But I just don't find Spotify a nice thing to use, a good thing to use. I don't like the apps. I don't want to pay for it. I find it quite limiting in the music, like, some of the things I like can be a bit different, like Off the Beat and Tracking Scents, and I can't find the artists on there, so I'm like, "Why would I want to listen to it?"

I know my housemate when I lived with her a couple of years ago, that's all she used; I don't know if she still uses it anymore. She lived off Spotify – she'd create playlists on Spotify, find new music on there, but she didn't know how to download music illegally and she didn't want to pay for the music through iTunes, so Spotify was her best thing to use. So for her, it was a godsend, but for me, I just don't understand why people use it; I don't see a need. [Laughs]

R: You also said about… you were thinking you might try and start making some more YouTube videos as well as doing the blogging?

N: Yes.

R: I wondered if you've had a go at doing that?

N: Yes, but I get scared… It's pathetic! I sat in front of my camera and filmed, like, fifty videos. And of all them, I just… freeze completely in front of the camera. I don't know what it is… I used to be A-OK in front of a camera, but I don't know whether it's kind of subconsciously, all I can keep thinking of is like, "Is this right? Am I doing it right? Is it coming across okay? Will people like it? Will people be mean to me? What are they going to think? Am I doing it like all the other You Tubers? Is the lighting right?" Too many things just kind of like play in my mind; I can't just sit there and be myself and film.

So I have tried. I made, like, an Adobe After Effects or something like that. I made, like, an intro, so where, like, all my logo flashes in and the name of the film... Uh, the name of the film! [Corrects self] The name of the video comes in in a cool effect. I made an outro that shows my last played video; everything is ready to go, but I'm not feeling confident anymore.

I just sit there and freeze and go, "No, no, no, no. I can't do it." So it's not something I want to try and do; it's something I keep saying I want to do, but YouTube just keeps evolving by the day, getting bigger and bigger, and every day I don't do it, I get more scared to do it. I'm my own worst enemy with it.

R: You talked last time about YouTube being critical?

N: Well, I always thought YouTube as the scary place. Like to me, everyone who blogs and everyone who reads blogs and comments on them are happy, lovely people. I barely get anything… like, I don't think I've ever really gotten anything really mean on my blog post. Everything is just like, "Oh my god, I love what you've written!" and "Ah, I love your photos! Ah, I love you! I love this! I love everything!"… Happy roses.

But whenever I go to, like, a You Tuber and watch their YouTube video and then read their comments, people are SO NASTY! I don't why, like, YouTube is the place to be mean. I don't know, like, if it's because you're putting your whole self across. I don't know what it is, but people are horrible. Like, they pick at… I remember when I did do YouTube videos, um, people had a go at me for my fringe. Then, they had a go at me because I was playing with my fringe. And then, they didn't like my accent. And that was when I got, like, a hundred hits for a video, like nothing, like absolutely teeny-tiny. And I was like, "If this is what people say when I don't really have anybody watching, I'd hate to think what you get when those people are watching."

'Cause that's the thing as well – like, on a popular video, you can get like sixteen thousand views. If sixteen thousand people want to say a comment as well, that's a hell of a lot of words. On a blog post, you might only get like two thousand hits a day, something like that, and they might not be reading the same blog post, so to know that that one video is getting something like sixteen thousand or twenty-three thousand views, like however many people are sitting there and watching it. I can understand in a sense why they get, like, so much more hate comes around and things like that.

And people are just mean; it's like just because one girl has the confidence to sit in front of the camera and tell you what lipstick she likes, and that person is too scared to, that doesn't mean you should be mean to the one that's confident enough to do it.

R: What is it about that that scares you?

N: I guess in a way I don't want it to affect my blog. Like, I don't want people to stop reading my blog because they think I'm a terrible You Tuber, so part of me worries that I could tarnish my blog, in a sense, and people could be like, "Oh, she's an alright blogger, but now she's just made everything worse and I'm not going to ever read her blog again."

Um… and I guess it would be embarrassing… to fail, in a sense, because I don't want to, like, promote any YouTube channel and, like, people I inspire or You Tubers I watch to see my video and see everyone hating it and be sobbing because it just didn't so well. I'd kind of be a bit embarrassed to be all like, "Oh my god, everyone!" Make a big song and dance, I start a YouTube, and then I have to stop making videos because I've got upset because everyone was mean. [Laughs] That would suck. [Laughs]

R: You said you said you filmed some videos.

N: Yeah.

R: Have you still kept them?

N: No, no. They are so far deleted. Not one saved on the hard drive; nowhere safe. They are long gone in the empty recycle bin of doom. No, no. I do have my old videos still, so like videos that I did when I first did YouTube. I still, even though those… I think I made those private on YouTube so no one could see them, I still have the original files... on my computer, on my external hard drive somewhere. I think I still have those around… I'm not sure why, but I know I still have them. [Laughs] I don't think that I would sit and watch them because it's too embarrassing. [Laughs]

It's kind of like… I don't know, like, a little bomb place that you know is there if you dare ever look. But sometimes it's nice just to know it's there in case you do. I guess all of them I know I still have. I never uploaded to YouTube; it's something I filmed and it was, um, like a pet tag, so you, like, talk about all of the pets that you have and I did one with my house rabbit and it... I never uploaded it. And then I filmed one with my cat. Never uploaded it, but my cat passed away, so I kind of have that more for sentimental reasons because it's the only video I have of, like, me interacting with my cat because I never *filmed* me and my cat together. Like I have photos of her or just like a video of her just walking around, but I never had one of me, like, holding her or things like that. So sometimes it's quite nice to see, like, a video of me, like, holding her and things like that. [Getting slightly upset] Oh god I'm getting a bit emotional… [Laughs]

Yeah, because when I took it, I didn't think anything was going to happen to her; I was like, "She'll be around forever." Like I remember saying in the video, like, "Oh my god, she's really old and she has, like, this wrong with her and this wrong with her, but she's a trooper! She's had this wrong for years and she's A-OK!" And I never uploaded it because I didn't like the lighting or something in it and I think 'cause I never uploaded the one of Lola, I was like, "I don't know if I going to do this tag video. I'll just keep them because I've kept all my videos." And then when she did pass away, I was like, "Oh, yeah, I have that video!" Then, I'd watch it and be like… [Imitates sound of bawling]

R: Have you watched it since?

N: Yeah, yeah. A couple of times I think actually, yeah. 'Cause sometimes I'm… if I'm going through old files and, like, you come across it, I go, "I want to watch that!" Or sometimes I go, "I miss Charlotte!" and then I think, "Oh, I have a video!" and then you can go and watch it. But then, sometimes me doing my video kind of ruins the whole sentimental flashback [laughs] because I'm trying to be there and film a YouTube video and sometimes I'll just be like, "Shut up, it was just a cat!" [Laughs] But yeah, I have seen it a couple of times since.

R: Um… What else was I going to ask? Ah, you spoke about how you used Google Reader.

N: Yes.

R: And you'd started using Hello Cotton –

N: Blog Loving?

R: Yeah. And Google Reader it's has just been announced that it's retiring.

N: I know.

R: So have you changed yet?

N: I'm now 100% a Bloglovin' girl. I still have a HelloCotton account… because some people only use HelloCotton, so I don't want to be unavailable to people on certain platforms. Um… I'd rather just have an account so if someone did want to read my blog on HelloCotton, they can. But yeah, I think I did a blog post about, "Google Reader's going! Come join me on Bloglovin'!" and, like, encouraging people to follow me on Bloglovin' and I made an account and now that's the only way I read blogs now, just through Bloglovin'.

Like Google Reader – you can still use it, but I was trying to be stern with myself and be like, "No! Get used to the change now, 'cause at one point, Google Reader will never be around, so you might as well get used to Bloglovin' now" as opposed to carrying on using Google Reader and then in July, I'll be like, "Ah, fuck's sake!" So yeah, I now read all my blogs… I follow all my blogs through Bloglovin'.

R: Did you make that change…

N: Yeah.

R: … After the announcement?

N: Yes, yeah, 'cause I had a little heart attack. Then, I tried something else. I tried something called Feedly, I think it was called – like a Google Reader counterpart. I did not like it and I was like, "Oh my god, this looks hideous!"

And then, there was this whole thing about Google Friend Connect being, like, cut because of Google Reader, 'cause Google was trying to force everyone to use Google+, but no one wants to because it's terrible. So I was like, "Oh, well if people aren't following me through Google Friend Connect, then they won't see me on this Feedly thing anyway, so I might as well just do it all through Bloglovin'."

So then, I was like, "OK!" and I preferred the interface and it looked so much nicer anyway, so I was like, "I can use that to read my blog now", and I can read it on my phone as well.

R: So is Google Friend Connect definitely gone or is that kind of a…?

N: Well, it's a whole rumour thing…

R: Yeah.

N: …Because it's like the whole point of Google Friend Connects was it was a way to get the subscriptions on Google Reader as opposed to having to, like, manually add someone in. You just click Google Friend Connect "I want to follow you" and that you're a Google Reader kind of thing. So if they get rid of Google Reader, it makes no sense to have Google Friend Connect because it's not going to connect you to anything, so I can imagine it going.

And now if you go on Blogger and you look at the design, if you want to add the Google Friend Connect widget to your blog, it's not there anymore; it's completely gone. So unless

you already have it, you can't add. The only thing you can add is, like, "Join my Google+ circle" and "Join all my circles" and all that stuff, so it looks like Google is forcing people to try and use Google+ instead. But I don't want to… I refuse. [Laughs]

R: Did you try using it when it first came out?

N: I did when it first came out because when it first came out, I was doing an interactive media course so everyone was all like, "Ah, new media! This is cool! Everyone, quick – use Google+." So I have an account with them, but… It just doesn't make sense to me. I don't… understand the whole concept. I don't know why I'm wanting people in my circle or why I have different circles. I don't like the way they try to do the whole, like, group edit thing. So, like, you can have ten people on a conversation and type to each other, but then you can go and edit what other people have already said. And I remember people used it to edit what I had said, like some of the guys from uni just to put stupid things, and I was like, "Oh god, this is so frustrating!" So in the end, I just got annoyed with it and just deleted it. And I did like the interface and the layout; I just thought it was over my head.

R: Have you deleted the…?

N: The page?

R: The Google+ account?

N: No, it's still there. Don't ask me why – sentimental reasons. I haven't even looked at it. I don't even know what my password is. It's like my Hotmail – I don't use it; no one has that address anymore, but I still have it. I guess I kind of worry if I delete things, that I might need it... sometimes, so I have so many like…. I probably still have a Neopets account somewhere floating around. Um, yeah, I'm not really one for going back and deleting things, unless I know I'm really not going to need it or... I actually… I only ever really deleted something if I don't like it, so like I signed up to Feedly and then I'm like, "No, I hate it! Like, I want to get out of it." Anything else, I just stop using like MySpace or Hotmail or MSN or anything, Neopets. I kind of just... leave it. I don't ever unsubscribe or, like, leave the account, delete my account, or something like that.

R: Does it bother you there's a profile there that you-

N: I did when I came across my profile picture, because in some ways, I can't remember what I was doing, but this little picture of me popped up and I was like, "Where the fuck did that come from?!" And I clicked on it and it took me to me Google+ page. And I was like, "What? People can see that?! Ew!" So I changed the picture then forgot about it. [Laughter] So there's no… Like, it's got my name, my date of birth… Like, I think that's all the stuff that's in there and a picture of me and my circles, whoever's still in them. But that's the only information I've got in there, so it only bothered me when I found a picture and I was like, "Ew! Change that." [Laughs]

R: What about Hotmail? Is there... I think you said before there's stuff on there that you'd like to keep.

N: Yeah, which is probably why I still have my account. Yeah.

R: I suppose you could forward them onto…

N: Yeah.

R: …Your current account, but…

N: It's almost like my external hard drive for email, if that makes sense?

R: Yeah.

N: Um, I know it's there all the time, but I like to look at it if I need to. Or if I want to find something or I just want to laugh at myself as per usual or remember that someone was actually nice to me. Um, I kind of go there and it's all... That's kind of my archive; nothing new goes there. Sometimes I'll go and check it because I'll get a lot of, like, spam, in the, like, subscriptions I've signed up to and things back in the day, but I'm too lazy to unsubscribe. Sometimes I just go in there just to clean that all out because I don't want those floating around, but that's about it.

R: And where's the stuff that's in there? Is it all organised in any way?

N: Um… I don't think it is… I used to be very organised in my emails, but I think… there's a couple of folders, but I think it's more for, like, important stuff. The bulk of my inbox is just old emails from boyfriends.

R: What kind of folders did you have, other than that?

N: Um, I think it was mainly just, like, important or if I was, like, applying for a job, I'd filter everything into that; just little things. I wasn't very folder-y with my Hotmail. With my main email now, my BT Yahoo one, I have seventy folders. I have a folder for everything. Like, I have a folder for, like, my credit cards. I have a folder for, um, like certain people I know. Um… or orders, shopping orders I made, the jobs that I've applied to, the… Like, if I was planning a holiday somewhere, I have a folder. Like, I have a folder for everything! I'm the folder queen! [Laughs] At work, there are folders in my email at work and it's all colour-coordinated and all that. It's ridiculous!

R: Is that something that you did straight away when you got the account?

N: Yeah, 'cause I found it overwhelmed me for having so many emails in one folder.

R: Yeah?

N: And I know you can search for stuff, but I always find the search I find to be really bad and it'd always drag up loads of emails I didn't want to look at, that weren't important to what I was looking for, so I'd always file them away so that I knew where it was. So if I wanted to search for it, I could as opposed to relying on the search field being able to find the email account.

R: With emails, are those the only two mail accounts you've had, the Hotmail and the BT Yahoo?

N: I have a Gmail one. Um… I have two Gmail ones from my blog, so I have my [blog name] one and then I have my old one when I very first started my blog; I still have that email account. So I have two Gmail accounts – one with BT, one with Hotmail, and my work one. I don't

think I have… I had an AOL one back in the day. Oh my god, AOL?! Part of me wishes that you could still keep AOL and look up... I remember when you have to, like, sign in and you got taken into this environment, and only anything you could do on the internet was in this little environment. Wow! Yeah so I had an AOL one but that's about it. Yeah, I think so.

R: Can you still get on the AOL one?

N: No. I think I remember getting an email from them being like, "We're closing this down" I was like "Awwh, okay." Um, yeah, I don't… I wouldn't even know what it is. No, I have absolutely no idea what it would be.

R: Did you take anything off there before they shut it down?

N: No, 'cause I don't think I could access it without being in the weird AOL world. Like, when you had to, like, load it up as a piece of software and log in, then it'd make that annoying connection thing and it's be like" You are now on AOL." Um, I think everything was stuck in that world, so no, I didn't think anything of it.

R: Can you remember when and why you got the AOL one and when you got the Hotmail one?

N: Um, I got Hotmail… I remember that story – I remember I got Hotmail because everyone at school when we were in year seven had Hotmail accounts, and I didn't, and the only internet access we had at home was on my dad's work computer, so if I got to use the internet, it was usually with my dad, like, watching over my shoulder and being like, "What are you doing?"

And I remember saying to him, "I want to open a Hotmail account!"

And he was like, "Oh, I'm not sure what this is and all this stuff…" And you know the whole terms and conditions thing that I'd just click through and say yes? He made me print it out and read it! And he wouldn't let me say yes until I read it, because he was like, "Well, you need to know what you're signing up to!" And I was like, "I don't care! I just want an email account," and he was like, "Well no, you need to know what you're doing," and I was like, "Fine!" So I remember reading through it. I can't remember what it said; I don't think I really read it. Um, yeah – that's how I created my first Hotmail account, because I think I had to create… Yes! You had to create it to use MSN.

R: Mm-hmm.

N: Because there was this thing on MSN going on at seven, everyone would be like, "Oh, be on MSN at seven o'clock and we'll chat!" and it's like, "Why? So we can all go home and talk on computers as opposed to, like, going to the park and talking to each other face-to-face?"

"Yeah, let's go home and talk on computers because that's so much cooler!" So I had to make a Hotmail account in order to use MSN, so that's why I was like, "Dad, can I have a Hotmail account?" Yeah, so I opened that up so I could have MSN and talk to all my friends on the computer instead of face-to-face because that was better.

R: Do you remember what the email address was?

N: Probably something ridiculously hideous and cringe-worthy and had sparkles and glitter and girlyness 9-4-3-2-1 all over it… something. It would've been bad. I know all my old emails

were just cringe-worthy. Yeah, you can always tell a sixteen-year-old girl or a fourteen-year-old girl by their email address. It's just... sprinkles or sparkles or something with loads of numbers after it.

R: And then you changed to the new email address?

N: Um… I can't… What was my Hotmail one? I think it was the same. I remember… Well, it can't have been when I was making my… adult other one, because my name is ____ and I remember being in six school and being like, "Oh, I have a new email!", something like that.

I didn't know what to come up with, so I was like, "What about _____?" and I was like, "Oh my god, that's so cool!" And because it was really hard to get a username that was unique… Everything was, like, a number following it, and I was like, "No, I just want something unique!" and like no one… Like, everything I use "_____" for because on any website that I go onto, like, "_____" doesn't exist because no one's stupid enough to be like, "I want to be _____."

Um, but I hated having numbers after everything, like adamjohnson942 or adamjohnson439, and things like that. I hated having all that, so I was like, "No, I'm going to be super unique and just have my independent one," so everything is pretty much "_____." [Laughs]

R: And then is that the one you were using at the moment?

N: Yes, that's my BT email, whatever it is. Like, everyone… A lot of people have their name now. I know that was always the things when we were applying to jobs and it was like, "You need to have a sensible email address." I always refused. I was like, "I don't want to be hired on my email address." And they were like, "But they won't take you seriously!" And I was like, "To be fair, I've got the job I got now off my email address. I've got work placements off my email address." I was like, "I guess for some people it does matter, but maybe that's if they have a bad email address and a bad CV." I like to think I had an OK CV [laughs], so that kind of hitched the fact that I had a really embarrassing email address. Sometimes, like, when you go into shops and stuff and they're like, "Oh, what's your email?" I'm like, "_____" and they kind of look at me and be like, "Seriously? You're one of those people?!" I'm like, "Yeah, it's OK."

But everyone has that and everything's attached to that, so I think now, like, if I was to change my email now, it'd just be so much hassle; I just stay with what it is because so many people know it.

R: Yeah.

N: So I wouldn't even know how to, like, transfer everyone and begin to tell everyone what my new email address is; I just wouldn't want to. It'd just be… That'd be far too much hassle. [Laughs]

R: So what sort of stuff do you use your email for at the moment?

N: Um, my personal one, it's everything, absolutely everything – talk to my mum, talk to my family, talk to friends, shopping online… um... setting up, like, my credit cards. Like, sorts of things like that, it would be in my _____ email. Um, practically everything—applying for jobs, like, "What's your contact email?" _____. Um… anything that I'd use an

email for, like, I went to Tiffany's to fix a necklace and they were like, "What's your email address?" I was like, "If anyone needs to contact me or speak to me by email, I can't give out my work one; I'll just give that one," so I use that for absolutely everything.

R: Do you tend to delete many emails on that one?

N: I used to not, but I have a folder at the top called "All", which is, like, all my personal emails, like from friends and family or anything like that. Um, I used to always just file them away in there and keep them. Unless it's something important, a link I think I need or something I need to refer back to, I now usually delete it… unless it's, like, really cute. Then I'm like, "Aww! I want to keep that. " but that doesn't really happen anymore. I used to be nicer; I don't like digital communication anymore. [Laughs]

R: Is there a reason why you've started deleting more stuff?

N: I think just because there's so many. And I'd look through and see, like, I had two hundred emails and I'm like, "I'm not going to sit here and re-read everything!" Um, it's more like a nostalgic thing now, like, I like knowing they're there, but I'm not going to honestly answer them anymore because I know I don't really read them. Um, and if I do, I do usually find them embarrassing and I don't want to find anything embarrassing from this day and age. [Laughs] Like I can laugh when it's funny years ago, but if I'm still doing it now, I'm like, "Oh god!" So, um, I don't react to them as much anymore, no.

R: How do you find emails you want to keep?

N: On BT, you can, like, star it. So if it's important, I put a star next to it, because if I need to find it, then I can find it easier, but that's about it. There was that thing with Gmail… [Gasps] It's one of those things which you don't think would ever happen. Yeah, I don't know—it's already happened. [Laughs] I guess... because I know you only get, like, a certain amount of space. So I guess if I started to, like, use up my limit, I'd start to be more kind of conscious and worried. But yeah, it's nothing I've ever… thought about doing. I wouldn't even know how to back them up.

R: Yeah.

N: Unless I just printed them out, but I don't do that. [Laughs] I know you can download Facebook.

R: Oh, can you?

N: Like your entire Facebook account and I'm like, "Whoa! I don't want to do that." [Laughs] Um, but I haven't heard about the Twitter one because I wondered about that, but people tweet such absolute nonsense and, like, some people have over, like, six hundred thousand tweets that they've sent. So to archive all that, I'm like, "Who's going to read through six hundred thousand tweets that they've made in the past year?!" Because that much cannot have happened in a year to warrant six hundred thousand tweets! So, yeah, I think Twitter is definitely not something I'd ever archive. [Laughs]

R: Yeah.

N: There's too much nonsense on there. You can't really say I just want these ones. Yeah, you have to take everything. When you just wake up and you're like, "Oh, I've just woken up", I don't want to re-read that ten years later! [Laughs]

R: Yeah [pause] Um, you said about… You've got your new SLR?

N: Yes.

R: Has that changed anything with blogging?

N: Um… It's just changed… Well, I changed, like, my set-up. I had a very rigged set-up— I could only ever take photos in this one area of my room. That's changed, because I've seen how I live here, so that's different. Um, it's not really… It's just changed, like, the quality of my pictures; it's not changed how I take them or how many I take or anything like that. That just means the overall quality that then appears on my blog is higher and that's means I'm a bit more kind of inventive when I take photos.

R: When you say it's changed the way you can take them. How has it changed that?

N: In terms of, like, lighting and stuff. Like before, one issue I always had to make sure of, like, back home, I had, like, massive windows on pretty much one wall. So I had lots of natural light, whereas when I was at uni, I had none, so taking pictures with my point and shoot was a lot harder. Whereas with digital SLRs because you can change the capture, you can affect how much light comes into the sensor, so you can photos when it's a lot darker, which means it's easier for me to take photos, and yet they're still look good; they don't look all dark and weird.

R: You said before you take loads of photos of the same thing?

N: Yeah. To make sure there's one I like! To make sure that I'm in focus. Um, because a lot of the time, I'm like, "Oh yeah, a good photo!" and I look at it on the laptop and it's completely blurry and I'm like, "Oh god, my eyes are bad!" Um… and not to sound silly, but I love pushing the shutter on my SLR. So, like, I'll have… I'll be focused on a product, I'm happy with everything, and I won't click it once, I'll click it three times. The photos are pretty much identical and when I go to edit them, I'm like, "I cannot see the difference," but it's a reassurance. I don't want to be taking photos and then get to my laptop and hate them all; I'd rather have too many so I can edit it down and be like, "Oh, OK, that's the one I really like!"

I like to think it's changed the way people look at my blog, so that people maybe think either I take it more professionally or I mean more business or something like that or I take more pride in it 'cause my photos are better. I like to think that they can come to my blog and know they'll be good pictures, so if they think, "I only like bloggers who take swatches," or "I only like bloggers who have clear photos," I'd like to think that I go into that kind of category. In that sense, I like to think it's kind of changed it, yeah.

R: You said last time that you didn't want to buy the camera and only use it for blogging. You wanted to make the most of…

N: Yeah, I do— I use it for blogging. [Laughs] I did a photography course because I was like, "I want to know how to use it, so I don't have it on, like, auto." I'd always have it on capture or I always change the settings so I know how to do that, so if the lighting's different or if I'm

trying to get a different type of shot, I know how to change it, um, which is what I wanted to make sure, and I got another lens at Christmas so I change my lenses.

But to be honest, I was never really into photography. Like, I'm not the kind of person that would go down the beach with a camera and take pictures, so for me, I kind of always knew my camera would just be for blogging. I don't mind that. I'm just glad that I don't rely just on the automatic settings and let the camera do all the work; I can actually use and ask my brain and make sure *I* know that I'm getting the photo I want.

R: Do you take it anywhere with you and take photos?

N: I like to think I would. Like, I'm going on holiday in May and I'd like to think I'd take my camera with me to take photos when I'm on holiday. But in terms of, like, holiday snaps, to me, my point and shoot is fine. Like I don't need some, like, insane quality of a palm tree that I've seen on holiday, just having the memory... Like, I don't have to do the white-light photos and standby when my photos are pretty much on my iPhone and I'm happy with those; I just like the fact that I can see them. Like, to me, I don't really get them printed or blown up and put on a canvas; I'm not going to need some high, like, insane quality. And I probably wouldn't want to lug it around, 'cause it's really heavy. Like, I take it out to blogging events and things like that, but that's the only time it ever really leaves the house. [Laughs]

R: Has your blogging routine changed at all?

N: Um… Well, I think when I last saw you, I was very much in my Sunday routine – I'd take all my photos on a Saturday, edit them all and upload them on a Sunday, and write all my blog posts on a Sunday.

But now, if I have… I don't whether it's I have more time at work or I'm more relaxed. I'm kind of more the boss and kind of do what I like, but now I blog while I'm at work, so now all my Sundays, I make sure my photos are sorted and all of my blog posts, but I don't write any of the texts. So when I get into work, whenever I have, like, a spare twenty minutes, I then usually write my blog post while I'm at work. Or if I don't get it done, I'll stay behind at lunchtime or something, like I'll just eat lunch at my desk and write my blog post there.

Um, so I do it more during the week as opposed to doing all on a Sunday, because I'm returning back from London a lot on Sundays or I have things to do or… I find my blog posts weren't as good because I was forcing myself to write them all on a Sunday and I just didn't want to, so now I kind of leave it until the day or, like, if I have time at work, I might write, like, two in advance or something like that. But I'm a lot less strict than I was when I was back in London.

R: It's interesting how a change in work changes your style.

N: Completely! And it's… as well, I find I take my pictures a lot more during the week now because... before, I used to only ever take them on a Saturday. Like, if I were to have seen something during the week and I wanted to blog about it that week, I couldn't – I had to wait until Saturday until I took all my photos. But now, because I just take photos on my, like, wardrobe… Well, not my wardrobe, but my cabinet thing… Like if I know… 'Cause a lot of the time, I'm not here on a Saturday or when I was working Saturdays, like, I'd only be able to take my photos on a Sunday and if the Sunday was really cloudy, I'd be stuck – I couldn't

take any of my photos, so I found I had to be a lot more, kind of like, inventive with my time and, like, set my alarm twenty minutes early and wake up and then take blog photos then. Um, because I know, like for example, I went to Boots on Saturday and… What else? What did I do yesterday? Oh, and I got my hair done last week and I took those photos, uploaded them, and kind of sorted them out and like this morning, I took photos for tomorrow... No, for Thursday and Friday.

So I'm kind of like... I'm more flexible now. I'm not just like, "I have to blog on this day! I have to take photos this day!" I do like doing it on a weekend when I can because I have more time, but more so now, I find myself taking photos before I go to work.

R: Is that…?

N: I think it was the fact that I lost my Saturdays because of work. Um, because I was back in London. So, say I went to London on a Friday evening from work, I wasn't back till Sunday evening, which meant I had no daylight in my room, on the weekend. And I didn't want to take photos back in London because I didn't want to change my set-up. Like, I just take it off the top of my cabinet, which is white, but I don't have a white cabinet back home. So if I were to take my photos back home, they would visibly be different and I quite like keeping them uniform because I don't want any sudden issues like a bright, pink background when none of my photos have that. I like to try to keep them all quite clean and quite minimalist in that sense, so I wouldn't allow myself to take photos of something when I was London. So I just simply didn't have the time, so I had to start making the time in the mornings.

But when it's summer that all goes out the window because I can come home and blog, because it's bright till, like, seven. So I can blog whenever! Like, this is the thing – when it starts getting summer, you'll see bloggers and You Tubers be like, "I can blog and film videos whenever I want! This is amazing!" Like before, you had to, like, make sure you were up at the crack of dawn for the two hours of light when it was sunshine-y or something like that. But in the summer, everyone becomes a lot more, kind of carefree, and they'll film at seven o'clock at night because it'll still be light outside, so people become a lot happier in that sense – you don't have to be as rigid; you don't have to try and only do it when it's light because it's light for so much longer.

R: Is there a difference in the number of posts in the summer?

N: Yes! You always get the winter complainers. So every winter, always… Not always the same people, but you'll always be like, "Sorry! I didn't have time to blog because when I came around to blogging, the light had gone so I couldn't take photos." Or people, like YouTube, will be like, "Well, I came to film, but it was all dark and that's why I couldn't film." But a lot of You Tubers now use studio lights, so they have, like, professional set-ups, so whether it's light or dark, it doesn't matter; they film whatsoever. But I think natural light always looks better, so I'd be interested to see whether they opt to use natural light when it's summer or still use their studio lights. But also what it means for them is they can film videos around the clock; they don't need to rely on natural light in the winter. They can just put on the studio lights and put on the camera and film.

R: Is that professional bloggers that –

N: Yeah, like people who do it for a living.

R: Yeah.

N: Say you're like… who are really, like, into YouTube videos. I don't know whether they use studio lights for, like, their blog pictures. Um, from the photos I see, I don't think they do because they're not yellow at all. But in some videos, you can tell when obviously if they send their video up to the minutes or not, you'll be like, "OK, you're using studio cameras, studio lights, because it's really bright and obviously at the moment it's not bright and nice." So yeah, you can… kind of tell.

R: Um… last time you talked a bit about kind of monitoring stats on your blog.

N: Yes.

R: And also about revenue from advertising. I was wondering if you've been tracking that at all.

N: Yeah. Um, I have, like, a notebook where what I do is count out all my blog posts. So I've been doing it since May last year and I write every blog post that I do and it's kind of like a plan for me, so I'll write the dates, like, three weeks in advance and then I can plan when I want to write posts. So I know what posts are coming up and I know what I'm going to be talking about and when I take photos and things like that; make sure I have them. And then, what I do is every morning, I check Google Analytics and I write down, like, what my stats were for the day before. Then, I can see whether it goes up or down and what's been popular, what's not, things like that.

R: Is it going up, the longer you do it?

N: It did. It's weird – it went up, pretty much until I moved to WordPress. So the whole thing of, like, "More SEO, more hits!" all clearly went downhill. It took about two, three weeks after the move to WordPress and then everything just dropped, like really significantly. I don't whether it's because I was on WordPress. I don't whether my blogs just got boring. I don't whether people have just… Like, I remember the Olympics last year, everyone's stats went down because everyone was watching the Olympics, not reading blog posts, so I don't know whether that happened, but it was steadily getting higher and higher until I moved to WordPress. Then after that, it just kind of bombed. They're all kind of the same kind of, like, staple. They're the same kind of stats every day, but they're not what I used to receive like last year, no. It's such a shame. [Laughs]

R: How do you feel when you see a drop in readers?

N: It's annoying because you wonder why. Like part of me is just hoping that a whole new design will help things out. But I also think it's because, they're probably not, but being in Bournemouth, I'm very away from the whole blogger thing.

R: Yeah.

N: I don't go to events because I can't. I don't see bloggers very often. Like, if you're always hanging out with bloggers, bloggers will always think of you. If they're going to recommend someone, they'll think of you if they're going to link to your post or read your blog. Like, I don't think any of the big bloggers read my blog 'cause I don't think they really know about it because they're in their own little London world and I'm on the outskirts. It's trying to get

them to think about me as a nearby possibility, so I don't whether it's the fact that I've fallen "out the loop" in a sense. 'Cause I remember when I used to work for quite a big blog, I can see where they'd mention me on a blog or a YouTube, like my stats would go through the roof. Instantly that day, they'd like triple 'cause you mention me. Mentions from other bloggers are a really big thing and I don't think I've been mentioned in quite a while, so I'm wondering if that has something to do with it as well.

I mean, sometimes, like… especially more so recently, you are kind of like the, "Why do you do this? Why do I blog? And what's the point if no one's reading it?" But I don't… It's not my business; I don't blog for people to read it, if that makes sense. It's more of a hobby, so… It's annoying, 'cause obviously, everyone wants high stats and everyone wants loads of people to read their blog, but it's not the end of the world that it's gone down and it just encourages me to be a bit more inventive, try to come up with new ideas and, like, then you can see if it starts to pay off because the stats will start going up.

R: Everyone wants higher stats?

N: 'Cause you make more money, I think. Yeah, 'cause you get paid a pound every time someone comes to your website and looks at an ad there. If that happens a hundred times, you get a hundred pounds. If it happens two thousand times, you get two thousand pounds and that kind of thing. I think a lot of it has to do with money and the higher the stats, the more noticeability you get, the more… the bigger PRs will notice you, the better events you'll get invited to, the better freebies you'll get. Like, highest stats… kind of… not that it's the end-of all blogging; that's wrong. But more people who read it, you're better in a sense. You're more respected in a sense, so people want to use you because you have high stats; they don't want to use someone who doesn't have high stats.

Since January, like this year, I think this is the year, the be-all and end-all of blogging on my end, I think, and everyone I used to read, like, so many people have gone professional full-time bloggers. So many people have given up their jobs and all they do is blog. Like, all the bloggers I used to read last year, like over half of them have now, and it's kind of like you're a professional blogger or you're not.

Like, it's very… Everyone used to just be a blogger, but now it's like professional or not and the gap I feel is getting bigger and bigger because the people who professionally blog have so much time for it— they can come up with cool content, new ideas, multiple posts a day, videos; they can do everything because that's all they do, whereas it's harder for someone like me... Like, I know a lot of people who have full-time jobs and can't even post six times a week. I'm still very proud of the fact that I can do that, but my content might not be as interesting or as innovative or as exciting or it might not change as much 'cause I don't have the time to spend to be like, "Hmm, what should I do with my blog today?" I'm just kind of like, "Ooh, blog post!" and kind of get it done as opposed to "How will this help my company?" or something like that.

I think the difference between those two is really becoming apparent. And I think it'll be a lot harder for people like me soon. [Laughs]

R: I can imagine it's quite hard not to get as swept up as in…

N: Oh, yeah, completely. Oh, yeah. Everyone's like, "Don't compete!" and it's like, "Yeah, but you want to be the big blogger who has loads of stats!"

R: Yeah.

N: You see them do something, you think, "Oh, maybe I should do that!" Kind of the whole WordPress thing when everyone moved to WordPress and I was like, "Hmm, maybe if I move to WordPress…" It's hard not to, because when you see people doing the same thing as you but better, you're kind of like, "Why can't mine be better?" I think it's impossible not to be competitive and especially when you see people at twenty-one be like, "I'm quitting my day job to do this." You're like, "That would be quite nice."

I love my job to pieces and I still do it because I don't want to be a beauty writer for the rest of my life. Like, being a beauty writer is not my dream. These people will until they get picked up or something and then come write for them. So for them it's awesome, but… Yeah, sometimes, you… Like, all they do is wake up, write blog posts, maybe go to a PR event, go out for lunch with a blogger, go home, that's it – day job's done. That would be kind of cool. [Laughs]

So yeah, you're bound to get a little bit jealous but it's… you want to know almost what their secret is, how they did it, why their blog is suddenly bigger than yours or things like that, or why it's more successful, why are people reading it? Like, if you are in the same kid of industry as them, I think you're kind of bound to judge yourself against them and compare. Sometimes, like Google Friend Connect, like you might see someone who started blogging a year last than you and they suddenly have more Google Friend Connect people than you. And you're like, "Oh! Well, I've been blogging longer. Why don't I have more? Why is he suddenly more popular?" Like the, you start getting more heads up about it and then you're like, "Hold on! I'm not blogging for the numbers!" But it does make you wonder because... or maybe you've, like, a new blogger who's been blogging for six months suddenly has an article in Grazia and her blogger gets mentioned and you're like, "Oh, why didn't Grazia know that I'm around when I've been blogging for three years and she's been blogging for six months?!" So, sometimes, you do kind of wonder and it's... Yeah, it's hard not to get swept up in it at times.

R: Is there any blog posts that you do more for yourself rather than to get…?

N: No. [Laughs] Ultimately, I think I do them all for myself because I find it very hard to write for someone else. Like, I wouldn't know what to say. Like if I was doing a blog post just for readers, I don't, I wouldn't know because there's so much in beauty, like you can't just say the magic word. You can't just be like, "Ooh, Revlon!" or something and everyone will flock to you. I think it's a lot more complicated than that, so I don't think I would be able to possibly just write a blog post for someone else. And I'd think it come across… because my blog posts wouldn't sound like me and I think it'd be really boring to read. Like, some of them I still find that I read back and I go, "Oh, that's boring!" 'cause my heart's not in it and if my heart's not in it, you can see it all over the blog post, 'cause I'm usually quite, like, happy and chatty and chirpy and if I'm just like regurgitating a press release then you can see it straight away, it just doesn't work at all.

R: Have you ever kind of done that, where you've written a blog post and look back and think…?

N: Oh, all the time. I used to go through and make posts that were published to drafts. I wouldn't delete them, but I would remove them from the internet, in a sense, because I would be like, "My god, that's embarrassing!" and I don't want anyone… 'Cause, like, as your photography gets better, I don't want someone to see my bad picture. As my writing gets better, I don't people to see my bad writing. So you're kind of self-editing because you want to portray yourself as this blogger who's always been amazing. Like, I sometimes with the old photos and things, look back and be like, "Ha! That's what I use to look and act like!" I know it sounds a bit silly, but I don't want someone else to see that 'cause I just want them to see the beautifully, lovely, edited, pretty version not the "I took pictures in the dark with an iPhone." [Laughs]

R: Have you found that since you've started using the SLR? Is there, like, a difference between them?

N: Completely! Like, even when I start using my point and shoot, I found a massive difference. Um, like, even when I learned how to resize the photos to look bigger on my blog posts because I use to take them on my iPhone with just loads of crap in the background and it would just be terrible. So I think my point and shoot was my biggest change and when I changed the sizing of my pictures, because they use to just be tiny little square iPhone pictures, so I think that was the difference. With my SLR, not so much because I was always more careful with my pictures before I go it. The only thing that's really changed is my set-up and that's the main thing.

R: Before you said you would only ever blog from a computer not your phone.

N: Yeah.

R: Or, like, a tablet or…

N: Yeah.

R: Anything like that. Is that still the same?

N: Yeah, still do. Yeah. I think on my iPad I might, but I'm never really on the go. I work, like, around the corner so I get in the car and two minutes later I'm at work, like I'm not on the train for forty minutes so I don't have time. Like, if I want to blog, there's pretty much always a computer or a laptop in front of me I'll blog on; I'm never really away from it or have a need to.

R: Yeah. Have you ever thought about getting an iPad or anything like that?

N: Yes, I do want an iPad Mini. But I don't need it if I'm not living in London, I'm telling myself, because I'm either at work, I have a computer or I'm at home, I have my laptop. If I'm on the go, I'm not really… I usually have my phone, like everything... I'm saying to myself when I move back to London and start commuting, then I'll get one 'cause then I'll actually have more of a use and time to use one whereas now I wouldn't have time to use one.

R: Yeah.

N: But I do really want one. [Laughs]

R: In the last interview, you talked about you had, like, a wish list of albums that you wanted to buy.

N: In terms of like what?

R: Like different kinds of music.

N: I still have that.

R: Is that kind of like an actual wish list or a…?

N: Yeah, there's always this thing that I say if I get, like, an infinite amount of money or win the lottery, I'm going to go to, like, HMV – although I don't know if I can anymore – they're closing down; that breaks my heart. And like, rebuy all the albums I once downloaded, so just to have them kind of thing. Not like everything, but like from my favourite artist, if I downloaded their music either illegally off of the iTunes. If I had the money, I would go and, like, buy it as a CD.

R: Yeah?

N: So I'd feel good.

R: Have you got, like, an actual list that you've written down or stored it?

N: It's more like a mental list.

R: Yeah.

N: But my list is, in a way, kind of my iTunes as well.

R: Mm-hmm.

N: Because if I have it on iTunes and then I don't have it on CD, that would be the kind of things that I would want to go out and buy.

R: Have you ever use, like, a wish list? You know, like Amazon and stuff like that?

N: At HMV, I did, but then it just encouraged me to spend money. And then I'd always get emails that'd be like, "tunes in your wish list are now reduced to sell!" I'll be like, "OK! I'll buy that!" I was like, "OK, this isn't good." Um, I always have, like, a mental note. Like, I have like… a thousand of wish lists on my phone. I can go to America, so I have beauty products that I want to buy. I have, like, my dream wish lists, which I think I have, like, an iPad on it. So I have lots of lists because I can buy it and I can be quite fickle so I kind of have to write down what I want to buy because I'll find in two weeks later, I'll be like, "I don't want it anymore!" I've got to save myself money as opposed to driving out and buying it and then I'll be like, "I don't really need that." So I do keep a lot of lists in that sense.

R: Is that kind of list on your Notes in Apple?

N: Yeah, it's on Notes or I have it on, like a Word document.

R: Yeah?

N: On my laptop, yeah.

R: Do you keep all of those, like do you, you know, save the list for like a holiday?

N: I delete things once I've bought them. But if I haven't bought them, then I'd probably still keep it, just to keep the option open. [Laughs] Like, there's a thing in my Excel. I have a spreadsheet of all my money and I have, like, a savings tab of all my savings that I'm trying to save for, and I have my wish list there. And when I buy things, I write "bought" next to them so I know what I bought, because then I know where all my money is going. So then I can kind of make a mental note like, "Look, I bought that!" and "I kind of didn't want to buy that, so don't buy that in the future." Little things like that.

R: Yeah.

N: When I finally do it.

R: Um… Oh! Have you tried, like, Vimeo or… Sorry. Vine?

N: Um, no, no. I've kind of been really stubborn about it. Loads of people signed up to it but I don't see the point, because it's.. Have you heard of this thing, Keek? Keek is like the celebrity version of Vine. So I know all the kind… I thought it was like a Kardashian only thing because it started with a "K", but I was like, "Oh, Keek!" A lot of, like, the big You Tubers have a Keek account, not a Vine account. So I know when Vine started, I was just like, "Is this a rip off of Keek?! I don't want to join Vine if it's not going to be the popular platform." So I never joined it.

R: Yeah?

N: And now I see a lot of people moving to Keek instead. I don't know whether they get paid to be on there or what it is, but a lot of people are on it and I'm still a bit like… Like, sometimes if someone links to it on Twitter, I'll click on it and look through all the most recent Keeks. But I don't really get much enjoyment out of that thirty-second video. I'm just kind of like, "What the hell can you talk about?!" I don't see the point. Like, you were just showing a picture that's moving, kind of thing. Like I don't think it's long enough to have any actual kind of purpose.

R: Is it… How can it be like a celebrity only….? Is it like invite-only or something?

N: 'Cause I know, like, all the Kardashians have, like, a Keek account, so I don't know whether it's like… 'Cause it was a whole thing, like Twitter was giving you an insight into celebrity's minds, so it's like Keek gives you a thirty-second insight into their lives.

R: Mm-hmm.

N: That you can physical see what they're doing as opposed to being like, "I'm on a photo shoot!", you'll see a thirty-second clip of the photo shoot. So maybe it's just that extra endpoint so you can see how they're living, what they're doing, what they have. It's not just picture— you actually get, like a thirty-second clip. And sometimes, they, like, speak to you. [Laughs] Some of them; not real people. [Laughs] Um, but they might say, "Hello," or "Thank you", so sometimes it's more to get kind of, like, sentiments across than just an text or just a picture. They'll actually make a video being like, "Oh my god, I love you guys!" or something like that, very cringe-worthy but yeah. People aren't really that interesting. [Laughs] You think they are. You're like, "Oh my god, I follow them on Twitter!" and then you'll be like, "They're so dull!" [Laughs]

References

Ahuvia, A.C. (2005) Beyond the Extended Self: Loved Objects and Consumers' Identity Narratives. *Journal of Consumer Research*, 32(1), 171–184.

Akhtar, S. (2005) *Objects of Our desire: Exploring Our Intimate Connections with the Things Around Us.* New York: Harmony Books.

Amazon (2014) *Amazon Kindle Store Terms of Use*. Available from: http://www.amazon.co.uk/gp/help/customer/display.html?nodeId=201014950 [Accessed 22 September 2014].

Apple (2014) *iTunes Terms and Conditions.* Available from: http://www.apple.com/legal/internet-services/itunes/us/terms.html [Accessed 17 September 2014]

Arnould, E.J. and Thompson, C.J. (2005) Consumer Culture Theory (CCT): Twenty Years of Research. *Journal of Consumer Research,* 31(4), 868–882.

Arsel, Z. and Bean, J. (2013) Taste Regimes and Market-Mediated Practice. *Journal of Consumer Research*, 39(5), 899–917.

Arsel, Z. and Thompson, C. (2011) Demythologizing Consumption Practices: How Consumers Protect their Field-Dependent Capital from Devaluing Marketplace Myths. *Journal of Consumer Research*, 37, 791–806.

Askegaard, S. and Linnet, J.T. (2011) Towards an Epistemology of Consumer Culture Theory: Phenomenology and the Context of Context. *Marketing Theory*, 11(4), 381–404.

Bajde, D. (2013) Consumer culture theory (re)visits actor-network theory: Flattening consumption studies. *Marketing Theory*, 13(2), 227–242.

Bales, E. and Lindley, S. (2013) Supporting a sense of connectedness: Meaningful things in the lives of new university students IN: *Proceedings of the 2013 ACM conference on Computer Supported Cooperative Work (CSCW 2013)*. New York: ACM Press, 1137–1146.

Bardhi, F. (2003) Thrill of the Hunt: Thrift Shopping for Pleasure IN: Keller, P.A. and Rook, D.W. (eds.) *NA Advances in Consumer Research Volume 30*. Valdosta, GA: Association for Consumer Research, 375–376.

Bardhi F. and Arnould, E.J. (2005) Thrift Shopping: Combining Utilitarian Thrift and Hedonic Treat Benefits. *Journal of Consumer Behaviour*, 4(4), 1–11.

Bardhi, F. and Eckhardt, G.M. (2012) Access-Based Consumption: The Case of Car Sharing. *Journal of Consumer Research*, 39(4), 881–898.

Bardhi, F., Eckhardt, G.M. and Arnould, E.J. (2012) Liquid Relationship to Possessions. *Journal of Consumer Research*, 39(3), 510–529.

Belk, R.W. (1988) Possessions and the Extended Self. *Journal of Consumer Research*, 15(2), 139–168.

Belk, R.W. (1991) Possessions and the Sense of Past. IN: Belk, R.W. (ed.) *Highways and Buyways: Naturalistic Research From the Consumer Behavior Odyssey.* Provo: Association for Consumer Research, 114–130.

Belk, R.W. (1991b) The Ineluctable Mysteries of Possessions. *Journal of Social Behavior and Personality*, 6(6), 17–55.

Belk R.W. (1982) Acquiring, Possessing, and Collecting: Fundamental Processes in Consumer Behavior IN: Bush, R.F. and Hunt, S.D. (eds.) *Marketing Theory: Philosophy of Science Perspectives*. Chicago: American Marketing Association, 185–190.

Belk, R.W. (1992) Moving Possessions: An Analysis Based on Personal Documents from the 1847–1869 Mormon Migration. *Journal of Consumer Research*, 19(3), 339–361.

Belk, R.W. (1995a) Studies in the New Consumer Behaviour IN: Miller, D. (ed.) *Acknowledging Consumption: A Review of New Studies*. London: Routledge, 53–94.

Belk, R.W. (1995b) *Collecting in a Consumer Society*. New York: Routledge.

Belk, R.W. (2000) Are we what we own? IN: Benson, A.L. (ed.) *I Shop, Therefore I Am: Compulsive Buying and the Search for Self.* Maryland, USA: Rowman and Littlefield Publishers, 76–104.

Belk, R.W. (2007), Why Not Share Rather than Own? *Annals of the American Academy of Political and Social Science*, 611 (May), 126–140.

Belk, R.W. (2010) Sharing. *Journal of Consumer Research*, 36(5), 715–34.

Belk, R.W. (2013) Extended Self in a Digital World. *Journal of Consumer Research,* 40(3), 477–500.

Belk, R.W. (2014a) You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67(8), 1595–1600.

Belk, R.W. (2014b) Ownership and Collecting IN: Frost, R.O. and Steketee, G. (eds.) *The Oxford Handbook of Hoarding and Acquiring*. Oxford: Oxford University Press, 33–42.

Belk, R.W. (2014c) Sharing Versus Pseudo-Sharing in Web 2.0. *Anthropologist*, 18(1), 7–23.

Belk, R.W., Fischer, E. and Kozinets, R.V. (2014). *Qualitative Consumer and Marketing Research*. London: Sage.

Belk, R.W., Ger, G. and Askegaard, S. (2003) The Fire of Desire: A Multi-Site Inquiry into Consumer Passion. *Journal of Consumer Research,* 30(3), 326–352.

Belk, R.W., Seo, J.Y. and Li, E. (2007). Dirty Little Secret: Home Chaos and Professional Organizers. *Consumption, Markets and Culture*, 10(2), 133–140.

Belk, R.W., Sherry Jr., J.F., and Wallendorf, M. (1988) A Naturalistic Inquiry Into Buyer and Seller Behavior at a Swap Meet. *Journal of Consumer Research*, 14(4), 449–70.

Belk, R.W., Wallendorf, M. and Sherry Jr., J.F. (1989) The Sacred and the Profane in Consumer Behavior: Theodicy on the Odyssey. *The Journal of Consumer Research*, 16(1), 1–38.

Belk, R.W., Wallendorf, M., Sherry, J.F. Jr. and Holbrook, M.B. (1991) Collecting in a consumer culture. IN: Belk, R.W. (ed.) *Highways and Buyways: Naturalistic Research from the Consumer Behavior Odyssey*. Provo: Association for Consumer Research, 178–215.

Bentham, J. (1931/1894) *The Theory of Legislation* (edited by C. K. Ogden). London: Routledge & Kegan Paul.

Bernard, L.L. (1924) *Instinct: A Study in Social Psychology*. New York: Holt.

Bettany, S. and Kerrane, B. (2012) The (post-human) consumer, the (post-avian) chicken and the (postobject) Eglu. *European Journal of Marketing*, 45(11/12), 1746–1756.

Blizzard (2012) *World of Warcraft End User Licence Agreement*. Available from: http://us.blizzard.com/en-us/company/legal/wow_eula.html [Accessed 30 August 2014].

Bloor, D. (1999) Anti-Latour. *Stud. Hist. Phil. Sci.*, 30(1), 81–112.

Bonsu, S. K. and Darmody, A. (2008) Co-Creating Second Life: Firm-Consumer Co-operation in Contemporary Economy. *Journal of Macromarketing*, 28(4), 355–368.

Bourdieu, P. (1984) *Distinction. The Social Critique of the Judgement of Taste*. London: Routledge.

Brown, B. And Sellen, A. (2006) Sharing and Listening to Music IN: O'Hara, K. and Brown, B. (eds.) *Consuming music together: Social and collaborative aspects of music*. Netherlands: Springer, 37–56.

Campbell, C. (1987) *The Romantic Ethic and the Spirit of Modern Consumerism.* Oxford: Blackwell.

Campbell, C. (2005) The Craft Consumer: Culture, Craft and Consumption in a Postmodern Society. *Journal of Consumer Culture*, 5(1), 23–42.

Canniford, R. and Shankar, A. (2013) Purifying Practices: How Consumers Assemble Romantic Experiences of Nature. *Journal of Consumer Research*, 39(5), 1051–1069.

Cappellini, B. and Parsons, E. (2012) Sharing the Meal: Food Consumption and Family Identity IN: Belk, R.W., Askegaard, S. and Scott, L. *Research in Consumer Behaviour Volume 13*. Bingley: Emerald, 109–128.

Castronova, E. (2005) *Synthetic Worlds: The Business and Culture of Online Games*. London: University of Chicago Press.

Castronova, E. (2006) Virtual worlds: a first-hand account of market and society on the Cyberian frontier IN: Salen K. and Zimmerman, E. (eds.) *The Game Design Reader: A Rules of Play Anthology*. Cambridge, MA: MIT Press, pp. 814–863.

Chee, F. M., Taylor, N. T. and de Castell, S. (2012) Re-Mediating Research Ethics End-User License Agreements in Online Games. *Bulletin of Science Technology Society December*, 32(6), 497–506.

Chen, Y. (2009) Possession and Access: Consumer Desires and Value Perceptions Regarding Contemporary Art Collection and Exhibit Visits. *Journal of Consumer Research*, 35(6), 925–940.

Collins, H. and Yearley, S. (1992) Epistemological Chicken IN: Pickering, A. (ed.) *Science as Practice and Culture.* Chicago: University of Chicago Press, 301–326.

Cooks, R. (2014) Spotify streams past rivals as it doubles subscriber base to 10m. *Financial Times,* 21 May. Available from: http://www.ft.com/cms/s/0/a9fa8fea-e0cf-11e3-875f-00144feabdc0.html#axzz34jHUVpci [Accessed 25 May 2014].

Csikszentmihalyi, M. and Rochberg-Halton, E. (1981) *The Meaning of Things: Domestic Symbols and the Self.* Cambridge: Cambridge University Press.

Curasi, C.F., Price, L.L. and Arnould, E.J. (2004) How Individuals' Cherished Posessions Become Families' Inalienable Wealth. *Journal of Consumer Research*, 31(3), 609–622.

Cwerner, S. B. and Metcalfe, A. (2003) Storage and Clutter: Discourses and Practices of Order in the Domestic World. *Journal of Design History*, 16(3), 229–239.

Debatin, B., Lovejoy, J. P., Horn, A. K., and Hughes, B. N. (2009) Facebook and online privacy: Attitudes, behaviors, and unintended consequences. *Journal of Computer-Mediated Communication*, *15*, 83–108.

Denegri-Knott, J. and Molesworth, M. (2009) 'I'll sell this and I'll buy them that': ebay and the management of possessions as stock. *Journal of Consumer Behaviour,* 8(6), 305–315.

Denegri-Knott, J. and Molesworth, M. (2010) Concepts and Practices of Digital Virtual Consumption. *Consumption, Markets & Culture*, 13(2), 109–132.

Denegri-Knott, J., Watkins, R. and Wood, J. (2012) Transforming Digital Virtual Goods into Meaningful Possessions IN Molesworth, M. and Denegri-Knott, J. (eds.), *Digital Virtual Consumption.* Oxford: Routledge, 76–91.

Dion, D., Sabri, O. and Guillard, V. (2014) Home Sweet Messy Home: Managing Symbolic Pollution. *Journal of Consumer Research*, 41(3), 565–589

Dittmar, H. (1991) Meanings of material possessions as reflections of identity: Gender and social-material position in society. *Journal of Social Behavior and Personality,* 6(6), 165–186.

Dittmar, H. (1992) *Material Possessions and Identity*. PhD Thesis, University of Sussex.

Douglas, M. (1967) *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*. London: Routledge and Kegan Paul.

Douglas, M. and Isherwood, B. (1970) *The World of Goods: Towards an Anthropology of Consumption,* 2nd ed. London: Routledge.

Drever, J. (1917) *Instinct in Man: A Contribution to the Psychology of Education.* Cambridge: Cambridge University Press.

Eckhardt, G.M. and Houston, M.J. (2001) To Own Your Grandfather's Spirit: the Nature of Possessions and Their Meaning in China IN: Tidwell, P.M. and Muller, T.E. (eds.) *Asia Pacific Advances in Consumer Research Volume 4.* Provo, UT: Association for Consumer Research, 251–257.

Ekbia, H.R. (2009) Digital artifacts as quasi-objects: Qualification, mediation, and materiality. *Journal of the American Society for Information Science and Technology*, 60(12), 2554–2566.

Ekerdt, D.J. (2009) Dispossession: The Tenacity of Things IN: Jones, I.R., Higgs, P and Ekerdt, D.J. (ed.) *Consumption and Generational Change: The Rise of Consumer Lifestyles*. New Jersey: Transaction Publishers, 63–78.

Epp, A.M. and Price, L.L. (2010) The Storied Life of Singularized Objects: Forces of Agency and Network Transformation. *Journal of Consumer Research*, 36(5), 820–837.

Etzioni, A. (1991) The Socioeconomics of Property. *Journal of Social Behavior and Personality*, 6(6), 465–468.

Facebook (2015) *Terms of Service*. Available from: https://www.facebook.com/legal/terms [Accessed 1 February 2015].

Faulkner, P., and Runde, J. (2011) The social, the material, and the ontology of non-material technological objects. Paper presented at 27th EGOS Colloquium, Gothenburg, 6–9 July.

Ferraro, R., Escalas, J., and Bettman, J. (2007) Attachment style, psychological security, and consumer response to special possession loss. IN: Fitzsimons, G. and Morowitz, V. (eds.) *NA - Advances in Consumer Research Volume 34.* Duluth, MN: Association for Consumer Research, 542–545.

Freeman, E.H. (2002) The Digital Millennium Copyright Act. *Information Systems Security*, 11(4), 4–8.

Fromm, E. (1976) *To Have or To Be.* New York: Harper & Row.

Furby, L. (1976) The socialization of possession and ownership among children in three cultural groups: Israeli kibbutz, Israeli city and American IN: Modgil, S. and Modgil, C. (eds.) *Piagetian research: compilation and commentary Vol 1*. Windsor, England: NFER Publishing, 95–127.

Furby, L. (1978a) Possession in humans: An exploratory study of its meaning and motivation. *Social Behaviour and Personality,* 6, 49–65.

Furby, L. (1978b). Possessions: Toward a theory of their meaning and function throughout the life cycle. IN: Baltes, P.B. (ed.) *Life Span Development and Behavior, Vol. 1*. New York: Academic Press, 297–336.

Furby, L. (1980) The Origins and Early Development of Possessive Behavior. *Political Psychology,* 2(1), 30–42.

Furby, L. (1991) Understanding the Psychology of Possession and Ownership: A Personal Memoir and an Appraisal of Our Progress. *Journal of Social Behaviour and Personality*, 6(6), 457–464.

Garrahan, M. (2014) Netflix Subsctibers Numbers Surge. *Financial Times*, 22 January. Available from: http://www.ft.com/cms/s/0/e4dde050-83b7-11e3-aa65-00144feab7de.html#axzz34jHUVpci [Accessed 30 January 2014].

Gauss, G. (2012) Property and Ownership. IN: Estlund D. (ed.) *Oxford Handbook of Political Philosophy*. Oxford: Oxford University Press, 93–112.

Giesler, M. (2006) Consumer Gift Systems, *Journal of Consumer Research*, 33(2), 283–290.

Giesler, M. (2008) Conflict and Compromise: Drama in Marketplace Evolution. *Journal of Consumer Research*, 34(6), 739–753.

Giesler, Markus (2012) How Doppelgänger Brand Images Influence the Market Creation Process: Longitudinal Insights from the Rise of Botox Cosmetic *Journal of Marketing*, 76(6), 55–68.

Goulding, C. (1999). Consumer research, interpretive paradigms and methodological ambiguities. *European Journal of Marketing*, 33(9), 859–873.

Grayson, K. and Schulman D. (2000) Indexicality and the Verification Function of Irreplaceable Possessions: A Semiotic Analysis. *Journal of Consumer Research*, 27(2), 17–30.

Gregson N. (2007) *Living with Things: Ridding, Accommodation, Dwelling*. Oxford: Sean Kingston Publishing.

Gregson, N. and Crewe, L. (2003) *Second Hand Cultures*. Oxford, UK: Berg.

Gregson, N., Metcalfe, A. and Crewe, L. (2009) Practices of object maintenance and repair: how consumers attend to consumer objects within the home. *Journal of Consumer Culture*, 9, 248–272.

Grey, T. (1980) The Disintegration of Property IN: Pennock, R.J. and Chapman, J.W. (eds.) *Property: Nomos XXII*. New York: New York University Press, 69–86.

Gross, R. and Acquisti, A. (2005) Information revelation and privacy in online social networks. IN: *Proceedings of the 2005 ACM Workshop on Privacy in the Electronic Society*. New York, NY: ACM, 71–80.

Hamari, J. and Lehdonvirta, V. (2010) Game Design as Marketing: How Game Mechanics Create Demand for Virtual Goods. *Int. Journal of Business Science and Applied Management*, 5 (1), 14–29.

Harman, G. (2009) *Price of Networks: Bruno Latour and Metaphysics*. Australia: re.press.

Hirsch, C., and Bloch, P. H. (2009) Interaction seeking in second life and implications for consumer behaviour IN: Wood, N.T. and Solomon, M.R. (eds.) *Virtual Social Identity and Consumer Behaviour*. New York, NY: M. E. Sharpe, 43–60.

Hirschman, E.C. (1994) Consumers and their Animal Companions. *Journal of Consumer Research,* 20(4), 616–632.

Hirschman, E.C., Ruvio, A. and Belk, R.W. (2012). Exploring space and place in marketing research: Excavating the garage. *Marketing Theory*, 12(4), 369–389.

Hogan, B. (2010) The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online. *Bulletin of Science, Technology & Society,* 30(6), 377–386.

Honoré, A.M. (1961) Ownership IN: Guest, A.G. (ed.) *Oxford Essays in Jurisprudence.* London: Oxford University Press, 107–47.

Hölzle, U. (2013). *A second spring of cleaning – Official Google Blog*. Available from: http://googleblog.blogspot.co.uk/2013/03/a-second-spring-of-cleaning.html#uds-search-results [Accessed 30 March 2013].

Huang, E. (2012). Online experiences and virtual goods purchase intention. Internet Research. 22(3), 252–274.

Instagram (2013) *Terms of Use*. Available from: https://help.instagram.com/478745558852511 [Accessed 15 October 2014].

Jenkins, R., Molesworth, M. and Scullion, R. (2014) The Messy Social Lives of Objects: Interpersonal Borrowing and the Ambiguity of Possession and Ownership. *Journal of Consumer Behaviour,* 13(2), 131–139.

Kallinikos, J. and Aaltonen, A.V. and Marton, A. (2013) The Ambivalent Ontology of Digital Artifacts. *MIS Quarterly: Management Information Systems*, 37(2), 357–370.

Kallinikos, J. and Mariátegui, J. (2011) Video as digital object: production and distribution of video content in the internet media ecosystem**.** *The Information Society*, 27(5), 281–294.

Kedzior, R. (2014) *How Digital Worlds Become Material.* PhD Thesis, Hanken School of Economics: Finland.

Kirk, D. and Banks, R. (2008) On the Design of Technology Heirlooms. IN: *Proceedings of the International Workshop on Social Interaction and Mundane Technologies* (SIMTech'08)

Kirk, D. and Sellen, A. (2010) On Human Remains, Values and Practice in the Home Archiving of Cherished Objects. *Transactions on Computer-Human Interaction*, 17(23), 1–43.

Kleine, S. S. and Baker, S. M. (2004) An integrative review of material possession attachment. *Academy of Marketing Science Review*, 1(1), 1–35.

Kleine, S.S., Kleine III, R.E. and Allen, C.T. (1995) How Is a Possession 'Me' or 'Not Me'? Characterizing Types and an Antecedent of Material Possession Attachment. *Journal of Consumer Research*, 22(3), 327–343.

Koiso-Kanttila, N. (2004) Digital Content Marketing: A Literature Synthesis. *Journal of Marketing Management*, 20(1–2), 45–65.

Kopytoff I. (1986) The cultural biography of things: commodification as a process IN: Appadurai, A. (ed.) *The Social Life of Things.* Cambridge: Cambridge University Press, 64–94.

Lastovicka, J. L. and Fernandez, K.V. (2005) Three Paths to Disposition: The Movement of Meaningful Possessions to Strangers. *Journal of Consumer Research*, 31(4), 813–832.

Lastovicka, L.J. and Sirianni, N.J. (2011) Truly, Madly, Deeply: Consumers in the Throes of Material Possession Love. *Journal of Consumer Research,* 38(2), 323–342.

Latour, B. (1987) *Science in Action: How to Follow Scientists and Engineers through Society.* Cambridge, MA: Harvard University Press.

Latour, B. (1988) *The Pasteurisation of France* (Translated by Alan Sheridan and John Law). USA: Harvard University Press.

Latour, B. (1992) Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts IN: Bijker, W.E. and Law, J. (eds.) *Shaping Technology/Building Society: Studies in Sociotechnical Change*. Cambridge, Massachusetts: MIT Press, 225–258.

Latour, B. (1993) *We Have Never Been Modern*. USA: Harvard University Press.

Latour, B. (2005) *Reassembling the Social: An Introduction to Actor–Network Theory*. Oxford, UK: Oxford University Press.

Latour, B. and Woolgar, S. (1979) *Laboratory Life: The Construction of Scientific Facts.* Princeton, New Jersey: Princeton University Press.

Law, J. (1992) Notes on the Theory of the Actor-Network: Ordering, Strategy and Heterogeneity. *Systems Practice,* 5, 379–393.

Law, J. (1994) *Organizing Modernity*. Oxford: Blackwell.

Law, J. (1999) After ANT: complexity, naming and topology. *The Sociological Review*, 47(1), 1–14.

Law, J. (2004) *After Method: Mess in Social Science Research*. Oxon: Routledge.

Law, J. (2008) Actor-network theory and material semiotics IN: Turner, B.S. (ed.) *The New Blackwell Companion to Social Theory*, 3rd Edition. Oxford: Blackwell, 141–158.

Law, J. and Urry, J. (2004). Enacting the Social. *Economy and Society*, 33(3), 390-410.

Lehdonvirta, V. (2009) Virtual item sales as a revenue model: identifying attributes that drive purchase decisions. *Electronic Commerce Research,* 9(1), 97–113.

Lehdonvirta, V. (2012) A history of the digitalization of consumer culture: From Amazon through Pirate Bay to Farmville IN: J. Denegri-Knott and Molesworth, M. (eds.) *Digital Virtual Consumption*. New York: Routledge, 11–28.

Lehdonvirta, V. and Castronova, E. (2014) *Virtual Economies: Design and Analysis*. London: MIT Press.

Lehdonvirta, V. and Virtanen, P. (2010) A New Frontier in Digital Content Policy: Case Studies in the Regulation of Virtual Goods and Artificial Scarcity. *Policy and Internet,* 2(3) 7–29.

Lehdonvirta, V., Wilska, T. and Johnson, M (2009) Virtual Consumerism: Case Habbo Hotel. *Information, Communication & Society*, 12(7), 1059–1079.

Lenhart, A. (2012) *Teens, Smartphones & Texting.* Washington: Pew Internet Research. Available from: http://www.pewinternet.org/files/old-media//Files/Reports/2012/PIP_Teens_Smartphones_and_Texting.pdf [Accessed 1st January 2015].

Leonardi, P.M. (2010). Digital materiality? How artefacts without matter, matter. *First Monday,* 15(6). Available from: http://firstmonday.org/article/view/3036/2567 [Accessed 30 November 2014]

Lessig, L. (1999) *Code: and Other Laws of Cyberspace*. New York: Basic Books.

Lessig, L. (2006). *Code 2.0. New York: Basic Books.* Available at: http://codev2.cc/ [Accessed 30 November 2014].

Levy, S.J. (1959) Symbols for Sale. *Harvard Business Review* (July-August), 117–124.

Lewis, M. and Brooks, J. (1978) Self, Other, and Fear: Infants' Reactions to People IN: Lewis, M. and Rosenbaum, L.A. (eds.) *The Origins of Fear.* New York: John Wiley, 165–194.

Locke, J. (1690) *Two Treatises of Government.* Oxford: Oxford University Press.

Macpherson, C.B. (1978) *Property: Mainstream and Critical Positions*. Oxford: Blackwell.

Maguadda, P. (2011) 'When materiality 'bites back': Digital music consumption practices in the age of dematerialisation. *Journal of Consumer Culture,* 11(1), 15–36.

Manley, L. and Holley, R.P. (2012) History of the Ebook: The Changing Face of Books. *Technical Services Quarterly,* 29(4), 292–311.

Marcoux, J. (2001) The Refurbishment of Memory IN: Miller (ed.) *Home Possessions: Material Culture Behind Closed Doors*. New York: Berg, 69–86.

Martin, D.M. and Schouten, J.W. (2014) Consumption-Driven Market Emergence. *Journal of Consumer Research*, 40(5), 855–870.

Marx, K. (1964; original 1848) *Communist Manifesto.* New York: Washington Square Press.

Maycroft, N. (2009) Not Moving Things Along: Hoarding, Clutter and Other Ambiguous Matter. *Journal of Consumer Behaviour*, 8(6), 354–364.

McAlexander, J.H. (1991) Divorce, the Disposition of the Relationship, and Everything IN: Holman, R.H. and Solomon, M.R. (eds.) *NA - Advances in Consumer Research Volume 18*. Provo, UT : Association for Consumer Research, 43–48.

McAlexander, J.H., Schouten, J.W. and Roberts, S.D. (1993) Consumer behavior and divorce IN: Costa, J.A. and Belk, R.W. (eds.) *Research in Consumer Behavior Volume 6*. Greenwich, CT: JAI Press, 55–84.

McClelland, D. (1951) *Personality*. New York: Holt, Rinehart, and Winston.

McCourt, T. (2005) Collecting Music in the Digital Realm. *Popular Music and Society*, 28(2), 249–52.

McCracken, G. (1986) Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods. *Journal of Consumer Research,* 13 (June), 71–84.

McCracken, G. (1988) *Culture and Consumption: New Approaches to the Symbolic Character of Consumer Goods and Activities.* Bloomington: Indiana University Press.

McDougall, L. (1908) *An Introduction to Social Psychology*. London: Methuen.

Martin, J. (2008) Consuming Code: Use-Value, Exchange-Value and the role of Virtual Goods in Second Life. *Journal of Virtual Worlds Research,* 1(2), 1–21.

Mehta, R. and Belk, R.W. (1991) Artifacts, Identity, and Transition: Favorite Possessions of Indians and Indian Immigrants to the United States. *Journal of Consumer Research*, 17(4), 398–411

Miller, D. (2008) *The Comfort of Things*. Cambridge: Polity Press.

Miller, D. (2010), *Stuff*. Cambridge: Polity.

Miller, C.C. and Stone, C., (2009) Virtual Goods Start Bringing Real Paydays. *The New York Times,* 16 November. Available from: http://www.nytimes.com/2009/11/07/technology/internet/07virtual.html?_r=0 [Accessed 5 November 2014].

Mintel (2014a) *Music and Video Purchasing – UK – August 2014*. London: Mintel International. Available from: http://reports.mintel.com/display/679745/ [Accessed 30 September 2014].

Mintel (2014b) *Books and e-books – UK – September 2014*. London: Mintel International. Available from: http://academic.mintel.com/display/679475/ [31 October 2014].

Mintel (2014c) *Videogames and Consoles – UK – November 2014*. London: Mintel International. Available from: http://reports.mintel.com/display/679582/ [Accessed 5 December 2014].

Moisander, J., Valtonen, A. and Hirsto, H. (2009a) Personal Interviews in Cultural Consumer Research – Post-structuralist Challenges. *Consumption, Markets and Culture*, 12(4), 329–48.

Moisander, J., Peñaloza, L. and Valtonen, A. (2009b) From CCT to CCC. Building Consumer Culture Community IN: Sherry Jr, J.F. and Fischer, E. (eds.) *Explorations in Consumer Culture Theory* . London: Routledge, 7–33.

Mol, A. (1999) Ontological politics: A word and some questions IN: Law, J. and Lassard, J. (eds.) *Actor Network Theory and After*. Malden, MA: Blackwell, 74–89.

Mol, A. (2010) Actor-Network Theory: sensitive terms and enduring tensions. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 50, 253–269.

Molesworth, M. and Denegri-Knott, J. (eds.) (2012) *Digital Virtual Consumption*. Oxford: Routledge.

Munzer, S. R. (1990) *A Theory of Property.* Cambridge: Cambridge University Press.

Myers, E. (1985) Phenomenological Analysis of the Importance of Special Possessions: An Exploratory Study IN: Hirschman, E.C. and Holbrook, M.B. (eds.) *NA Advances in Consumer Research Volume 12*. Provo, UT: Association for Consumer Research, 560–565.

Odom, W., Sellen, A., Harper, R., Thereska, E. (2012) Lost in Translation: Understanding the Possession of Digital Things in the Cloud. IN: *CHI '12 - Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, New York: ACM Press, 781–790.

Odom, W., Zimmerman, J. and Forlizzi, J. (2011) Teenagers and their Virtual Possessions: Design Opportunities and Issues IN: *CHI '11 - Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. New York: ACM, 1491–1500.

Odom, W., Zimmerman, J., Forlizzi, J. (2014) Placelessness, spacelessness, and formlessness: experiential qualities of virtual possessions. IN*: Proceedings of the 2014 conference on Designing interactive systems*, New York: ACM Press, 985–994.

Ofcom (2014) *The Communications Market Report.* UK: Ofcom. Available from: http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr14/2014_UK_CMR.pdf [Accessed 5 January 2015].

Oxford English Dictionary (2015) *Possession*. Available from: http://www.oxforddictionaries.com/definition/english/possession [Accessed 20 September 2014].

Ozanne, L. K. and Ballantine, P. W. (2010) Sharing as a form of anti-consumption? An examination of toy library users. *Journal of Consumer Behaviour*, 9(6), 485–498.

Parsons, L. (2008) Thompson's Rubbish Theory: Exploring the practices of value creation IN: Borghini, S., McGrath, M.A. and Otnes, C. (eds.) *European Advances in Consumer Research Volume 8.* Duluth, MN: Association for Consumer Research, 390–393.

Peitz, M. and Waelbroeck, P. (2006) Piracy of digital products: A critical review of the theoretical literature. *Information Economics and Policy,* 18(4), 449–476.

Petrelli, D. and Whittaker, S. (2010) Family Memories in the Home: Contrasting Physical and Digital Memories. *Personal and Ubiquitous Computing*, 14(2), 153–169.

Pierce, J.L., Kostova, T., and Dirks, K.T. (2003) The state of psychological ownership: Integrating and extending a century of research. *Review of General Psychology*, 7(1), 84–107.

Prahalad, C.K. and Ramaswamy, V. (2004) Co-Creation Experiences: The Next Practice in Value Creation. *Journal of Interactive Marketing* 18(3), 5–14.

Prelinger, E. (1959) Extension and Structure of the Self. *Journal of Psychology*, 47 (January), 13–23.

Price, L.L., Arnould, E.J. and Curasi, C.F. (2000) Older Consumers' Disposition of Special Possessions. *Journal of Consumer Research*, 27(2), 179–201.

Price, Linda, L. Arnould, E.J. and Moisio, R. (2006) Making Contexts Matter: Selecting research contexts for theoretical insights IN: Belk, R.W. (ed.) *Handbook of Qualitative Research Methods in Marketing*. Northampton: Elgar, 106–128.

Reckwitz, A. (2002) Toward a Theory of Social Practices. A Development in Culturalist Theorizing. *European Journal of Social Theory,* 5(2), 243–263.

Restivo, S. (2010) Bruno Latour: The Once and Future Philosopher. IN: Ritzer, G. and Stepinsky, J. (eds.) *The New Blackwell Companion to Major Social Theorists*. Boston: Blackwell, 520–540.

Richins, M.L. (1994a) Special Possessions and the Expression of Material Values. *Journal of Consumer Research*, 21(3), 522–533.

Richins, M.L. (1994b) Valuing Things: The Public and Private Meanings of Possessions. *Journal of Consumer Research*, 21(3), 504–521.

Rifkin, J. (2000) The Age of Access: The New Culture of Hypercapitalism Where All of Life Is a Paid for Experience. New York: Penguin.

Ritzer, G. and Jurgenson, N. (2010) Production, Consumption, Prosumption: The nature of capitalism in the age of the digital 'prosumer'. *Journal of Consumer Culture,* 10(1), 13–36.

Rook, D.W. (1985) The Ritual Dimension of Consumer Behaviour. *Journal of Consumer Research*, 12(3), 251–264.

Rowley, J. (2012) Conducting research interviews. *Management Research Review*, 35(3/4), 260–271.

Rudmin, F.W. (1988) Ownership as Interpersonal Dominance: A History and Three Studies of the Social Psychology of Property, PhD thesis, Queens University, Canada.

Rudmin, F.W. (1990) The economic psychology of Leon Litwinski (1887-1969) – A program of cognitive research on possession and property. *Journal of Economic Psychology,* 11, 307–339.

Rudmin, F.W. (1994) Gender differences in the semantics of ownership: A quantitative phenomenological survey study. *Journal of Economic Psychology*, 15, 487–510.

Sartre, J. (1943) *Being and Nothingness: A Phenomenological Essay on Ontology*. New York: Philosophical Library.

Scaraboto, D., Carter-Schneider, L. and Kedzior, R. (2013) At world's end: Exploring consumer-marketer tensions in the closure of adverworlds. *Journal of Marketing Management*, 29(13–14), 1518–1541.

Scarabato, D. and Fischer, E. (2013) Frustrated Fatshionistas: An Institutional Theory Perspective on Consumer Quests for Greater Choice in Mainstream Markets. *Journal of Consumer Research*, 39(6), 1234–1257.

Schatzki, T. (1996) *Social Practices: A Wittgensteinian Approach to Human Activity and the Social.* Cambridge: Cambridge University Press.

Schau, H.J. (1998) Discourse of Possessions: the Metatheory of Russell W. Belk IN: Alva, J.W. and Hutchinson, J.W. (eds.) *NA - Advances in Consumer Research Volume 25*. Provo, UT: Association for Consumer Research, 37–44.

Schlatter, R. (1951) *Private Property: The History of an Idea.* New Brunswick, NJ: Rutgers University Press.

Schouten, J.W. (1991) Selves in Transition: Symbolic Consumption in Personal Rites of Passage and Identity Reconstruction. *Journal of Consumer Research*, 91 (4), 412–425.

Seligman. M.E.P. (1975) *Helplessness*. San Francisco, CA: Freeman.

Shankar, A., Elliot, R. and Fitchett, F. (2009) Identity, consumption and narratives of socialization. *Marketing Theory,* 9(1), 75–94.

Sherry Jr., J.F. and McGrath, M.A. (1989) Unpacking the Holiday Presence: A Comparative Ethnography of Two Gift Stores IN*:* Hirschman, E.C. (ed.) *Interpretive Consumer Behaviour.* Provo, UT: Association for Consumer Research, 148–167.

Sherry Jr., J.F., McGrath, M.A. and Levy, S.J. (1992) The disposition of the gift and many unhappy returns. *Journal of Retailing*, 68(1), 40–65.

Sherry Jr., J.F, McGrath, M.A. and Levy, S.J. (1993) The Dark Side of the Gift. *Journal of Business Research,* 28(3), 225–244.

Shiels, J. (2009) The US virtual economy is set to make billions. BBC News, 29 December 2009. Available from: http://news.bbc.co.uk/1/hi/technology/8425623.stm [Accessed 28 April 2014].

Siddiqui, S. and Turley, D. (2006) Extending the Self in a Virtual World IN: Pechmann, C. and Price, L. (eds.) *NA - Advances in Consumer Research Volume 33*, Duluth, MN: Association for Consumer Research, 647–648.

Slater, D. (2011) Marketing as a monstrosity: the impossible place between culture and economy IN: Zwick, D. and Cayla, J. (eds.) *Inside marketing: practices, ideologies, devices*. Oxford: Oxford University Press, 23–41.

Smith, A. (1910/1890) *The wealth of Nations*. London: Dent.

Snare, F. (1972) The Concept of Property. *American Philosophical Quarterly*, 9(2), 200–206.

Spiggle, S. (1994) Analysis and Interpretation of Qualitative Data in Consumer Research. *Journal of Consumer Research*, 21(3), 491–503.

Sundararajan, A. (2004) Managing Digital Piracy: Pricing and Protection. *Information Systems Research,* 15(3), 287–308.

Tapscott, D. and Williams, A.D. (2006) *Wikinomics: How mass collaboration changes everything.* New York: Portfolio.

Terranova, T. (2000) *Free labor: Producing culture for the digital economy. Social Text*, 18(2), 33–58.

Thompson, C. 1997. Interpreting consumers: a hermeneutical framework for deriving marketing insights from the texts of consumers' consumption stories. *Journal of Marketing Research,* 38(4), 438–455.

Thompson, M. (1979) *Rubbish Theory*. Oxford: Oxford University Press.

Thompson, C.J., Arnould, E. and Giesler, M. (2013) Discursivity, difference, and disruption: Genealogical reflections on the consumer culture theory heteroglossia. *Marketing Theory,* 13(2), 149–174.

Thompson, C.J., Locander, W.B, and Pollio, H.R. (1989) Putting consumer experience back into consumer research: The philosophy and method of existential-phenomenology. *Journal of Consumer Research*, 16(2), 133–146.

Tobin, S. S. (1996) Cherished possessions: The meaning of things. *Generations*, 20(3), 46.

Veblen, T. (1899) *The Theory of the Leisure Class: An Economic Study of Institutions*. New York: Macmillan.

Visconti, A., Sherry Jr., J.F., Borghini, S. and Anderson, L. (2010) Street art, sweet art? Reclaiming the "Public" in public place. *Journal of Consumer Research*, 37(3), 511–529.

Wallendorf, M. and Arnould, E. (1988) 'My Favorite Things': A Cross-Cultural Inquiry into Object Attachment, Possessiveness, and Social Linkage. *Journal of Consumer Research*, 14(4), 531–547.

Wang, J., Zhao, X., and Bamossy, G. J. (2009) The sacred and profane in online gaming: A netnographic enquiry of online gamers IN: Wood, N.T. and Solomon, M.R. (eds.) *Virtual social identity and consumer behaviour*. Armonk, New York: M.E. Sharpe, 109–124.

Warde, A. (2005) Consumption and Theories of Practice. *Journal of Consumer Culture*, 5(2), 131–153.

Watkins, R. and Molesworth, M. (2012) Attachment to Digital Virtual Possessions in Videogames. IN Belk, R.W., Askegaard, S. and Scott, L. (eds.) *Research in Consumer Behavior Volume 14*. Bingley: Emerald Group Publishing Limited, 153–171.

Watson, M. and Shove, E. (2008) Product, Competence, Project and Practice: DIY and the dynamics of craft consumption. *Journal of Consumer Culture*, 8(1), 69–89.

White, R.W. (1959) Motivation Reconsidered: The Concept of Competence. *Psychological Review,* 66(5), 297–333.

Wortham, J. (2012). Dropbox Passes 100 Million Users. *New York Times,* 13 November. Available from: http://bits.blogs.nytimes.com/2012/11/13/dropbox-quadruples-user-base-passes-100-million-users/ [Accessed 21 November 2012].

Young, M. M. (1991) Dispossession of Possessions During Role Transitions IN: Holman, R.H. and Solomon, M.R. (eds.) *Advances in Consumer Research Vol 18.* Provo, UT: Association for Consumer Research, 31–39.

Young, M. M. and Wallendorf, M. (1989) Ashes to ashes, dust to dust: Conceptualizing consumer disposition of possessions IN: Childers, T.L. (eds.) *Proceedings of the American Marketing Association Summer Educators Conference: Marketing Theory and Practice.* Chicago: American Marketing Association, 33–39.

Zwick, D. and Dholakia, N. (2006a) Bringing the Market to Life: Screen Aesthetics and the Epistemic Consumption Object, *Marketing Theory*, 6(1), 41–62.

Zwick, D. and Dholakia, N. (2006b) The Epistemic Consumption Object and Postsocial Consumption: Expanding Consumer-Object Theory in Consumer Research. *Culture, Markets, and Consumption*, 9(1), 17–43.